**SIGACCESS Annual Report**

**July 2012 - June 2013  
Submitted by: Andrew Sears, Chair**

SIGACCESS continues to refine its activities to meet member needs. This report highlights SIGACCESS Awards as well as the SIG’s conference, publication, and other activities.

**Awards**

***ACM Student Research Competition (SRC)***

SIGACCESS continues to conduct this competition in conjunction with the ASSETS conference. For ASSETS 2012, the winners are:

*Graduate Awards:*

1st - Javier Torrente, Complutense University of Madrid, Reusable Game Interfaces for People with Disabilities

2nd - Yury Puzis, Stony Brook University, Accessible Web Automation Interface: a User Study

3rd - Wei Tzu-Wei, Chung Yuan Christian University, Detecting the Hand-Mouthing Behavior of Children with Intellectual Disability Using Kinect Imaging Technology

*Undergraduate Awards:*

1st - Nithin Santhanam, University of Pittsburgh, Wii Remote as a Customizable Web Navigation Device For People with Cerebral Palsy

***SIGACCESS Best Paper Award***Shiri Azenkot, Kyle Rector, Richard Ladner, and Jacob Wobbrock. 2012. PassChords: secure multi-touch authentication for blind people. In *Proceedings of the 14th international ACM SIGACCESS conference on Computers and accessibility (ASSETS '12)*. ACM, New York, NY, USA, 159-166. DOI=10.1145/2384916.2384945 <http://doi.acm.org/10.1145/2384916.2384945>

***SIGACCESS Best Student Paper Award***Ha Trinh, Annalu Waller, Keith Vertanen, Per Ola Kristensson, and Vicki L. Hanson. 2012. iSCAN: a phoneme-based predictive communication aid for nonspeaking individuals. In *Proceedings of the 14th international ACM SIGACCESS conference on Computers and accessibility (ASSETS '12)*. ACM, New York, NY, USA, 57-64. DOI=10.1145/2384916.2384927 <http://doi.acm.org/10.1145/2384916.2384927>

***SIGACCESS Outstanding Contribution to Computing and Accessibility Award***

This award is given every other year. For 2012, the recipient was Dr. John Gardner, Professor Emeritus of Physics at Oregon State University and is founder and president of ViewPlus Technologies, Inc. After losing his sight in 1988 in mid-career, John Gardner formed the Science Access Project ([http://dots.physics.orst.edu](http://dots.physics.orst.edu/)) to do research and development on new technologies for access to complex information by people with print disabilities. ViewPlus Technologies ([http://www.ViewPlus.com](http://www.viewplus.com/)) is a spin-off company formed to commercialize the Tiger tactile graphics embosser technology and other technologies developed in the Science Access Project.

***SIGACCESS Scholarship in Computers and Accessibility***

The SIGACCESS Scholarship Award aims to provide support for participation in the ASSETS conference for individuals who would not otherwise be able to attend. Practitioners, researchers, members of advocacy groups, or individuals with disabilities are eligible to apply. Applicants must have a demonstrated interest in accessible computing. Awardees will have the opportunity to actively participate in the ASSETS conference and gain experience and knowledge from interacting with experts in the field. The scholarship award is in the amount of $2,000. SIGACCESS awards up to five scholarships per year, pending availability of funds. The 2012 scholarships were awarded to Tuuli Keskinen, Jennison Asuncion, and Katherine Kahl to attend ASSETS 2012. In addition, consistent with the mission of SIGACCESS, we provided travel support for an assistant that needed to travel with one of the recipients.

***Supporting ACM-W Scholarships***

Beginning with ASSETS 2010, SIGACCESS has supported the ACM-W Scholarship program by providing a complimentary registration to ACM-W Scholarship recipients. For ASSETS 2012, SIGACCESS hosted Clara Bayarri, Universitat Politecnica de Catalunya.

**Significant Programs**

***ASSETS Conference***

ASSETS 2012 was held in Boulder, Colorado. The number of submissions was consistent with recent history with submissions from numerous countries spanning a variety of topics. The acceptance rate, near 30%, was also consistent with recent history. Attendance was solid, and the conference was profitable.

As has become the norm, the conference featured an NSF sponsored Doctoral Consortium (see the January 2013 issue of the SIGACCESS Accessible Computing Newsletter – Issue 105). This consortium allowed doctoral students to present their dissertation topics and receive feedback during formative stages of their work. The conference also hosted a Microsoft Student Research Competition (SRC) event (see information about the winners of the competition above).

The SIGACCESS Business Meeting, held at ASSETS, updated attendees on SIG activities and discussed ideas for new activities. We continued discussions regarding supporting workshops or other smaller events that were more focused with regard to topic or geographical location.

ASSETS offers a mentoring program to authors who are new to the conference as well as authors who are new to presenting research or are submitting work to a new category. Authors who are not familiar with preparing papers in English can also seek assistance. Mentors are experienced ASSETS authors, providing advice to the prospective authors about how their work may fit with the conference and how to effectively present their ideas. Normally, mentoring does not include detailed copyediting. This year the mentoring program received 16 requests. To provide some context, the conference normally receives approximately 100 full paper submissions.

***ACM Transactions on Accessible Computing***The inaugural issue of the *ACM Transactions on Accessible Computing (TACCESS)* appeared in May, 2008. Volume one included three issues, with volumes two and three both including the full set of four issues. The number of submissions continues to grow. TACCESSis a quarterly journal that publishes refereed articles addressing issues of computing as it impacts the lives of people with disabilities. It provides a technical forum for disseminating innovative research related to computing technologies and their use by people with disabilities.

The SIGACCESS newsletter continues with its regular online publications: see http://www.sigaccess.org/community/newsletter/. Jinjuan Feng (Towson University) has served as the Newsletter Editor since June, 2010.

Also available on the SIGACCESS website is the periodic ‘Left Field’ column (see <http://www.sigaccess.org/community/left_field/>), which is now produced by Markel Vigo of the University of Manchester. The goal of Left Field is to bring to the attention of members publications from the ACM Digital Library that are of interest, but published in venues typically outside the reading of SIGACCESS members.

***SIGACCESS Website***

The SIGACCESS webmaster is Joshua Halpern (HP Labs), who is working on a redesign of the SIGACCESS web site for easier maintenance. The SIGACCESS web site provides information about the SIG’s activities including awards and conferences as well as a repository of dissertations and theses, our newsletter, the “Left Field” column, writing guidelines, and other resources, which may be of value to the community.

**Innovative programs**

SIGACCESS has developed several resources, which are made available to the community at large via the SIGACCESS web site. The first is a set of writing guidelines, which reflect current thinking on language for writing in the academic accessibility community. Certain words or phrases can (intentionally or unintentionally) reflect bias or negative, disparaging, or patronizing attitudes toward people with disabilities and in fact any identifiable group of people. Choosing language that is neutral, accurate, and represents the preference of the groups to which it refers can convey respect and integrity. The second resource is a guide for planning accessible conferences. This document contains information for organizers of academic conferences who wish to make their events as accessible as possible, so that people with disabilities can participate fully.

SIGACCESS was pleased to support a workshop held in conjunction with the ECRC event in May 2013 in Paris. The workshop, titled [Towards an Inclusive Europe: Reflections on the Digital Agenda for eAccessibility](http://www.inclusive-europe.eu/) (<http://www.inclusive-europe.eu/>), attracted participants from numerous countries and featured a presentation by ACM President Vint Cerf. The purpose of the workshop was to consider what progress has been made towards the eAccessibility aspirations in Europe and propose ways in which European stakeholders can push the digital agenda for eAccessibility further forward.

**Key Issues**

Moving forward, there are a number of issues that SIGACCESS must address including developing future leaders for the community and continuing our efforts to reach new audiences. The SIG is actively engaged in developing leaders, recruiting new members of the community to participate both in the conference organizing committee and in other SIG activities. To reach new audiences, and become a more international organization, the SIG arranges for ASSETS to be periodically held in Europe. We were pleased that ASSETS continues to receive numerous submissions and have very strong attendance. We will be considering the possibility of holding ASSETS outside of the US more frequently.

The most recent SIGACCESS election had a full slate of candidates. The current Chair and Secretary/Treasurer were re-elected and Clayton Lewis of the University of Colorado was elected to serve as the Vice Chair.

**2013 SIGACT REPORT**

**July 2012 - June 2013**

**Submitted by: Paul Beame, Chair**

**1. Awards**

* 2013 Gödel Prize: This was shared between Antoine Joux, “A One Round Protocol for Tripartite Diffie-Hellman”Journal of Cryptology, Vol. 17, Issue 4 (2004) and Dan Boneh and Matthew K. Franklin “Identity-Based Encryption from the Weil Pairing”SIAM Journal on Computing, Vol. 32, No. 3 (2003). The prize is awarded jointly with the EATCS and this year was awarded at the STOC conference.
* Knuth Prize: Gary Millerfor his algorithmic contributions in a wide range of areas from cryptography and isomorphism testing to parallel computing and linear system solving. The Knuth Prize is given jointly by SIGACT and IEEE TCMFCS and the Knuth Prize and Lecture was given this year at STOC.
* Paris Kanellakis Theory and Practice Award: Andrei Broder, Moses Charikar and Piotr Indykfor their groundbreaking work on Locality-Sensitive Hashing that has had great impact in many fields of computer science. This award is an ACM award sponsored in part by SIGACT.
* 2013 Edsger W. Dijkstra Prize in Distributed Computing:
  + Nathan Linial. (1992). "Locality in Distributed Graph Algorithms". SIAM Journal on Computing 21:193-201. The Dijkstra Prize is given jointly by SIGACT and SIGOPS.
* SIGACT Distinguished Service Award: Lane Hemaspaandra
* STOC 2013 Best Paper Award: “Low Rank Approximation and Regression in Input Sparsity Time” by Kenneth L. Clarkson and David P. Woodruff, and “Approximation Resistance from Pairwise Independent Subgroups” by Siu On Chan
* Danny Lewin Best Student Paper Award (STOC 2013): “Approximation Resistance from Pairwise Independent Subgroups” by Siu On Chan and “Maintaining Shortest Paths Under Deletions in Weighted Directed Graphs” by Aaron Bernstein
  + SIGACT awarded approximately thirty student travel awards to allow these and other students to attend the 2013 STOC conference. Some of these awards were supported by NSF Grant CCF-1319775.
* Though the Turing Award is not directly sponsored by SIGACT, the winners of this year’s award, Shafi Goldwasser and Silvio Micali are prominent members of the SIGACT community.

**2. Significant papers on new areas published in proceedings**

**STOC 2013**

The ACM Symposium on Theory of Computing (STOC 2013) covers much of computer science theory.

Kenneth L. Clarkson and David P. Woodruff in their paper “Low Rank Approximation and Regression in Input Sparsity Time” provided a new and important algorithm for the old and well-studied problem of linear regression, whose classic *least-squares* solution is too inefficient for many of today’s large data sets. In particular, when the amount of data is much larger than the dimension of the space it uses randomization and approximation to reduce the dependence of the running time on the dimension from quadratic to linear. The results also extend to finding low rank matrix approximations more generally.

Siu On Chan in his “Approximation Resistance from Pairwise Independent Subgroups”, which won both a Best Paper Award and the Danny Lewin Best Student Paper Award showed optimal results on the NP-hardness of approximating the Max-*k*-CSP problem, the problem of finding an assignment that satisfies the maximum number of a given set of Boolean constraints of arity at most *k*. This had been one of the important cases where optimal results were lacking and had been widely sought. This improved the bounds in previous hardness results by an exponential factor in *k*. The paper also gave broad conditions under which a randomly chosen assignment provides as good an approximation guarantee as is possible unless P=NP.

The other winner of the Danny Lewin Best Student Paper Award was Aaron Bernstein for his paper “Maintaining Shortest Paths Under Deletions in Weighted Directed Graphs” which gives the first algorithm for handing dynamically changing directed graphs with total running time only a small amount larger than the product of the number of vertices and edges. Previous results had only produced such results for *un*weighted, *un*directed graphs, though the results in this paper only apply to deletions of edges.

**SODA 2013**

SODA is a major conference that focuses on algorithms and combinatorics.

Bruce M. Kapron, Valerie King, and Ben Mountjoy,'s Best Paper at SODA 2013, "Dynamic graph connectivity in polylogarithmic worst case time” solves the long-standing problem of producing a data structure for maintaining connectivity in undirected graphs with very fast response (polylogarithmic in the input size) for *every* update. This improved a data structure from the 1990’s that solved the same problem but only in an amortized sense – occasionally the algorithm would take a long time to handle an update but averaging over any sequence its total time would not be too long.

Martin Grohe, Ken-ichi Kawarabayashi, and Bruce Reed’s Best Paper at SODA 2013, "A Simple Algorithm for the Graph Minor Decomposition - Logic meets Structural Graph Theory” gives a dramatic improvement in solving an important graph-theoretic problem with many algorithmic implications. It is well known that planar graphs can be characterized as those not having the complete graph K5 or complete bipartite graph K3,3 as minor. In their famous theorem on graph minors, Robertson and Seymour showed that every minor-closed family of graphs has a similar finite characterization. Their result embodied in over 400 pages of its proof a cubic time algorithm for decomposing a graph in such a family and therefore for solving many problems on such graphs. This paper uses a logical characterization to solve the same problem in only quadratic time and, as importantly, much more simply than the algorithm implied in the 400 page proof (though the correctness of the algorithm relies on that proof).  
  
Shiri Chechik's Best Student Paper at SODA 2013, "New Additive Spanners" gave a number of new construction sof graph spanners from a given input graph. Graph spanners are sparse subgraphs that faithfully preserve the pairwise distances of a given graph (up to some small adjustment). They are very useful for graph algorithms because they allow one to replace an original dense graph with a sparse graph that has essentially the same distance properties but which takes much less time and space to work with. In this construction, the distances are preserved up to an additive absolute distance of 4 using only O(n7/.5) edges. Beating n3/2 size for such spanners was open.

Bernhard Haeupler’s Best Student Paper at SODA 2013, “Simple, Fast and Deterministic Gossip and Rumor Spreading" derives a new simpler algorithm with better performance for broadcasting information in which each processor in a network communicates with a single processor at each time step. Such algorithms are called gossip algorithms and this one is the first of its kind to be efficient on every small diameter network.

**SPAA 2013**

SPAA is a major conference that focuses on the theory of parallel algorithms and architecture for parallel computation .

Ravi Kumar, Benjamin Moseley, Sergei Vassilvitskii and Andrea Vattani’s Best Paper at SPAA 2013, “Fast Greedy Algorithms in MapReduce and Streaming” showed how to implement greedy algorithms for a wide variety of problems in only logarithmically-many MapReduce rounds and still achieve nearly optimal results. Greedy algorithms normally require a linear number of rounds to achieve optimal results.

Martina Eikel and Christian Scheideler’s Best Paper at SPAA 2013, “IRIS: A Robust Information System Against Insider DoS-Attacks” presents the first scalable distributed information system, i.e., a system with low storage overhead, that is provably robust against Denial-of-Service (DoS) attacks by a *current* insider. This allows a current insider to have complete knowledge about the information system and to have the power to block any ξ-fraction of its servers by a DoS-attack, where ξ can be chosen up to a constant. Previous solutions only worked for *past* insiders.

**3. Significant programs that provided a springboard for further technical efforts**

SIGACT sponsored or co-sponsored a number of important conferences including the Symposium on Theory of Computation (STOC), Symposium on Principles of Distributed Computing (PODC), Symposium on Computational Geometry (SoCG), Symposium on Parallel Algorithms and Architectures (SPAA), Innovations in Theoretical Computer Science (ITCS), Logic in Computer Science (LICS), and Symposium on Discrete Algorithms (SODA).

SIGACT also supports several conferences in-cooperation including Symposium on Principles of Database Systems (PODS), Symposium on Foundations of Computer Science (FOCS), and Symposium on Principles of Programming Languages (POPL).

**4. Innovative programs which provide service to our technical community**

The Committee for the Advancement of Theoretical Computer Science (CATCS) sponsored by SIGACT continues to be very active. The committee meets by conference call every month and has developed and executed action plans to increase the visibility of theoretical computer science and to increase the funding base for theory of computation at the NSF. The Committee has helped advise the NSF CCF Director and other NSF officers on several matters including recruiting for positions within. The committee has also been working to obtain a more detailed and complete picture of the state of academic employment in theoretical computer science within the broad range of US research universities.

SIGACT continues to support student attendance at SODA and STOC by funding Student Best Paper Awards, travel, lunches, and reduced registration fees. This helps ensure that the maximum number of students can attend these conferences. The NSF has helped support part of these efforts.

STOC, as the flagship conference for SIGACT, has been broadening its reach and increasing its attendance with the inclusion of satellite workshops and a poster session. This year it was held in conjunction both with the Computational Complexity Conference (CCC) with which it is in-cooperation and with a workshop on the Visions of the Theory of Computing held at the new Simons Institute for Theoretical Computer Science.

**5. Summary of key issues that the membership of the SIGACT will have to deal with in the next 2-3 years**

Funding and articulating the importance of theoretical computer science are perennial issues that are being addressed by the Committee for the Advancement of Theoretical Computer Science (CATCS). Despite the relatively good position for CISE with the sequester, there are still major concerns for the future. One issue that CATCS is currently documenting is an apparent relative concentration of researchers in theoretical computer science at highly ranked institutions versus a relative lack of such researchers at lower ranked institutions. Spreading theoretical computer science more broadly to these institutions could have significant impact on academic employment in theoretical computer science. Some of this may involve educating those institutions that theoretical computer science researchers are indeed able to obtain research funding.

After a year of discussion, in the Fall of 2012, the Symposium on Computation Geometry (SoCG), a conference co-sponsored by SIGACT ran a referendum on whether or not to stay with ACM. The vote favored departure, in large measure because of the many difficulties involved in the financial aspects of running ACM sponsored conferences outside of North America. With the assistance of ACM staff, the new SIGACT leadership has been working closely with the leadership of SoCG to address these concerns and find ways to keep SoCG under the ACM umbrella. A final version of the referendum will be repeated in the Fall of 2013 with more opportunity for ACM and SIGACT to state their case. Some of the specific irritants have been addressed. Despite improvements, the ACM financial model for sponsored overseas conferences has been problematic and SoCG will agree to remain in ACM only if they are able to be in-cooperation when outside North America, with SIGACT covering the increased proceedings cost. The issue of sponsored conference finances outside of North America still seems likely to remain a major irritant for other relatively small ACM conferences.

In 2012, there was dissatisfaction within a large segment of the SIGACT community over ACM’s publication policies. This resulted in a resolution at the STOC 2012 conference in favor of trading reduced returns for more open access. While the proposed changes in the Fall of 2012 improved the situation in some ways, there is still considerable opposition to those policies within the SIGACT community. The promise of ACM’s reassessment of these policies in the Summer of 2013 has left members of the SIGACT community expectant. Following through on these changes will be critical to the community. With well-funded free and open services for dissemination of research like the Arxiv, and profit-oriented publishers that make their older issues available for free, ACM needs to decide its appropriate publication role and how it can best benefit the community.

The role of the logic community within ACM needs to be resolved. This is a potentially large community that SIGACT brought into ACM with its co-sponsorship of LICS, but the fit is not an ideal one. SIGACT strongly supports the creation of SIGLOG, a logic-oriented SIG. In some sense this is not an issue for the current membership of SIGACT but rather an organizational one for ACM.

**SIGAda Annual Report**

**July 2012 – June 2013**

**Submitted by: Ricky E. Sward, Past Chair**

**SIGAda Awards**

Started in 1994, the ACM SIGAda Awards recognize individuals and organizations that have made outstanding contributions to the Ada community and to SIGAda. The Outstanding Ada Community Contribution Award is given for broad, lasting contributions to Ada technology and usage. The Distinguished Service Award is given for exceptional contributions to SIGAda activities and products.

This year the Outstanding Ada Community Contribution Awards were awarded to Pat Rogers and Luis Miguel Pinho.

Pat Rogers – Pat is an internationally recognized Ada expert with a long history of contributions to the Ada language and its infrastructure, in particular in the area of real-time embedded systems. He is a founding member of the Ada Run-Time Environment Working Group (ARTEWG). Over the past 25 years, he has taught university and professional courses on Embedded/Real-Time Systems with Ada, Software Fault Tolerance, Hard Real-Time Schedulability Analysis, and Object-Oriented Programming with Ada. Pat served as the Associate Director for Research at NASA’s Software Engineering Research Center where he was

responsible for support of all NASA centers and contractors in the areas of Ada run-time systems and technology, host/target environment issues for real-time, space-based applications, and software engineering.

Luis Miguel Pinho – Miguel has been and continues to be a technically active member of the real-time Ada community with special interest in distributed and parallel computing. He actively participates in multiple European projects, and presents and publishes about his research work in various international conferences and journals. Miguel joined the Board of Ada-Europe in 2007 and served as Program co-chair of the Ada-Europe conference in Stockholm. He established the record of the longest tenure as Editor-in-Chief of the Ada User Journal (21 issues since 2007), and created the on-line AUJ archive and consolidated the flow of contributions. Miguel organized the Ada-Europe conference in Porto, the International Real-Time Ada Workshop series in the wonderful location of Viana do Castelo and was responsible for getting Portugal represented on the ISO working group on Ada (WG9).

This year the Distinguished Service Award was awarded to James C. Morrison.

James C. “JC” Morrison – JC Worked with Ada in early 1990s in Control Data Corporation’s Federal Division. He then worked as a trainer at his consulting company, Ada Solutions. JC was actively involved in both the Baltimore and DC Chapters of SIGAda serving on the Conference Committee and as Local Arrangements Chair for SIGAda 2000 in Baltimore. JC staffed the SIGAda Booth at trade shows at the Washington DC Convention Center in the late 1990s to about 2002. He attended every SIGAda conference from 1998-2010 and served as volunteer, handling registration desk duties and other behind-the-scenes work. JC passed away in 2011 and will be sorely missed.

**Significant Papers published in proceedings**

This year’s conference included five outstanding keynote speeches. The keynote speakers presented on the following topics:

Kathleen Fisher, DARPA Information Innovation Office, *HACMS: High-Assurance Vehicles*

Nancy Leveson, Massachusetts Institute of Technology, Dept. of Aeronautics and Astronautics, *Challenges for Safety-Critical Software*

Barbara Liskov, Massachusetts Institute of Technology, Department of Electrical Engineering and Computer Science, *Programming the Turing Machine*

Greg Morrisett, Harvard University, School of Engineering and Applied Sciences, *Hardening Legacy C/C++ Code*

Guy Steele, Oracle Labs, *Programming Language Life Cycles*

There were several outstanding papers in the conference this year with equally outstanding presentations. For example:

*Program Proving Using Intermediate Verification Languages (IVLs) like Boogie and Why3* by K. Rustan and M. Leino

*Hi-Lite: The Convergence of Compiler Technology and Program Verification* by C. Dross, J. Känig, and E. Schonberg

*A Robust Implementation of Ada’s Finalizable Controlled Types* by H. Kirtchev

*Software for FAA’s Automatic Data Comm Between Air Traffic Controller and Pilot* by J. O’Leary

*Adapting ACATS for Use with Run-Time Checks Suppressed* by D. Eilers and T. Koskinen

Overall, the papers being submitted to the SIGAda conference continue to be of high quality.

**Significant Programs that provided a springboard for further technical efforts**

A formal liaison exists between SIGAda and WG9. ISO/IEC JTC1/SC22 WG9 is that body of international representatives responsible for the maintenance and evolution of the Ada International Standard. The National Bodies represented on WG9 are Belgium, Canada, France, Germany, Italy, Japan, Switzerland, the United Kingdom, and the United States.

In March 2007 the ISO (the International Organization for Standardization) in Geneva, Switzerland announced the formal completion of the process to revise the Ada 95 language, with the publication of the Ada 2005 standard — officially named ISO/IEC 8652:1995/Amd 1:2007. This announcement culminates a collaborative international effort under ISO's Ada Working Group (WG9) to enhance the 1995 version of the Ada language.

At least one SIGAda Officer participates and represents the membership at the WG9 meetings held twice each year.

**Innovative Programs which provide service to some part of our technical community**

Since 1994 SIGAda has conducted an "Ada Awareness Initiative". Its centerpiece has been our SIGAda professional booth display unit in exhibition halls at important software engineering conferences. This lets folks know that Ada is very much alive and a sound part of any software engineering effort having real-time, high integrity, high-assurance, and highly distributed requirements. We brought the booth to the SIGCSE conference this year providing good visibility for SIGAda to the Computer Science educational community. We decided not to take the booth to the Software and Systems Technology Conference (SSTC) due to declining attendance at the conference.

Via this exhibiting, SIGAda sustains Ada visibility ("name recognition"), provides various Ada-advocacy materials and makes available Ada experts (our booth staff volunteers) who can intelligently answer questions, provide pointers and help, and debunk the misinformation about Ada that many attendees at these shows have. This program continues to be extremely successful and viewed as a highly important thrust by the SIGAda membership.

**Summary of key issues to deal with in the next 2-3 years**

The key issue SIGAda will deal with over the next 2-3 years is the financial stability of the organization. Over the past several years, the conferences have not produced a profit with the exception of the SIGAda 2011 conference in Denver. The annual conference is the main source of revenue for the SIGAda organization, so continued losses on the conferences will eventually make SIGAda not viable in the eyes of ACM. SIGAda is up for its viability review this year, so we will present our case for continuing the organization and how we will deal with the financial situation.

In 2012, we decided to rename the SIGAda annual conference in order to focus on a niche in the safety critical, high integrity area of Computer Science. The SIGAda 2012 annual conference was called the High Integrity Language and Technology (HILT) conference. This conference was well attended and included outstanding keynote speeches and paper presentations. The conference suffered a loss in revenue around $5K. The committee for the HILT 2013 conference is already making changes to registration policies that will avoid this situation this year.

We will continue to publish three issues of the Ada Letters journal and seek participation in the form of contributing articles and papers.

**SIGAPP FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Sung Shin, Chair**

The SIGAPP mission is to further the interests of the computing professionals engaged in the development of new computing applications and applications areas and the transfer of computing technology to new problem domains.

**SIGAPP Officers**

Chair – Sung Shin, South Dakota State University, USA

Vice Chair – Jiman Albert Hong, Soongsil University, Korea

Secretary – Michael Schumacher, University of Applied Sciences Western Switzerland Institute of Business

Information Systems, Switzerland

Treasurer – Tei-Wei Kuo, National Taiwan University, USA

Web Master - Hisham Haddad, Kennesaw State University, USA

ACM Program Coordinator, Irene Frawley, ACM HQ

**Status of SIGAPP**

The main event that took place within SIGAPP for this year was the Symposium on Applied Computing (SAC) in Coimbra, Portugal after taking place in Riva del Garda, Italy in 2012. This year's SAC was very successful. More details about SAC will follow in the next section. We also supported several additional conferences with in-cooperation status. We have 10% co-sponsorship for two conferences. The first one, 2013 International Conference on Ubiquitous Information Management and Communication (ICUIMC) was held in Kota Kinabalu, Malaysia in January, 2013, and the 2013 Reliable and Convergent Systems (RACs) will be held in Montreal, QC, Canada in October 2013. ICUIMC 2013 conference was successful, and it has been beneficial for SIGAPP. We will continue to support those conferences in the coming year.

Four issues of Applied Computing Review (ACR) were published in FY 2012 and FY 2013. We introduced it semi-annually in an electronic version only in FY 2011. It is now stabilized, and we have begun publishing it quarterly, electronically, since spring of 2012. Ultimately, we want ACR to appear in the Science Citation Index (SCI). ACR includes invited papers from world-renowned researchers and selected papers presented by prominent researchers and professionals who attended the Symposium on Applied Computing 2013 in Coimbra, Portugal. The selected papers have been expanded, revised, and peer-reviewed again for publishing in ACR. The next issue will be published in fall of 2013. We selected high quality papers from two SIGAPP-sponsored conferences, ICUIMC and RACs. We hope that ACR will serve as a platform for many new and promising ideas in the many fields of applied computing. It is strongly related to nearly every area of computer science, and we feel an obligation to serve the community as best we can. ACR papers represent current research trends in applied computing. These authors truly contribute to the state of the art in applied computing.

The Student Travel Award Program continues to be successful in assisting SIGAPP student members in attending the SIGAPP main conference – SAC. 23 students were granted awards to attend SAC 2013, representing 11 countries. Allocated budget of these awards was increased compared to the last year. We also implemented a Developing Countries Travel Award for researchers from developing countries who would otherwise have difficulty attending the SAC conference. For 2014, this award was suited exclusively for students from developing countries. Also, we hope to support faculty-level researchers from such countries.

SIGAPP continues to have a stable membership. SIGAPP's and SAC's strength and uniqueness among ACM SIGs continues to be the opportunity for scientific diversity and crosscutting multiple disciplines within the ACM community. The officers look forward to continue working with the ACM SGB to further develop the SIG by increasing membership and converting SIGAPP’s ACR, Applied Computing Review to a new journal on Applied Computing.

**Status of SAC**

The 28th Annual edition of SAC has marked another successful event for the Symposium on Applied Computing. This international gathering attracted over 350 attendees from over 58 countries. It was hosted and held on the campus of Institute of Engineering of the Polytechnic Institute of Coimbra (ISEC-IPC), Coimbra, Portugal, March 2013. There was an open Call for Track Proposals and after prescreening the proposals, 36 Tracks were finally accepted for SAC 2013. The prescreening and selections were made based on the success of those Tracks in the previous SAC conferences as well as targeting new and emerging areas. The Call for Papers for these Tracks attracted 1,063 final paper submissions from 58 different countries. The submitted papers underwent the blind review process and 255 papers were finally accepted as full papers for inclusion in the Conference Proceedings and presentation during the Symposium. The final acceptance rate for SAC 2013 is 24% for all tracks. In addition to the accepted full papers, 73 papers that received high enough review scores were accepted as short papers for the Poster Program. The Monday Tutorials program offered 6 tutorials and attracted over 60 attendees. It included coffee breaks and a social luncheon that took place on campus. The Student Research Competition (SRC) program, sponsored by Microsoft Research, is a new addition to SAC 2013. The SRC program is designed to provide graduate students the opportunity to meet and exchange ideas with researchers and practitioners in their areas of interest. A total of 38 submissions were received and finally 5 student research abstracts were accepted. The top three winners were recognized and presented with awards at the SAC Banquet.

SAC 2014 will be hosted by the City of Gyeongju, Korea, March 24 – 28, 2014. The conference is sponsored by Seoul National University, Kyungpook National University, Soongsil University, and Dongguk University, Korea. The conference website at <http://www.acm.org/conferences/sac/sac2014/> has further details such as the symposium committee, technical tracks, and track chairs.

SAC 2015 is being considered for Spain, in the city of Salamanca. A decision by the SAC steering committee will be made soon. No proposals were submitted from the U.S. for SAC 2014 and 2015.

**Summary**

1. Awards that were given out

Student Travel Awards, 23 awards granted, totaling $28,100

SIGAPP Distinguished Service Award was given to Prof. Mathew Palakal, IUPUI, USA.

2. Significant papers on new areas that were published in proceedings.

3. Significant programs that provided a springboard for further technical efforts - SAC continues to have tracks that represent application and convergent areas which are not covered by other SIGs. SAC has always been open to new tracks in applied computing representing current trends in computing.

4. Innovative programs which provide service to some part of your technical community - expansion of Student Travel Award Program for SIGAPP student members, initiation of Developing Countries Travel Award Program for students and faculty.

5. The Student Research Competition (SRC) program, sponsored by Microsoft Research, was a new addition to SAC 2013. The SRC program is designed to provide graduate students the opportunity to meet and exchange ideas with researchers and practitioners in their areas of interest. A total of 38 submissions were received, and finally 5 research abstracts were accepted. Three winners were selected and recognized during the SAC Banquet. We plan to increase student participation in the SRC program in future SACs.

6. A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years – increase SIGAPP membership, continuation of awards, development of a refereed journal in Applied Computing, and expanding the SRC program.

**SIGARCH Annual ReportJuly 2012 - June 2013**

**Submitted by: David Wood, Chair and Doug Burger, Past Chair**

**Overview**

The primary mission of SIGARCH continues to be the forum where researchers and practitioners of computer architecture can exchange ideas. SIGARCH sponsors or cosponsors the premier conferences in the field as well as a number of workshops. It publishes a quarterly newsletter and the proceedings of several conferences. It is financially strong with a fund balance of over a million dollars. The SIGARCH bylaws are available online at <http://www.acm.org/sigs/bylaws/arch_bylaws.html>.

**Officers and Directors**

During the past fiscal year David Wood served as SIGARCH Chair, Sarita Adve served as Vice Chair, and Partha Ranganathan served as Secretary/Treasurer. Norm Jouppi, Kai Li, Scott Mahlke, and Per Stenstrom served on the Board of Directors, and Doug Burger also served as Past Chair. 2013 was an election year for SIGARCH, but in accordance with SGB bylaws, the executive committee, by unanimous consent, requested that their terms be extended for an additional two years to maintain continuity, especially during the establishment of SIGHPC and the initial transition of SC'XY from SIGARCH to SIGHPC. In addition to these elected positions, there are three appointed positions. Doug DeGroot continues to serve as the Editor of the SIGARCH newsletter Computer Architecture News. Kevin Lim continues to serve as the SIGARCH Information Director, providing SIGARCH information online. Mattan Erez continues to serve as SIGARCH's liaison on the SC conference steering committee.

**Awards**

The Eckert-Mauchly Award, cosponsored by the IEEE Computer Society, is the most prestigious award in computer architecture. SIGARCH endows its half of the award, which is presented annually at the Awards Banquet of ISCA. James Goodman of the University of Auckland and emeritus professor of the University of Wisconsin, Madison, received the award in 2013, for "For pioneering contributions to the architecture of shared-memory multiprocessors." In 2009, SIGARCH petitioned ACM to increase the ACM share of the award to $10,000, using an endowment taken from the SIGARCH fund balance, which ACM has approved. The increase will happen when IEEE approves a matching increase, which will increase the amount of the award to $20,000.

SIGARCH has endowed the Maurice Wilkes Award, an award established to recognize computer architects early in their careers, named after one of the pioneers of computer architecture who began making significant contributions early in his career. The award is selected by a vote of the Executive Committee and Board of SIGARCH, from a list of nominees supplied by a three person nominating committee. Due to a potential conflict of interest, the nominating committee was expanded this year from three to five. The 2013 award went to Parthasarathy (Partha) Ranganathan of HP Labs "For contributions to the design of power-efficient microblade servers and pioneering work in disaggregated system designs."

SIGARCH also cosponsors, along with the IEEE-CS TCCA, the Influential ISCA Paper Award which is presented annually at the ISCA conference. This award recognizes the paper, presented at the ISCA conference 15 years previously, which has had the most impact on computer architecture. The ninth Influential ISCA Paper Award was presented to Srilatha Manne, Artur Klauser, Dirk Grunwald, "Pipeline Gating: Speculation Control for Energy Reduction," which appeared in the proceedings of the 24th ISCA (1998).

In 2009, SIGARCH and the ASPLOS co-sponsors (SIGPLAN and SIGOPS) approved the creation of an ASPLOS Best Paper Award, the first one of which was awarded in 2009. The Award is determined by a vote of the Program Committee, and announced at the conference. In 2013, the fifth ASPLOS Best Paper Award was awarded to two papers: A Hardware/Software Testbed for Computational Sprinting, Arun Raghavan, Laurel Emurian, Lei Shao, Marios Papaefthymiou, Kevin Pipe, Thomas Wenisch and Milo Martin and Discerning the Dominant Out-of-Order Performance Advantage: is it Dynamism or Speculation?, Daniel McFarlin, Charles Tucker and Craig Zilles.

Starting in 2011, ASPLOS began awarding an Influential Paper Award, modeled after the award presented at ISCA. The ASPLOS Influential Paper Award is awarded to any paper published in ASPLOS conferences ten or more conferences prior to the conference in which the award is being made. No award was given in 2012. In 2013, the award was given to Ravi Rajwar and James R. Goodman, for "Transactional lock-free execution of lock-based programs," which appeared in ASPLOS X, in 2002.

In 2007 the ACM Awards Committee approved the establishment of the SIGARCH Distinguished Service Award, for "important service to the Computer Architecture community." Nominations are due each year by February 15th, and can be sent to the SIGARCH Secretary/Treasurer at any time. No award was given in 2012 due to a lack of nominations. In 2013, the award was given to Norman P. Jouppi, "For two-decades of dedicated service to SIGARCH and ACM." The committee has also pro-actively identified several candidates that meet the selection criteria for future awards.

SIGARCH is a co-sponsor of the Ken Kennedy Award, founded in 2009. The ACM-IEEE CS Ken Kennedy Award is awarded annually and recognizes substantial contributions to programmability and productivity in computing and substantial community service or mentoring contributions. The award includes a $5,000 honorarium and the award recipient will be announced at the SC Conference. The recipient will give a presentation, normally technical, at the SC conference at which it is announced, or at an ACM or IEEE conference of the winner's choosing during the year following the announcement. The 2012 recipient of the Ken Kennedy Award was Mary Lou Soffa, for "contributions to compiler technology and software engineering, exemplary service to the profession, and life-long dedication to mentoring and improving diversity in computing."

Also, SIGARCH and SIGHPC jointly nominated Kathy Yelick for the ACM-W Athena Lecturer Award, which celebrates women researchers who have made fundamental contributions to Computer Science. Dr. Yelick was recognized "For contributions to improving fundamental understanding and practice of parallel programming." She will present her award lecture at SC'13.

Three of the above awards, the Eckert-Mauchly Award, the Maurice Wilkes Award, and the Influential ISCA Paper Award were presented at ISCA 2013 in Tel-Aviv, Israel.

**New Areas and Programs**

SIGARCH continues to broaden its definition of Computer Architecture to encompass both new technology challenges and new application areas. On the technology front, as Moore's Law draws to a close, decreasing transistor reliability is driving a resurgence in novel ideas to build dependable systems from unreliable components. Similarly, the end of Dennard Scaling, which enabled power to largely scale with transistor counts, has resulted in a plethora of novel solutions using heterogeneity and/or new instruction set architectures to achieve fundamental increases in energy efficiency. And new non-volatile memory technologies have spurred the development of novel memory and storage architectures, which have great promise for transforming solutions for Big Data applications. On the application front, new architectures have been proposed to fundamentally revisit how to provide software security and increase programmer productivity. Finally, the importance of energy efficiency at all levels is driving an increasing recognition of the commonalities between the mobile space and the data center.

To address these emerging areas, SIGARCH has sponsored tutorials and workshops in these emerging areas. ISCA 2013 included tutorials on energy-secure architectures, workloads for the cloud, security, and power, as well as workshops on architectures for Big Data, Brain-inspired computing, architectural support for security and privacy, energy efficiency, and energy security.

**Innovative Programs**

SIGARCH supports child care and companion support travel programs to conferences, although participation since approval of these programs has been low. Reimbursement for child care is capped at $1000 per conference. SIGARCH has also formalized funding levels for its student travel grant program, and now provides a level of support to all conferences that SIGARCH sponsors at a 33% level or higher, which previously was only provided to the ISCA and ASPLOS conferences.

SIGARCH, with the encouragement of ACM, has begun exploring the creation of a European SIGARCH,implemented through the SIG Chapter mechanism. Goals of a European SIGARCH Chapter include:

* promote student research and education activities to make the computer architecture community grow long term
* promote networking events; conferences, workshops and summer schoolspromote collaboration with other SIGs (e.g. SIGPLAN, SIGOPS, SIGBED) within Europe as well as globally

This effort is still in its early stages, but we have high hopes that it will be successful and emulated in other regions, especially India, China, and South Korea. There is already a group in Korea that is interested in establishing a chapter there.

**Travel Grants**

SIGARCH has regularly supported student travel grants to its flagship conferences, ISCA and ASPLOS, but starting from 2011, SIGARCH broadened this program to other SIGARCH-sponsored conferences. The allocation to each conference is based on SIGARCH revenues and the percentage sponsorship of the conference and is set by dividing the travel grant budget by number of attendees, giving an extra 33% allocation to international conferences, and a small additional budget (~10%) to ISCA as the flagship conference. The grants are restricted to student members of SIGARCH, following several votes of theSIGARCH membership. (But the travel grant administrators are encouraged to highlight the cheap SIGARCH online membership option available for students.) For FY2013, SIGARCH budgeted $80,000 for travel grants. For ISCA 2013, SIGARCH funding for student travel was also supplemented by sponsorship from IEEE, Google, and vmware (SIGARCH funds accounted for half the total student travel funds). 65 students were funded by the ISCA student travel grant, of which 41 of those were recipients of SIGARCH funding. SIGARCH plans to continue to emphasize and support student participation in SIGARCH-sponsored conferences going forward as well. SIGARCH also supports a companion travel grant program for SIGARCH members who are either (1) a person with a physical disability necessitating a companion, or (2) a parent of an infant less than one year old who cannot travel without the infant and a care-provider for the infant. But we did not have occasion to disburse funds for this program in FY13.

**Conferences**

SIGARCH is a 50% cosponsor of ISCA, the International Symposium on Computer Architecture, which is the premier conference in the field of computer architecture. The 40th annual ISCA (ISCA 2013) was held in Tel-Aviv, Israel. Avi Mendelson was the General Chair, and Margaret Martonosi was the Program Chair. ISCA 2013 has been pledged $86,000 in industrial donations to support the conference, plus an additional $62,000 in support for student travel grants ($30,000 of this from SIGARCH). ISCA 2014 will be held in Minneapolis, with Avi Pen-Chung Yew and Antonia Zhang as General Chairs and Steve Keckler as Program Chair. ISCA 2015 will be held as part of FCRC. The program chair is in the process of being selected and the General Chair will be selected once the FCRC venue is finalized.

The SC'XY Conference is jointly sponsored by SIGARCH and the IEEE Computer Society. Formerly known as the Supercomputing Conference, the conference has successfully evolved away from its focus on supercomputers and is now the High Performance Networking and Computing Conference. In addition to its technical success, SC'XY is large enough that it must be scheduled many years in advance. SC 2012 was held in Salt Lake City, UT and SC 2013 will be held in Denver, CO. In Fall 2012, the ACM SGB with SIGARCH's support approved creation of the Special Interest Group in High-Performance Computing (SIGHPC). SIGARCH has since entered into an agreement with SIGHPC to transition sponsorship of SC'XY to SIGHPC, with SIGARCH remaining in-cooperation in the long term. Beginning with SC'12, any surpluses net of special projects will accrue to SIGHPC, to build up their fund balance. SIGHPC is also liable for any losses, with SIGARCH effectively acting as their banker in this event (i.e., in this hopefully rare case, SIGARCH will cover the loss, but SIGHPC will remain obligated to eventually repay SIGARCH).

SIGARCH is a cosponsor of the Conference on Architectural Support for Programming Languages and Operating Systems, commonly known as ASPLOS, along with SIGPLAN and SIGOPS. The conference had been held biannually since 1982, alternating its location between San Jose and Boston. Starting in 2008

the conference has been held annually. ASPLOS 2013 was held in Houston, TX, with Vivek Sarkar serving as General Chair and Ras Bodik serving as Program Chair. ASPLOS 2014 will be held in Salt Lake City, UT, with Al Davis and Rajeev Balasubraminian as General Chairs and Sarita Adve as Program Chair. ASPLOS 2015 will begin a cycle where every third year the conference is held internationally. ASPLOS 2012 was held in London, England. ASPLOS 2015 will be held in Istanbul, Turkey with Kemal Ebcioglu and Ozcan Ozturk as General Chairs and Sandhya Dwarkadas as Program Chair.

SIGARCH sponsors the International Conference on Supercomputing (ICS). ICS 2013 was held in Portland, OR. Allen Maloney was General Chair and Sam Midkiff and Mario Nemirovsky were Program Co-Chairs.

ICS 2014 will be held Munich, Germany June 10th to 14th.

The 20th Symposium on Parallel Algorithms and Architectures (SPAA 2013), jointly sponsored by SIGARCH and SIGACT, was co-located with PODC in Montreal, Canada, with Guy Blelloch as General Chair and Berthold Vicking as Program Chair. SPAA 2014 will be held in Prague and SPAA 2015 expects to be part of FCRC.

SIGARCH is one-half co-sponsor of the IEEE/ACM International Conference on Grid Computing. Grid 2012 was held in Bejing, China, with Dieter Kranzlmueller and Weimin Zheng as General Co-Chairs and Rajkumar Buyya and Hai Jin as Program Co-Chairs. Beginning in 2013, Grid 'XY has merged with CCGrid, below.

SIGARCH is a 10% co-sponsor of CCGrid: The IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing. CCGrid '13 was held in Delft, The Netherlands, with Dick Epema as General Chair and Thomas Fahringer as Program Chair. CCGrid '14 will be held in Chicago, IL with Xian-He Sun and Ian T. Foster as General Chairs and Kirk W. Cameron and Dimitris S. Nikolopoulos as Program Chairs.

SIGARCH is one-half cosponsor of the International Symposium on High Performance Distributed Computing. HPDC 2013 will be held in New York City, NY, with Manish Parashar and Jon Weissman as General Co-Chairs and Renato Figueiredo and Dick Epema as Program Co-Chairs. HPDC 2014 will be held in Vancouver, BC, Canada, with Beth Plale and Matei Ripeanu as General Chairs and Franc Cappello and Dongyan Xu as Program Chairs.

SIGARCH is one-third cosponsor of the Conference on Parallel Architectures and Compiler Techniques (PACT), along with the IEEE Computer Society and IFIP, and annually held in the fall. PACT 2012 was held in Minneapolis, MN with Pen-Chung Yew and Sangyeun Cho as General Co-Chairs and Luiz DeRose and David Lilja as Program Co-Chairs. Pact 2013 will be held in Edinburgh, Scotland, with Michael O'Boyle as General Chair and Andre Seznec and Francois Bodin as Program Chairs.

SIGARCH is one-fourth co-sponsor of the Symposium on Architectures for Networking and Communications Systems (ANCS). ANCS 2012 was held in Austin, TX, with Tilman Wolf as General Chair and Andrew Moore and Vikto Prasanna as Program Co-Chairs. ANCS 2013 will be held in San Jose, CA, with Walid Najjar as General Chair and Raj Yavatkar and Scott Rixner as Program Chairs.

In 2007 SIGARCH was a founding co-sponsor of the International Symposium on Networks-on-Chips (NOCS). NOCS 2013 was held in Tempe, AZ, with Karam S. Chatha and Chita Das as General Co-Chairs and Natalie Enright Jerger and John Bainbridge as Program Co-Chairs. NOCS 2014 will be held in Ferra, Italy, with Davide Bertozzi as General Chair.

SIGARCH also became a cosponsor of the International Conference on Autonomic Computing (ICAC) in2007. ICAC 2012 was held in San Jose, CA, with Dejan Milojicic as General Chair and Vanish Talwar and Dongyan Xu and Program Co-Chairs. As a result of a disagreement in direction between conference founder Salim Hariri and the steering committee, ICAC has now split into two separate conferences, with SIGARCH dropping to in-cooperation status with each one. The original ICAC is now being sponsored by Usenix, with ICAC 2013 being held in San Jose, with Jeffrey Kephart as General Chair and Calton Pu and Xiaoyun Zhu as Program Chairs. A new conference, Cloud and Autonomic Computing (CAC), has been created with a somewhat broader focus. The first offering of this conference, CAC 2013, will take place in Miami, FL with Salim Hariri as General Chair and Alan Still as Program Chair. We will monitor these two conferences to ensure that they remain successful and meet SIGARCH's high standards.

In addition to the above conferences, SIGARCH is co-sponsoring, or is in cooperation with, several other conferences. SIGARCH has a sponsorship position in SenSys, a conference on Sensor Systems. In addition, SIGARCH has in-cooperation status with TCE, HotPar, HIPEAC, HiPC, HPDS, ICWET, IPDPS, HotChips, CoolChips, PAPA, and Nano-Net.

**Publications**

CAN (Computer Architecture News), SIGARCH's newsletter, is published 5 times a year. Of those five, the ISCA Proceedings form a special issue, and the ASPLOS Proceedings is likewise distributed as a special issue. The regular issues of the newsletter consist of technical contributions, reports of panels, Internet nuggets (the most interesting or controversial articles from the comp.arch newsgroup), book reviews, and calls for papers. There are occasional single topic special issues based principally on workshops. Proceedings of SC, SPAA and ICS are available through the Member Plus program. In 2009, SIGARCH began offering a new electronic membership for regular members and students, at reduced cost with no proceedings mailed. Currently, more than half, 770, of SIGARCH's members have registered under the electronic membership option. Given the continuing shift to electronic memberships, the SIGARCH Executive Committee is exploring alternatives to revitalize, reform, or replace CAN.

**Finances**

SIGARCH enjoys a healthy fund balance that is currently larger than the $1.3M fund balance required by the ACM for sponsorship of SIGARCH conferences for FY'12. The projected SIGARCH fund balance for FY'12 is $3,083,993. Given prior large surpluses, SIGARCH and the SC Steering Committee have an agreement that some of the future profits from SC'XY will be in large part returned to the SC community, in the form of a series of project-oriented grants (to be matched by the other sponsor of SC'XY, the IEEE Computer Society). The grant amounts are capped by the average surplus over the first two of the previous three years. ISCA, SIGARCH's flagship conference, continues to be healthy and show attendance near the top of historical levels.

In FY12, SIGARCH implemented an increase in print membership fees to be break-even (SIGARCH was losing $13 per professional print membership and $23 per student print membership). The online membership rates were not changed and continue to be $6 and $2 respectively. Going into the fiscal year, we were concerned about potential implications of this change on the membership, but FY13 membership rates did not see any significant change and are projected to be slightly higher than last year.

**SC Conference Grants**

For SC'13, $208,281 has been budgeted for SC special projects. As part of the transition plan, SIGARCH is responsible for ACM's share of the special projects budget for SC'12 and SC'13 and is responsible for a pro rata share with SIGHPC (based on relevant surpluses) for SC'14. SIGHPC will be fully responsible for ACM's share of special projects beginning with SC'15.

**Membership**

SIGARCH membership was declining gradually since 1999, dropping from its peak of 1452 in 2005 to 1344 in 2009, but has started to recover, increasing to 1434 as of May 2013. SIGARCH's membership continues to shift to electronic-only membership, available at reduced cost, and is likely a factor in growing membership. Last year, more than half, 770, of SIGARCH's members chose electronic-only membership. There is opportunity to increase membership, particularly of students, and we will explore increased outreach to facilitate increased student participation. ISCA, SIGARCH's flagship conference, continues to be healthy and show attendance near the top of historical levels.

**Summary**

SIGARCH remains a financially healthy institution with an enthusiastic membership. The interest of its members can be gauged by the health of all of its major conferences in the past year. The challenges remain as they have in previous years: how to better serve our members, how to encourage other members of the architecture community to join, how to help steer the community as the nature of our field changes, and how to use our fund balance most effectively.

**SIGART FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Yolanda Gil, Chair**

The scope of SIGART consists of the study of intelligence and its realization in computer systems. This includes areas such as autonomous agents, intelligent user interfaces, knowledge discovery, human language technologies, cognitive modeling, knowledge representation, planning, robotics, problem solving, machine learning, and computer vision.

Activities during 2012/2013:

**1. SIGART OFFICERS**

The elected SIGART officers starting July 1, 2013 are:

Yolanda Gil, USC/Information Sciences Institute (Chair)

Sanmay Das, Washington University in St. Louis (Vice-Chair)

Susan Epstein, City University of New York (Secretary/Treasurer)

The elected SIGART officers until June 2013 were:

Yolanda Gil, USC/Information Sciences Institute (Chair)

Qiang Yang, Hong Kong University of Science and Technology (Vice-Chair)

Gautam Biswas, Vanderbilt University (Secretary/Treasurer)

SIGART has an Advisory Board whose members are:

Tom Dietterich, Oregon State University

Jim Hendler, Rensselaer Polytechnic Institute

Haym Hirsh, Rutgers University

Eric Horvitz, Microsoft Research

Craig Knoblock, USC/Information Sciences Institute

In addition, SIGART has several Appointed Officers:

Mehran Sahami, Stanford University (Educational Activities Liaison)

Peter Norvig, Google Research (Educational Activities Liaison)

Weike Pan, Hong Kong University of Science and Technology (Information Officer)

**2. AWARDS**

The ACM SIGART Autonomous Agents Research Award is an annual award for excellence in research in the area of autonomous agents.

The 2013 ACM SIGART Autonomous Agents Research Award recipient is Professor Jeffrey S. Rosenschein (The Hebrew University of Jerusalem, Israel). Professor Rosenschein is honoured for his pioneering work on the use of game theory in multi-agent systems. Among Professor Rosenschein's many contributions in this area are techniques for automated negotiation, computational social choice, multi-agent planning, and mechanism design in computational settings. In addition, Professor Rosenschein has a substantial track record of community service, having been general co-chair for the AAMAS conference in 2003, president of the International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS), and serving as co-editor-in-chief for the journal "Autonomous Agents and Multi-Agent Systems".

**3. CONFERENCES**

SIGART co-sponsored the following conferences:

\* ACM International Conference on Intelligent User Interfaces (IUI), March 19-22, 2013, Santa Monica, CA.

\* 8th ACM/IEEE International Conference on Human-Robot Interaction (HRI), March 3-6, 2013, Tokyo, Japan.

\* 28th IEEE/ACM International Conference on Automated Software Engineering (ASE), November 11-15, 2013 in Palo Alto, CA.

\* 7th International Conference on Knowledge Capture (K-CAP), June 23-26, 2013 in Banff, Alberta.

\* IEEE/WIC/ACM International Conference on Web Intelligence (WI-IAT), November 17-20, 2013, Atlanta, GA.

In addition, SIGART granted in-cooperation status to many international conferences.

SIGART has an agreement with the International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS) to continue a special cooperation status regarding the AAMAS conference and the ACM SIGART Autonomous Agents Research Award indefinitely. The recipient of the award is invited to give a talk at the conference.

The K-CAP conference had to be cancelled due to flooding in the Calgary area. ACM supported the organizers in managing the cancelations. The organizers are considering several options to hold a face-to-face meeting where the papers would be presented.

**4. EDUCATIONAL ACTIVITIES**

SIGART participated in the IEEE/ACM Curriculum Initiative to review CS curricula. Mehran Sahami and Peter Norvig are SIGART Appointed Officers that are Educational Activities Liaisons and are participating in the IEEE/ACM joint initiative.

SIGART awarded a number of scholarships to students to attend the conferences co-sponsored by SIGART. The amounts of scholarships varied from $1,000 to $10,000 per conference, depending on the conference size. Funding students is a good way to ensure long term growth and vitality in the AI community and a good investment for the future.

SIGART co-sponsored with AAAI the 2013 SIGART/AAAI Doctoral Consortium. The Doctoral Consortium is held each year during the AAAI conference, and provides an opportunity for Ph.D. students to discuss in depth their research interests and career objectives with the other participants and a group of established AI researchers that act as individual mentors. Presentations and discussions take place over two days of intense meetings prior to the AAAI conference.

**5. OUTREACH ACTIVITIES**

SIGART has a web site with up-to-date information about the SIG and its activities. Weike Pan is the SIGART Information Officer and developed and maintains the site.

**6. PLANS FOR THE FUTURE**

SIGART plans to continue to support communities related to AI in a broad sense. SIGART will continue expanding the areas covered by co-sponsored and in-cooperation conferences to ensure that communities that work in AI or find inspiration with AI topics maintain ties with AI. This will increase the visibility of SIGART and help the growth of new communities.

**SIGBED FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Christoph Kirsch, Past Chair**

**Awards**

SIGBED created a new award, called the Paul Caspi Memorial Dissertation Award. The award will recognize outstanding doctoral dissertations that significantly advance the state of the art in the science of embedded systems, in the spirit and legacy of Dr. Paul Caspi's work. More details on the award are on SIGBED's awards page.

SIGBED also offers a student award in the name of late Dr. Frank Anger to promote cross- disciplinary research between embedded systems and software engineering. SIGBED solicited applications from qualified student members in 2012 and selected Indranil Saha (University of California, Los Angeles) as the winner of the award.

SIGBED also offers the SIGBED-EMSOFT Best Paper Award. The annual award is presented to the individual(s) judged by an award committee to have written the best paper appearing in the EMSOFT (Embedded Software) conference proceedings. The selection criteria are the scientific quality of the paper and the exposition of the ideas. The 2012 SIGBED-EMSOFT Best Paper is titled "Programming Parallelism with Futures in Lustre" by Albert Cohen, Léonard Gérard, and Marc Pouzet.

**Events highlighting new areas of interests at conferences**

ESWEEK 2012 featured three keynotes on new directions and challenges in embedded computing: Hannu Kauppinen, Nokia, “Wireless Innovations for Smartphones”; Satnam Singh, Google, “Computing without processors”; and Jong-Deok Choi, Samsung Electronics, “A standards-based, fully-open software platform for smart embedded systems”. CPSWEEK 2013 also included three keynotes discussing new CPS applications and significant challenges: Deborah Estrin, Cornell Tech, “Sensemaking for Mobile Health”; Vijay Kumar, U Penn, “Computing without processors”; and Manfred Broy, T.U. Munich, “Challenges in Modeling Cyber-Physical Systems ”.

Shorter time to publication for ACM TECS

ACM TECS has approximately doubled the number of pages in 2012-2013. The backlog is now significantly reduced leading to shorter times to publication.

**Innovative programs which provide service to some part of our technical community**

SIGBED continues to sponsor two major federated conferences, CPSWEEK in the spring [HiCoNS, HSCC, ICCPS, IPSN, RTAS] and ESWEEK [CASES,CODES+ISSS, EMSOFT] in the fall. SIGBED started in-cooperation status with ASPLOS continuing the trend of major events moving into the embedded space (DAC since 2011).

SIGBED has established student travel grants that were offered to students attending ESWEEK 2012.

SIGBED continues to operate a blog for announcements and other information at sigbed.org and the @sigbed Twitter account.

The SIGBED review, edited by Oleg Sokolsky of University of Pennsylvania, provides a forum for technical contributions by members as well as lists of upcoming events.

SIGBED continues to offer low membership rates at $15 for a regular membership and $5 for a student membership.

**Issues**

SIGBED will need to form a selection committee for the Paul Caspi Award and call for nominations. Other items are the organization of student travel grants for ESWEEK 2013 and possibly for CPSWEEK 2014 and the call for applications for the Frank Anger Award. SIGBED may also use the blog and twitter account for real-time postings during CPSWEEK and ESWEEK.

**SIGBio FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Aidong Zhang, Chair**

**ACM Special Interest Group in Bioinformatics, Computational Biology, Biomedical Informatics**

The ACM Special Interest Group on Bioinformatics, Computational Biology, and Biomedical Informatics (SIGBIO) has been instituted in January 2011 with the aim of focusing on research on bioinformatics data management topics, roughly covered by the so-called biological and biomedical data, knowledge, and information management. The focus of SIGBIO is to bridge computer science, mathematics, statistics with biology and biomedicine sharing research interests in the management of data related to life sciences. The mission of ACM SIGBio is to support advanced research, training, and outreach in Bioinformatics, Computational Biology, and Biomedical Informatics by stimulating interactions among researchers, educators and practitioners from related multi-disciplinary felds. The original name of this group was SIGBioinformatics, and in 2012, the name was shortened as SIGBio and currently has 542 members.

**SIGBIO Website**

The SIGBIO website was created and is maintained by Dr. Mohammed Zaki of Rensselaer Polytechnic Institute (see <http://www.sigbioinformatics.org/>). The new SIGBio logo is shown there.

**SIGBIO Conference (ACMBCB):**

The 2012 ACM International Conference on Bioinformatics, Computational Biology, and Biomedicine (ACM BCB 2012) (Orlando, October 7-10, 2012) was the third ACM conference in the areas of bioinformatics, computational biology, and biomedical informatics (187 attendees, 159 paper submissions, 33 regular papers and 31 short papers accepted). The conference was preceded by 4 international workshops on emerging topics of bioinformatics, systems biology, and biomedicine, and by 2 tutorials on biological networks analysis.

ACMBCB2012 Best Paper Award:

Reverse Engineering Molecular Hypergraphs, Ahsanur Rahman, Christopher L. Poirel, David J. Badger and T. M. Murali

ACMBCB2012 Best Student Paper Award:

Coalescent-based Method for Learning Parameters of Admixture Events from Large-Scale Genetic Variation Data, Ming-Chi Tsai, Guy Blelloch, R Ravi and Russell Schwartz

ACMBCB2012 Best Poster Award:

Shortest Paths Ranking Methodology to Identify Alterations in PPI Networks of Complex Diseases, Sergio Nery Simoes, David Correa Martins Jr, Helena Brentani and Ronaldo Fumio Hashimoto

The 2013 ACM International Conference on Bioinformatics, Computational Biology, and Biomedicine (ACM BCB 2013) will be held in Washington DC, September 21-23, 2013.

SIG Bio Community meeting was held on October 8, 2012 during the ACM BCB 2012 conference.

**In Cooperation Conferences**

SIGBio was in cooperation with the following conferences:

* SWAT4LS '12: Semantic Web Applications and Tools for Life Sciences, Paris, France, November 28-30, 2012 (see <http://swat4ls-2012.eventbrite.com/>)

**NSF Awards**

SIGBIO was awarded one National Science Foundation grants to support ACMBCB conference:

1. **‘**Student Travel Sponsorship for Third ACM BCB Conference, 2012’   
   (period:9/1/12-8/31/13, amount:$24000,   
   PI: Sanjay Ranka, co-PI: Tamer Kahveci)

**Special Program 1 – Women in Bioinformatics**

In 2011, we started a special program, called Women in Bioinformatics, sponsored by the National Science Foundation during the BCB2011 conference. The purpose of this program is to encourage female students to get involved in the bioinformatics research. We continued this program in BCB2012 meeting. A keynote speech was delivered by Martha L. Bulyk and a “Women in Bioinformatics” Forum was held on Oct. 9, 2012, which featured a set of presentations of both female faculty members and PhD students. There was a large audience.

**Special Program 2 – PhD Students Forum**

A PhD students Forum was held in BCB2012 which featured the poster presentations of 23 PhD students from various universities. This forum provided a platform for PhD students to network, practice presentation skills and exchange their ideas and research experiences.

**Special Program 3 – Knowledge Repository**

As part of our knowledge repository, we have started ourPhD Dissertation Abstract Repository. An initiative to create a PhD dissertation abstract repository has been proposed and started by Dr. Armin Mikler. This repository will host PhD dissertation abstracts collected from PhD students and will be available for public access.

**Special Program4 – Health Informatics Symposium**

A Health Informatics Symposium has been added to BCB2013 as a step to include topics in health informatics in the BCB conference. The goal of this symposium is to bring computational scientists together with researchers and professionals to discuss the problems in healthcare, public health, and everyday wellness. The symposium highlights the most novel technical contributions in computing oriented toward health informatics and the related social and ethical implications.

**SIG Bio Awards**

The SIG Bio award committee has proposed the following plan for establishing new SIGBio awards:

* *Best Paper* and *Best Student Paper Awards* – through our annual BCB conference, which is the flagship conference of our SIG, we plan to give two awards: Best Paper and Best Student Paper. The award selection process will follow the formal review process of the conference. The PC Chair(s) of the conference, in consultation with their Vice Chairs, will create a short list of papers based the peer reviews of the papers. Awards committee will review these short lists and make a selection. Selection will be announced during the BCB conference. We are in the process of finalizing the proposal to ACM and planning to give the first award during BCB 2013.
* *Best PhD Dissertation Award* – Starting from 2014, by leveraging the “Special Program 3 – PhD Dissertation Abstract Repository” mentioned above, awards committee will review the PhD dissertations submitted to repository throughout the year, and will select best dissertation.
* Starting from 2015 we plan to start two new awards 1) *Outstanding Service Award,* that will awarded to an individual for their service to SIGBio community, 2) *Research Achievement Award*to an individual for a body of work presented at the conference 5 years (or more) earlier and had the most impact, measured by using quantifiable metrics like citations, software usage etc.

Best paper and best student paper awards will be continuous and there will be at least one recipient each year. However, we envision that Best PhD Dissertation Award, Outstanding Service Award and Research Achievement Award may not be awarded every year.

**SIGCAS FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Andrew Adams, Chair**

* 1. ***1. General Report***

The 2012 publication schedule of SIGCAS Newsletter, as reported in the 2011-12 annual report, was quite thin. However, two issues (Volume 42) were published in August and December 2012 and the first issue of Volume 43 was published in May 2013. At least two more, and possibly three more, issues are expected in 2013. We are currently considering two volunteers for the role of Deputy editor of the newsletter which it is hoped will ensure a return to the desired approximately quarterly production schedule and also provide for a smooth succession when the current editor wishes to step down (not an imminent question, but always something to be considered).

Renewal of the website onto a new platform has not yet happened and is a priority for the coming year. A new underlying platform based on the ACM web services site has been obtained.

SIGCAS has been supporting the movement to promote “The Pledge of the Computing Professional” though has been careful to allow that movement's leaders to drive the process forward, but highlighting its existence and our support of the idea to other parts of the ACM and to SIGCAS members.

* 1. ***2. Awards***

SIGCAS gives two awards: the general “Making a Difference Award” and the more focussed “Outstanding Service Award”. The 2012 awards have been decided, but the plaques have not yet been produced and presented. The “Making a Difference Award” will be to Roxanne Starr Hiltz in recognition of her pioneering work on computer-supported collaborative working over many decades. The “Outstanding Service Award” will be to Beth Hawthorne in recognition of her word on Social and Professional Practice on the joint ACM/IEEE-CS Joint Task Force on this issue, amongst numerous other contributions to SIGCAS and to the ACM on ethics and professional issues.

* 1. ***3. Significant papers on new areas that were published in proceedings***

N/A

* 1. ***4. Significant programs that provided a springboard for further technical efforts***

N/A

* 1. ***5. Innovative programs which provide service to some part of your technical community***

SIGCAS ran a half-day workshop “Share and Learn” on computing and social issues, before the main SIGCSE conference in Denver, CO on March 6th 2013. SIGCAS Vice-Chair Netiva Caftori and Former Chair Flo Appel again ran the event on the morning of 6th March, which attracted 30 attendees and included the following highlights:

* Presentation of “The Pledge of the Computing Professional”
* Presentation on the new IEEE-CS/ACM Professionalism Curriculum
* A summary of selected papers presented at the CEPE 2011 conference, to be published in a Special Issue of the SIGCAS Newsletter Computers and Society.

In addition, SIGCAS ran a Birds of a Feather group meeting during the main SIGCSE program, in which case studies of interest to those teaching social, legal and ethical modules in computer science courses were presented by SIGCAS members Netiva Caftori, Jim Huggins, Alfreda Dudley, Karla Carter, and Dee Weikle.

We agreed “In Cooperation Status” with the following conferences:

* HILT 2012 / High Integrity Language Technology: ACM SIGAda Annual Conference
* ISTAS '13: International Symposium on Technology and Society
* ICTD '13: Information and Communication Technologies and Development
  1. ***6. Brief summary of key issues that the SIG membership will have to deal with in the next 2-3 years***

The web presence of SIGCAS still needs a radical overhaul. It is a priority for the SIG leadership over the coming year. New elements which are desired in the new site (depending on sufficient engagement by members):

* Direct member interaction on the SIGCAS website;
* Links to member groups on sites such as LinkedIn, Facebook, etc.;
* Encouragement of members to use #SIGCAS on systems such as Twitter for relevant postings;
* Social bookmarking of relevant news articles;
* Social referencing of relevant academic papers.

The SIGCAS-Talk mailing list was revived this year but unfortunately has seen limited usage through the year. It is hoped that as we develop a broader set of interactions between members, that this will either lead to increased mailing list traffic or the replacement of the mailing list with other channels.

SIGCAS does not run its own major conference but there are a number of highly relevant conferences which run annually or bi-annually including Ethicomp, CEPE (Computer Ethics and Philosophical Enquiry), IEEE-ISTAS and others. The Executive Committee has followed up on last year's intention to become more involved with these events, as can be seen by the list of currently agreed “in cooperation” agreements. We intend to continue to build on these links and to use them to promote a larger and more active SIGCAS membership in the coming years. In particular, we are negotiating “in cooperation” status with a major new IEEE event International Symposium on Ethics in Engineering, Science, and Technology which will be colocated with ISTAS 14 (and which we will again seek in cooperation status with). In 2014 Ethicomp and CEPE will also be colocated with each other and we will seek “in cooperation” status with those events as well. We are proceeding with the arrangement details for another new IEEE event, the Conference on E-government.

**SIGCHI FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Gerrit van der Veer, President**

**1. Awards**

1.1 SIGCHI made the following awards in 2012-2013:

* Lifetime Achievement in Research: George Robertson
* Lifetime Achievement in Practice: Jakob Nielsen
* CHI Academy: Tom Tullis, Erik Horvitz, Beki Grinter, Patrick Baudisch, Clarisse De Souza, Bonnie Nardi, Alan Dix, Victoria Bellotti
* Social Impact: Award: Sara Czaja
* Lifetime Service Award: Joe Konstan

1.2 SIGCHI Conference awards:

* Best of CHI Awards for Papers and Notes:

[The Many Faces of Facebook: Experiencing Social Media as Performance, Exhibition, and Personal Archive](file:///I:\proceedings\p1.pdf)    
Xuan Zhao, *Cornell University, USA*  
Niloufar Salehi, *Sharif University of Technology & Cornell University, Iran*  
Sasha Naranjit, *Cornell University, USA*  
Sara Alwaalan, *King Saud University & Cornell University, Saudi Arabia*  
Stephen Voida, *Cornell University, USA*  
Dan Cosley, *Cornell University, USA*

[The Efficacy of Human Post-Editing for Language Translation](file:///I:\proceedings\p439.pdf)    
Spence Green, *Stanford University, USA*  
Jeffrey Heer, *Stanford University, USA*  
Christopher D. Manning, *Stanford University, USA*

[Weighted Graph Comparison Techniques for Brain Connectivity Analysis](file:///I:\proceedings\p483.pdf)    
Basak Alper, *University of California, Santa Barbara, USA*  
Benjamin Bach, *INRIA, France*  
Nathalie Henry Riche, *Microsoft Research, USA*  
Tobias Isenberg, *INRIA, France*  
Jean-Daniel Fekete, *INRIA, France*

[Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk](file:///I:\proceedings\p611.pdf)   
Lilly C. Irani, *University of California, Irvine, USA*  
M. Six Silberman, *Bureau of Economic Interpretation, USA*

[Labor Dynamics in a Mobile Micro - Task Market](file:///I:\proceedings\p641.pdf)  (page 641)  
Mohamed Musthag, *University of Massachusetts, USA*  
Deepak Ganesan, *University of Massachusetts, USA*

[IllumiRoom: Peripheral Projected Illusions for Interactive Experiences](file:///I:\proceedings\p869.pdf)

Brett R. Jones, *University of Illinois at Urbana-Champaign & Microsoft Research, USA*  
Hrvoje Benko, *Microsoft Research, USA*  
Eyal Ofek, *Microsoft Research, USA*  
Andrew D. Wilson, *Microsoft Research, USA*

[At Home with Agents: Exploring Attitudes Towards Future Smart Energy Infrastructures](file:///I:\proceedings\p1173.pdf)   
Tom A. Rodden, *The University of Nottingham, UK*  
Joel E. Fischer, *The University of Nottingham, UK*  
Nadia Pantidi, *The University of Nottingham, UK*  
Khaled Bachour, *The University of Nottingham, UK*  
Stuart Moran, *The University of Nottingham, UK*

[The Dubuque Electricity Portal: Evaluation of a City-Scale Residential Electricity Consumption Feedback System](file:///I:\proceedings\p1203.pdf)   
Thomas Erickson, *IBM T.J. Watson Research Center, USA*  
Ming Li, *IBM T.J. Watson Research Center, USA*  
Younghun Kim, *IBM T.J. Watson Research Center, USA*  
Ajay Deshpande, *IBM T.J. Watson Research Center, USA*  
Sambit Sahu, *IBM T.J. Watson Research Center, USA*  
Tian Chao, *IBM T.J. Watson Research Center, USA*  
Piyawadee Sukaviriya, *IBM T.J. Watson Research Center, USA*  
Milind Naphade, *IBM T.J. Watson Research Center, USA*

[Analyzing User-Generated YouTube Videos to Understand Touchscreen Use by People with Motor Impairments](file:///I:\proceedings\p1223.pdf)   
Lisa Anthony, *University of Maryland, Baltimore County, USA*  
YooJin Kim, *University of Maryland, USA*  
Leah Findlater, *University of Maryland, USA*

[Reasons to Question Seven Segment Displays](file:///I:\proceedings\p1431.pdf)    
Harold Thimbleby, *Swansea University, UK*

[NailDisplay: Bringing an Always-Available Visual Display to Fingertips](file:///I:\proceedings\p1461.pdf)    
Chao-Huai Su, *National Taiwan University, Taiwan*  
Liwei Chan, *Academia Sinica, Taiwan*  
Chien-Ting Weng, *National Taiwan University, Taiwan*  
Rong-Hao Liang, *Academia Sinica, Taiwan*  
Kai-Yin Cheng, *National Taiwan University, Taiwan*  
Bing-Yu Chen, *National Taiwan University, Taiwan*

[Screenfinity: Extending the Perception Area of Content on very Large Public Displays](file:///I:\proceedings\p1719.pdf)   
Constantin Schmidt, *TU Berlin, Germany*  
Jörg Müller, *TU Berlin & University of the Arts, Germany*  
Gilles Bailly, *TU Berlin, Germany*

[SPRWeb: Preserving Subjective Responses to Website Colour Schemes through Automatic Recolouring](file:///I:\proceedings\p2069.pdf)    
David R. Flatla, *University of Saskatchewan, Canada*  
Katharina Reinecke, *Harvard University, USA*  
Carl Gutwin, *University of Saskatchewan, Canada*  
Krzysztof Z. Gajos, *Harvard University, USA*

[Improving Navigation-Based File Retrieval](file:///I:\proceedings\p2329.pdf)    
Stephen Fitchett, University of Canterbury, New Zealand  
Andy Cockburn, University of Canterbury, New Zealand  
Carl Gutwin, University of Saskatchewan, Canada

[LaserOrigami: Laser-Cutting 3D Objects](file:///I:\proceedings\p2585.pdf)  
Stefanie Mueller, Hasso Plattner Institute, Germany  
Bastian Kruck, Hasso Plattner Institute, Germany  
Patrick Baudisch, Hasso Plattner Institute, Germany

[FreeD - A Freehand Digital Sculpting Tool](file:///I:\proceedings\p2613.pdf)    
Amit Zoran, Massachusetts Institute of Technology, USA  
Joseph A. Paradiso, Massachusetts Institute of Technology, USA

[Job Opportunities Through Entertainment: Virally Spread Speech-Based Services for Low-Literate Users](file:///I:\proceedings\p2803.pdf)  
Agha Ali Raza, Carnegie Mellon University, USA  
Farhan Ul Haq, Lahore University of Management Sciences, Pakistan  
Zain Tariq, Lahore University of Management Sciences, Pakistan  
Mansoor Pervaiz, Northeastern University, USA  
Samia Razaq, Lahore University of Management Sciences, Pakistan  
Umar Saif, Lahore University of Management Sciences, Pakistan  
Roni Rosenfeld, Carnegie Mellon University, USA

[Webzeitgeist: Design Mining the Web](file:///I:\proceedings\p3083.pdf)    
Ranjitha Kumar, Stanford University, USA  
Arvind Satyanarayan, Stanford University, USA  
Cesar Torres, Stanford University, USA  
Maxine Lim, Stanford University, USA  
Salman Ahmad, Massachusetts Institute of Technology, USA  
Scott R. Klemmer, Stanford University, USA  
Jerry O. Talton, Intel Corporation, USA

[What Is "Critical" about Critical Design?](file:///I:\proceedings\p3297.pdf)    
Jeffrey Bardzell, Indiana University Bloomington, USA  
Shaowen Bardzell, Indiana University Bloomington, USA

[Mind the Theoretical Gap: Interpreting, Using, and Developing Behavioral Theory in HCI Research](file:///I:\proceedings\p3307.pdf)    
Eric B. Hekler, Arizona State University, USA  
Predrag Klasnja, University of Michigan, USA  
Jon E. Froehlich, University of Maryland, USA  
Matthew P. Buman, Arizona State University, USA

* Best of CHI Award for Case Study:

[Biometric Interaction - A Case Study of Visual Feedback and Privacy Issues in New Face Recognition Solutions](file:///I:\abstracts\P2367.pdf)

**Per Kvarnbrink, *Umeå University, Sweden*  
Karin Fahlquist, *Umeå University, Sweden*  
Thomas Mejtoft, *Umeå University, Sweden***

**2. Significant Papers on new areas that were published in proceedings**

*See 1.2*

**3. Significant programs that provided a springboard for further technical efforts**

3.1. SIGCHI Sponsored Regional Workshops for HCI Community in Asia (2011), HCI Community in Latin America (2012), and HCI Community in Africa (2013)

In order to better anticipate the possibility of SIGCHI events (including the CHI Conference and SIGCHI Sponsored Specialized Conferences) in Asia,  Latin America, and Africa, we have systematically created a series of regional workshops involving members of the SIGCHI EEC and representatives of the local communities focused on understanding of the actuality of HCI development in these developing regions. Capturing an understanding of HCI knowledge and practice that exists in the developing world has already proven useful in formulating strategies for using SIGCHI resources with clear targets to help developing world HCI communities mature and in building/strengthening ties with them.  In each workshop we have developed a better understanding of shared community interests, and have been taken up on offers to support continued professional growth in the area through sponsoring selected local events including speaker exchanges, professional development and various mentoring efforts, and local meetings aimed at growing the community.

Each of the regions offers different opportunities.  For example, we will hold the annual SIGCHI conference in Korea in 2015 and expect to continue to build the relationship between ACM SIGCHI and HCI researchers and practitioners through this event.  In Latin America, we have particularly aided the Brazilian community by responding to requests to support an additional workshop as a followup to the 2012 event.  In Africa, our efforts are smaller, reflecting the maturity of HCI in the region, but are viewed as highly valuable to the developing community.

3.2 CHI Communities

We currently have 13 communities ranging in size from 11 (Food-chi) to 383 (CSCW) members. We continue to refine this so as to provide support to the various kinds of members that make up CHI. All but two of these communities have formed a suite of officers for their own governance and held elections. This provides a self-renewing mechanism for these members to work with each other. The largest communities form the governing mechanism for some of our conferences.

**4. Innovative programs which provide service to some part of our technical community**

4.1. Public Policy

During the 2012-2013 year, the SIGCHI Chair of Public policy and the SIGCHI International Public Policy Committee held a workshop at the CHI 2013 conference in Paris, attended by 21 individuals from 9 different countries, about human computer interaction and public policy. Since the CHI 2013 conference, the group has been jointly authoring a report, to serve as a foundation for the topic of HCI and public policy (the report is currently at 41 pages and 11,000 words). We hope to complete the report by the end of 2013.  
  
We also continued to edit the "Interacting with Public Policy" forum of Interactions magazine.   
  
Related to SIGCHI accessibility efforts, the CMC started using the ASSETS checklist for doing conference facility walkthoughs. We setup the e-mail alias to send accessibility problems or concerns. For the first time, CHI 2013 collected data about accessibility on the conference survey. The CHI 2014 committee appointed two people: Jonathan Lazar for "digital accessibility" and Jen Rode for "physical accessibility" to improve accessibility issues for the 2014 conference. There are three areas of digital accessibility that we are working to improve in 2014: the web site, the mobile app, and the papers. Also, at the August EC meeting, 5 of us are meeting with the AccessComputing directors at the U of Washington, to learn more about how to be more inclusive of computer scientists with disabilities.

4.2. Education

Our 2013 work focuses on two inter-related projects: gathering a large and globally representative sample of respondents for our survey on HCI education, and building an online community to support HCI Education. We also continue to analyze our data as it emerges and distribute our preliminary results. Our progress to date is as follows:

* We published an article, “Teaching and Learning Human-Computer Interaction: Past, Present, and Future” that was featured in the March/April issue of Interactions
* We hosted the second SigCHI Education lunch at CHI 2013 with 18 students, practitioners, and academics working in HCI from around the world
* We adopted a three pronged approach to identifying key geographic areas where HCI Education a) exists in sufficient quantity and quality to study, b) is emerging or otherwise changing, and c) is practical to sample.
* Based on this approach, we identified 7 broad populations to target for future outreach: The United Kingdom, Scandinavia, Spain and Spanish-speaking countries in South America, France and Belgium, Austria and Germany, India, and Australia and New Zealand.
* Building on our previous work and other research on global English-language proficiency, we determined which populations would be best reached with a translated survey and which populations would be best reached with an English-language survey.
* By collaborating with Roberto Muñoz and Thiago Barcelos we translated the survey into Spanish.
* We gathered a sample of 48 Chilean participants using the translated survey, and secured support for distribution in Peru, Colombia, and Argentina.
* We selected an approach to community building that will involve a selection of approximately 10 charter members who will collaboratively select a community platform and identify key initial functions that the community will serve.
* We re-opened the English language survey on HCI Education, including two additional questions asking participants how an online community should support their needs and whether they would be willing to serve as charter members.

4.3. SIGCHI presence in Social media

Patrick Gage Kelly was appointed Social Media Chair in June 2013. He and Elizabeth Churchill are working on a strategy for social media presence for SIGCHI including our presence on LinkedIn and Facebook, and our use of Twitter and other boradcast media. These efforts will be coordinated with our attention to the Website redesign, the interactions online and print publications and our SIGCHI Newsletter which was launched in early 2013.

4.4. SIGCHI Newsletter

Analogous to the ACM Newsletter, the “ACM TechNews SIGCHI Edition” has been launched in April 2013

5.  **Summary of key issue that the membership of SIGCHI will deal with in the next 2-3 years**

5.1. Internationalization

We will continue to advance the internationalization of SIGCHI in the next few years with a continuing focus on Asia. We will also entertain specific proposals for workshops in other areas such as, but not limited to, Africa, the Indian subcontinent, and South America.

5.2. Relations to other societies

We will continue to seek to enhance our relationships to other societies and organizations broadly concerned with human computer interaction.

5.3. SIGCHI distinguished speakers

We will develop a HCI-dedicated list of Distinguished Speakers

5.4. Local Chapters

In 2013, SIGCHI has 34 active local chapters on 5 continents in 23 countries. 31 of the chapters are professional and 3 are student chapters, with the total number of chapter members of over 3,000. During FY 2012-2013, two local chapters were started in new geographical locations, Chile SIGCHI in Valparaiso and IsraHCI in Tel Aviv.

**Professional Chapters** **City State Country**

Belgian ACM SIGCHI Chapter Antwerp Belgium

Brazil ACM SIGCHI Chapter Sao Paulo Brazil

Central Chile ACM SIGCHI Chapter Valparaiso Chile

Central Russia ACM SIGCHI Moscow Russian Federation

China ACM SIGCHI Chapter Beijing China

Cyprus ACM SIGCHI Chapter Lemesos Cyprus

Czech ACM SIGCHI Chapter Praha Czech Republic

Estonian ACM SIGCHI Chapter Tallinn Estonia

Finland ACM SIGCHI Chapter Espoo Finland

Greater Boston ACM SIGCHI Chapter Somerville MA USA

Greece ACM SIGCHI Chapter -­‐ GrCHI Athens Greece

Ireland ACM SIGCHI Chapter Dublin Ireland

Italian ACM SIGCHI Chapter Padova Italy

Korea ACM SIGCHI Chapter Seoul Republic of Korea

Mexico ACM SIGCHI Mexico, D.F. Mexico

Michigan ACM SIGCHI Chapter Ann Arbor MI USA

New Zealand ACM SIGCHI Chapter Hamilton New Zealand

North India ACM SIGCHI Chapter Allahabad India

Northern Utah ACM SIGCHI Chapter Orem UT USA

Ottawa ACM SIGCHI Chapter Kanata ON Canada

Paris ACM SIGCHI Chapter Orsay Cedex France

Philadelphia ACM SIGCHI Chapter -­‐ PhillyCHI Deptford NJ USA

Poland ACM SIGCHI Chapter Warsaw Poland

Portland ACM SIGCHI Chapter Portland OR USA

Puget Sound ACM SIGCHI Chapter Seattle WA USA

Romania ACM SIGCHI Chapter Bucuresti Romania

San Francisco Bay ACM SIGCHI Chapter Belmont CA USA

Spain ACM SIGCHI Chapter San Mateo CA USA

Swiss ACM SIGCHI Chapter Zürich Switzerland

Tel Aviv ACM SIGCHI Chapter Tel Aviv Israel

Toulouse/France ACM SIGCHI Chapter Toulouse France

**Student Chapters**

George Mason University ACM Student SIGCHI Fairfax VA USA

University of Michigan ACM Student SIGCHI Ann Arbor MI USA

Iowa State University Chapter (SIGCHI) Ames IA USA

The annual Local Chapters Workshop held during the CHI'13 conference in Paris gathered together 20 participants from 11 different countries and can be considered as a success. In general, closer interactions between chapters was seen highly valuable in order to distribute resources and experiences between the chapters with varying backgrounds (size, age, membership, geographical location, etc.). As an outcome of the workshop, SIGCHI EC decided to offer funding for supporting networking projects between SIGCHI Local Chapters during FY 2013-2014. Furthermore, SIGCHI EC is planning a Chapters Exchange Program in order to support chapter interactions.

From the March-April 2013 issue of interactions magazine, SIGCHI offers the SIGCHI Local Chapters greater visibility through a local chapters’ column in the Community Square representing one local chapter at a time. So far the columns have introduced SIGCHI Finland, BayCHI, and BR-CHI (in press) to the larger HCI community.

**SIGCOMM FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Bruce Davie, Past Chair**

SIGCOMM continues to be a vibrant organization serving the broad community of people interested in all aspects of computer networking. We continue to run a stable of successful, high-impact conferences, several of these being in co-operation with other SIGs. There are a number of highlights to report from the past year.

Our flagship conference, continuing our policy of rotation among regions on a 3-year cycle, returned to Europe for 2012, and was held in Helsinki in August. The conference was very successful with high attendance numbers, strong fundraising, and an overall surplus that helped the SIG finance its other activities.

The SIG agreed to take over sponsorship of the International Conference on Future Energy Systems (e-Energy), with which we had been in co-operation for several years. The conference aims to be the premier venue for researchers working in the broad areas of computing and communication for smart energy systems (including the smart grid), and in energy-efficient computing and communication systems. A successful conference was held in Berkeley, CA, in May 2013. This is the first addition to the SIGCOMM stable of sponsored conferences in many years (ANCS was added in 2006).

As in previous years, we continued to fund programs to support regional conferences in the networking field as well as adding additional funds to the geodiversity travel grant program. The latter program enables graduate students and young faculty from under-represented regions to attend our flagship conference. The current set of regional conferences we support financially includes COMSNETS, a major networking conference in India, the Latin American Networking Conference (LANC) and the Asian Internet Engineering Conference (AINTEC). We continue to foster the success of these conferences by means such as invited speaker travel funds and student travel grants. In addition to supporting regional conferences, the SIG has capitalized on its strong financial position to continue general student travel support to both SIGCOMM and CoNEXT conferences.

After 4 years at the helm of the SIGCOMM newsletter, Computer Communications Review, S. Keshav stepped down as editor. Dina Papagiannaki was chosen by the SIG Executive Committee to replace him. CCR continues to thrive as a journal with high quality and timely publication. CCR turnaround time is rapid compared to most journals: for technical papers it is 8 weeks for review and 16 weeks for publication; for editorials it is 1-3 days for review and 6 weeks for publication. We continue to offer both online and print access to the newsletter. Starting in 2012, we now offer discounted, online-only SIG membership that does not include a print copy of the journal. SIG members who still desire a print membership can continue to receive a print copy (at a slightly higher membership rate).

With respect to awards, SIGCOMM has recognized Larry Peterson with the SIGCOMM award for lifetime achievement; he will receive the award and present a keynote talk at the annual SIGCOMM conference in August 2013 in Hong Kong.  Fittingly, Larry is also a co-author on one of the papers chosen for this year’s test of time award: *PlanetLab: an overlay testbed for broad-coverage services,* by Brent Chun, David Culler, Timothy Roscoe, Andy Bavier, Larry Peterson, Mike Wawrzoniak and Mic Bowman. The co-winner of that award is *A delay-tolerant network architecture for challenged internets,* by Kevin Fall. Both papers are from 2003. The SIGCOMM conference’s best paper award for 2013 goes to *Ambient Backscatter: Wireless Communication Out of Thin Air* by Vincent Liu, Aaron Parks, Vamsi Talla, Shyamnath Gollakota, David Wetherall, and Joshua Smith.

Now in its second year, the SIGCOMM award for best PhD thesis was awarded to Shyamnath Gollakota. His work addressed the design of practical systems that transform wireless networking by embracing the phenomenon of interference and rendering it harmless. His thesis was also awarded the ACM’s doctoral dissertation award. There were two runners up for SIGCOMM’s dissertation award, Ashok Anand and Laurent Vanbever.

The SIGCOMM Rising Star award was given to Teemu Koponen in recognition of outstanding research contributions, early in his career, on Information Centric Networking, Accountable Internetworking, and Software Defined Networking. His architectural ideas are deep, have improved practice, and crucially, he has put in significant effort in figuring out how to actually make them happen. Teemu delivered a keynote at the CoNext conference in Nice.

During the year, five SIGCOMM members were recognized as ACM Fellows: Lixin Gao, Rachid Guerraoui, S. Keshav, Klara Nahrstedt, and Ion Stoica.

SIGCOMM’s program of community-supported projects is now in its second year (<http://www.sigcomm.org/content/acm-sigcomm-community-projects>). Community-supported projects receive funding from SIGCOMM to create tools, data sets, etc. that can benefit a large fraction of the community. Projects funded in 2013 include “An Open-Source Instructional Network Laboratory”, “Experiment-Based Teaching for the Future ACM CS 2013 Curricula”, and “Joule Jotter: Collecting power utilization datasets from Households and Buildings”.

Finally, under the leadership of the SIGCOMM Education Chair, Olivier Bonaventure, and incoming IS director Hamed Haddadi, the SIG is producing an e-book on “Recent Advances in Networking.” The book consists of contributed chapters on a range of advanced topics, and will be released at the time of the annual conference in August 2013.

**SIGCSE FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Renee McCauley, Past Chair**

**1. Awards that were given out:**

SIGCSE Award for Lifetime Service to the Computer Science Education Community was presented to Henry Walker, Grinnell College.

SIGCSE Award for Outstanding Contribution to Computer Science Education was presented to Michael Kölling, University of Kent.

**2. Significant papers on new areas that were published in proceedings**

Best paper awards were given at two of our conferences:

At ICER 2012, The Chairs' Award went to Colleen Lewis, Harvey Mudd College, for "The Importance of Students’ Attention to Program State: A Case Study of Debugging Behavior."

At SIGCSE 2012, the Best Paper Award went to Leo Porter, Skidmore College, and Beth Simon, University of California, San Diego for "Retaining Nearly One-Third more Majors with a Trio of Instructional Best Prctices in CS1."

**3. Significant programs that provided a springboard for further technical efforts**

SIGCSE continues as a Society Partner in Project Kaleidoscope's SISL in STEM initiative (http://www.aacu.org/pkal/disciplinarysocietypartnerships/sisl/index.cfm). A SIGCSE representative has been present during several conference calls and SIGCSE has a member on 5 of the 6 working committees.

4. **Innovative programs which provide service to some part of your technical community**

The Special Projects grant program, which makes small grants for projects beneficial to SIGCSE members, has been seen an increase in submissions this year:

May 2012: 15 proposals, 3 funded, $13360

November 2012: 20 proposals, 3 funded, $14000

May 2013 round: 12 proposals, 1 funded, $5000

SIGCSE continues to work closely with the Computer Science Teachers Association (CSTA) and provides CSTA meeting space at the annual SIGCSE technical symposium.

The SIGCSE technical symposium provides meeting space and access to AV and food for numerous pre-symposium events. At SIGCSE 2013, pre-symposium events included a CSAB workshop, a SIGCAS meeting, a CRA women mentoring workshop, as well as workshops on Git & GitHub, GENI, computational thinking through music, computing ethics, and preparing students to participate in free open-source software.

Thirty-six professional development workshops were offered during the SIGCSE technical symposium.

**5. Events or programs that broadened participation either geographically, or among under-represented members of your community;**

In order to increase the likelihood of international membership on the 2013-16 board, the nominating committee focused on identifying an international pool of qualified candidates. The recently elected board includes 2 Australasians and 6 Americans. (The 2010-13 board consisted of 8 Americans.)

Through a donation from former SIGCSE Chair, Henry Walker, a travel grant program was established to support young faculty to attend SIGCSE conferences.

Two SIGCSE board members are participating on the SIG Governing Board Full Inclusion committee.

Finally, SIGCSE supports and promotes efforts aimed at increasing inclusion and educating the population about computing such as CS Ed Week, the College Board's pilot program for Advanced Placement courses in Computer Science Principles, and other national and international movements that promote computer science, such as code.org.

**6. A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years.**

Internationalization is expected to continue to be a major focus of SIGCSE.

The ballot of candidates for the new board included SIGCSE members from the U.S., Europe, Australasia and South America. The recently elected board includes two members from Australasia.

SIGCSE continues to investigate how it can engage educators from around the world. SIGCSE representatives are working with Informatics Europe representatives to discuss the possible formation of a new SIGCSE-like education conference in Europe. The ICER conference already moves from the US to Europe to Australasia on a rotating 3-year basis. The ITiCSE conference has historically been held in or around Europe, including Haifa, Israel (2012) and Canterbury, UK (2013). Upcoming ITiCSE conferences will be held in Uppsala, Sweden (2014), Vilnius, Lithuania (2015) and Arequipa, Peru (2016).

SIGCSE has chapters around the world including Australia, Spain and Turkey. Discussions concerning new chapters in Europe, India and China are underway. Managing this growth and providing an equitable voice for these regions is a key issue for SIGCSE.

**SIGDA FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Naehyuck Chang, Chair**

Submitted by SIGDA Executive Committee:

Naehyuck Chang (Chair), R. Iris Bahar (Vice Chair and Award Chair), Frank Liu (Conference Chair), Matthew Guthaus (Finance Chair), Gi-Joon Nam (Educational Activity Chair), Alex Jones (Technical Activity Chair), Patrick Madden (Past Chair)

**1. Awards that were given out:**

Note:  the 2013 Student Research Competition in Design Automation was rescheduled for November 2013 (co-located with ICCAD) in order to better align with the grand finals competition in June.

ACM SIGDA/IEEE CEDA A. Richard Newton Technical Impact Award in Electronic Design Automation

Keith Nabors and Jacob White, “FastCap: A Multipole Accelerated 3-D Capacitance Extraction Program,” IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, November 1991, Vol. 10, Issue 11, Pages 1449-1459.

SIGDA Outstanding New Faculty Award

The SIGDA Outstanding New Faculty Award (ONFA) recognizes a junior faculty member early in his/her academic career who demonstrates outstanding potential as an educator and/or researcher in the field of electronic design automation.  While prior research and/or teaching accomplishments are important, the selection committee especially considers the impact that the candidate has had on his/her department and on the EDA field during the initial years of their academic appointment. The award is presented annually at the Design Automation Conference, and consists of a $1,000 award to the faculty member, along with a citation.  The 2013 ONFA was awarded to **Shobha Vasudevan,** Assistant Professor, Dept. of Electrical & Computer Engineering, University of Illinois at Urbana-Champaign.

SIGDA Outstanding Ph.D. Dissertation Award

The SIGDA Outstanding Ph.D. Dissertation Award (OPDA) is given each year to an individual to an outstanding Ph.D. dissertation that makes the most substantial contribution to the theory and/or application in the field of electronic design automation.  To qualify the dissertation must be submitted between July 1, 2011 and June 30, 2012.  The award is presented annually at the Design Automation Conference, and consists of a $1,000 award, along with a citation.  The 2013 ONFA was awarded to **Duo Ding** (David Pan, advisor) and **Guojie Luo** (Jason Cong, advisor).

ACM Transactions on Design Automation of Electronic Systems Best Paper Award

Jason Cong, W. Jiang, B. Liu and Y. Zou, “Automatic Memory Partitioning and Scheduling for Throughput and Power Optimization,” 16(2), April 2011.

SIGDA Pioneering Achievement Award

The SIGDA Pioneering Achievement Award was created to recognize early work that has played a pivotal role in the design of electronic systems.  The award is presented annually at ICCAD at the member meeting banquet dinner.  The recipient of the award normally presents a short talk, which is recorded and made available through the ACM Digital Library.  The 2012 Pioneering award was given to **Louise Trevillyan** in recognition of her almost-40-year career in EDA and her groundbreaking research contributions in logic and physical synthesis, design verification, high-level synthesis, processor performance analysis, and compiler technology.

ACM SIGDA/IEEE CEDA William J. McCalla ICCAD Best Paper Award

The McCalla Best Paper award is given in memory of William J. McCalla for his contribution to ICCAD and his CAD technical work throughout his career.  The award for 2012 is given for the following paper:  Suming Lai, Boyuan Yan, and Peng Li, “Stability Assurance and Design Optimization of Large Power Delivery Networks with Multiple On-Chip Voltage Regulators,” in the proceedings of the 30th ACM/IEEE International Conference on Computer-Aided Design (ICCAD), pp. 247-254, November 2012.

SIGDA CADathlon

CADathlon is a SIGDA-sponsored programming contest that challenges students in their CAD knowledge, and their problem solving, programming, and teamwork skills. It serves as an innovative initiative to assist in the development of top students in the EDA field.  During the competition, students are presented with problems in six areas:  circuit design and analysis; physical design; logic and high-level synthesis; system design and analysis; functional verification; and bio-EDA.  The 2012 winners are:  1st place: **Hung-Chih Ou** and **Po-Ya Hsu** (National Taiwan Univ.); 2nd place: **Ching-Yu Chin** and **Chun-Kai Wang** (National Chiao Tung Univ.)

**2. Significant papers on new areas that were published in proceedings**

Significant papers at SIGDA sponsored conferences in 2013

*1. Design Automation Conference (DAC)*

The Best Paper Award at DAC 2013 was given to:

Zhuo Feng, "Scalable vectorless power grid current integrity verification". This work proposes a scalable vectorless power grid current integrity verification framework based on the ideas of PDE-constrained multi-level optimization methods. To facilitate more accurate and efficient vectorless current integrity verification, a novel EM-aware power grid reduction method is also proposed.

*2. Asian-Pacific Design Automation Conference (ASP-DAC)*

Two Best Paper Awards were given out at 2013 ASP-DAC.

The first award was given to:

Hiroki Matsutani, Paul Bogdan, Radu Marculescu, Yasuhiro Take, Daisuke Sasaki, Hao Zhang Michihiro Koibuchi, Tadahiro Kuroda, Hideharu Amano, "A case for wireless 3D NoCs for CMPs". This work presents a topology-agnostic 3D CMP architecture using inductive-coupling that offers great flexibility in customizing the number of processor chips, SRAM chips, and DRAM chips in a SiP after chips have been fabricated.

The second Best Paper Award was given to:

Chi-Wen Pan, Yu-Min Lee,  Pei-YuHuang, Chi-Ping Yang, Chang-Tzu Lin, Chia-Hsin Lee, YungFa Chou, Ding-Ming Kwai, "I-LUTSim: an iterative look-up table based thermal simulator for 3-D ICs". This work presents an iterative look-up table based thermal simulator, I-LUTSim, to efficiently estimate the temperature profile of three-dimensional integrated circuits. I-LUTSim constructs thermal impulse response tables at the pre-process stage and iteratively calculates the temperature profile via the table lookup at the simulation stage.

*3. International Symposium on Low Power Electronics and Design (ISLPED)*

Two Best Paper Awards were given at ISPLED 2013.

The first Best Paper Award was given to:

Nicola Cottini, Massimo Gottardi, Nicola Massari, Roberto Passerone and Zeev Smilansky “A 33uW 42 GOPS/W 64x64 pixels vision sensor with dynamic background subtraction for scene interpretation”. This work introduces a chip based on a VLSI-oriented vision algorithm, implemented at pixel-level, mimicking the basic process of pre-attentive visual perception.

Anomalous pixel behaviors are detected and coded into a 2-bit/pixel. Each pixel integrates two programmable Switched-Capacitors Low-Pass Filters and two clocked comparators, which are fundamental blocks for the execution of the vision algorithm.

The second Best Paper Award was given to:

Rangharajan Venkatesan, Vivek Kozhikkottu, Charles Augustine, Arijit Raychowdhury, Kaushik Roy and Anand Raghunathan “TapeCache: a high density, energy efficient cache based on domain wall memory”. This work proposes TapeCache, a first attempt to employ DWMs as last-level caches in general purpose computing platforms. DWMs enable much higher density compared to SRAM, DRAM, and other spin-based memory technologies such as STT-MRAM.

*4. International Symposium on Physical Design (ISPD)*

The Best Paper Award was given to:

Hua Xiang, Minsik Cho, Haoxing Ren, Matthew Ziegler and Ruchir Puri, "Network flow based datapath bit slicing”. This paper presented a smart algorithm for automatic datapath-aware latch-bank planning for bit slices.

*5. International Conference on Computer-Aided Design (ICCAD)*

The Best Paper Award at ICCAD 2012 was given to:

Suming Lai, Boyuan Yan and Peng Li, “Stability assurance and design optimization of large power delivery networks with multiple on-chip voltage regulators”.

The Ten-Year Retrospective Most Influential Paper Award was given to:

Steven Martin, Krisztian Flautner, Trevor Mudge and David Blaauw, “Combined Dynamic voltage scaling and adaptive body biasing for lower power microprocessors under dynamic workloads”, which was presented at ICCAD 2002.

*6. International Symposium on Field Programmable Gate Array (FPGA)*

The Best Paper Award was given to:

Louis-Noel Pouchet, Peng Zhang, P. Sadayappan, and Jason Cong. “Polyhedral-based data reuse optimization for configurable computing”.

*7. Great Lakes Symposium on VLSI (GLSVLSI)*

The Best Paper Award was given to:

Mengjie Mao, Hai (Helen) Li, Alex K. Jones, and Yiran Chen, “Coordinating prefetching and STTRAM based last-level cache management for multicore systems”.

Significant sponsorship changes

IEEE has decided to split its sponsorship of Asian-Pacific Design Automation Conference (ASP-DAC) between the existing sponsoring society (Circuits and Systems Society, IEEE CAS) and a new IEEE organization (Council for Electronic Design Automation, IEEE CEDA). The sponsorship of SIGDA is not affected. SIGDA has long working relationship with IEEE CEDA, including joint sponsorship of two flagship conferences DAC and ICCAD. SIGDA welcomes the participation of CEDA to ASP-DAC and looks forward to the collaboration with both IEEE CAS and IEEE CEDA.

**3. Significant programs that provided a springboard for further technical efforts**

SIGDA annually sponsors the following education activities for the Design Automation Conference (DAC) and the International Conference on Computer-Aided Design (ICCAD). Both conferences are top tier premium conferences in the design automation field.

**DAC conference education activities**

**University Booth (U-booth)**

University Booth (U-booth) provides an opportunity for the university research community to demonstrate their research results to DA community. Their research results can vary from EDA tools, design projects to even instructional materials. The demonstration space, displays and wireless Internet connections are provided for university participants. This year, total 15 teams were selected for their demonstrations after thorough review process by organization committee members. All the submissions were made in 5-min video presentation format. Students from a wide range of universities (US as well as international schools) have their travel expenses at least partially supported.

**Ph.D Forum**

Ph.D Forum is a poster session to present senior Ph.D student’s dissertation research with people in the EDA community. This year, total 24 Ph.D students had participated to present their work to the audience of 200+ people. This year’s Ph.D forum was special because it’s co-located with A. Richard Newton Young Student Fellow Program. The Newton Young Fellows, who are relatively junior graduate (or senior undergraduate) students also had posters presenting their current research or relevant course projects. Each Ph.D forum student is paired up with a few Newton young fellows to have more interactions between them. All Ph.D forum participants are supported partially for their travel expenses.

**Design Automation Summer School (DASS)**

Design Automation Summer School (DASS) offers graduate students the opportunity to participate in two-day intensive courses on research and development in design automation (DA). This year, the organizers invited 8 relevant presentations from the academia as well as industries. Each presentation spans 2 hours and its topic ranged from the fundamental CAD issue to bioinformatics and smart grid energy distribution. Total 25+ students registered for this event and they are supported partially for their travel expenses.

**ICCAD conference education activities**

**Student Research Competition (SRC)**

SIGDA will participate in the ACM SRC again. SIGDA SRC used to be held at DAC in the past. However, SIGDA decided to move it to ICCAD starting this year to balance the SIGDA education activities between DAC and ICCAD.

**CADathlon**

At the International Conference on Computer Aided Design (ICCAD), student teams compete in a set of design automation related programming problems. At ICCAD 2012 CADathlon contest, total 6 practical problems are presented by the organizers and total 10 teams (6 international schools) participated in the on-site programming competitions.

**DATE (Design, Automation & Test in Europe) Ph.D Forum**

DATE (Design, Automation & Test in Europe) has been hosting its own Ph.D Forum which is similar to SIGDA DAC Ph.D Forum. Starting this year (2013), SIGDA provided helps in organizing DATE Ph.D Forum event. Our effort is well accepted by DATE Ph.D forum organizers and EC expects to be an official sponsor of the event in a few years.

**4. Innovative programs which provide service to some part of your technical community**

A. Richard Newton Young Student Fellow Program

In honor of the memory of Dr. A. Richard Newton, the 50th Design Automation Conference is sponsoring an expanded Young Student Fellow Program. It is designed to assist young students at the beginning of a career in Electronic Design Automation and Embedded Systems. A Newton Fellow will receive financial travel support to attend DAC. Moreover, each Young Student Fellow will actively engage in DAC through a number of events including meetings with design automation luminaries, attendance at technical sessions and exhibits, participation in student-related events at DAC. Following a 50-year tradition, DAC strives to foster a vibrant and worldwide community of electronic design and embedded systems professionals. The fellowship actively supports the next generation.  The focus of the program is to bring students into DAC who otherwise would not be able to come.

Gi-Joon Nam, ACM SIGDA Educational Activity Chair, coordinate this program with the Design Automation Conference (DAC) organizers and jointly operate this program with SIGDA PhD Forum. The PhD Forum presenters became mentors of the young fellows. The young fellows also present their early research work together with the senior PhD Forum presenters. There were 61 mentees and 24 mentors attended.

NSF/CRA/CCC Workshop on Extreme-Scale Design Automation at DAC

Alex Jones, ACM SIGDA Technical Activity Chair, and Patrick Madden, ACM SIGDA Past Chair, organized NSF/CRA/CCC Workshop on Extreme-Scale Design Automation at the 50th Design Automation Conference, Sunday, June 2, 2013 - Monday, June 3, 2013. Over a series of three workshops, participants will discuss a broad set of challenges facing the electronic design community, and how these challenges impact the design and fabrication of new electronic systems (both with conventional CMOS and with emerging technologies). The first workshop will focus on emerging technologies and the interplay between graduate education and the design automation workforce. The second workshop will focus on the challenges of system design with many billions of transistors. The final workshop will unify observations made into a series of milestones, benchmarks, and metrics, to help direct research efforts over the next decade.

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Career Development Talk at Career Development and Global Research Network Workshop

Naehyuck Chang, ACM SIGDA Chair, gave a talk titled as “Career development” at International Conference on Field-Programmable Technology 2012 . This talk introduces ACM and ACM SIGDA, member benefits and higher grade memberships including ACM Senior Members, ACM Distinguished Members and ACM Fellows. It also covered ACM SIGDA conferences and journals and how ACM supported conferences are managed.

**5. Events or programs that broadened participation either geographically, or among under-represented members of your community**

Design Automation Conference (DAC) is one of the major ACM SIGDA sponsored conferences. DAC is more than 50 years old and has been focusing on semiconductor design automation. Recently DAC is creating and widening the topics that can be leveraged by DAC’s legacy research contribution such as embedded systems. Starting from 2012, DAC is preparing for a new topic area, automotive engineering. As vehicles are more and more equipped with electronics components even for chassis and powertrain as well as electronics control units (ECU), design automation and design methodology has positioned as a key technology. ACM SIGDA technically as well as financially supports this movement. As for the initiative movement, Naehyuck Chang, ACM SIGDA Representative at Design Automation Conference, attended SAE World Congress and Exhibition 2013 and communicated with SAE organizing members.

**6. A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years.**

Preparing for member benefits after open-access of ACM SIGDA conference proceedings take place

* Developing new member benefits including ACM SIGDA video presentation collection
* Developing an ACM SIGDA virtual conference named "ACM SIGDA” and publish papers in Proceedings of the SIGDA"
  + Supports professional interaction in light of reduced travel funding
  + Consider alternative publication review models that support timely publication with best possible evaluation mechanisms
* More ACM SIGDA student members through educational activities

More  ACM SIGDA members in Asia and Europe

* Coordinating regional associated organizations in Asia and Europe
* Providing student member benefits including travel grant

Interacting with industry and recruiting more ACM SIGDA professional members

* Visioning activities
  + Expand visioning activities for the future of (E)DA beyond U.S. centered efforts currently underway into other regions, particularly Asia

**SIGDOC FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Liza Potts, Chair and Rob Pierce, Past Chair**

Overview

**ACM SIGDOC Purpose and updates**

The Association for Computing Machinery (ACM) Special Interest Group (SIG) on the Design of Communication (DOC) — ACM SIGDOC — emphasizes the design, development, and delivery of communication for computer-mediated information products and systems. SIGDOC fosters the study and publication of processes, methods, and technologies for communicating, designing, developing, and delivering these artifacts. Members include technical communication professionals, usability specialists, information architects, software engineers, educators, researchers, web designers, system developers, computer scientists, information technology professionals, and managers responsible for researching, producing, and/or supervising the creation of user interfaces, information architecture, technical materials, websites, and social media.

2013 has been a year of ongoing but successful change for SIGDOC - a year where great steps forward have been made. In March of 2013, in the SGB EC viability review, SIGDOC received a two year approval, citing the positive steps that had been taken over the past year. Acting as interim chair to address the challenges needed for a quick turnaround in the direction of how the SIG had been led, some difficult but effective changes that were deemed necessary were made.

Over the past year, the leadership kept the members updated and informed through the members email list, the website, and the quarterly newsletter.

SIGDOC continues to be a small but vital and vibrant community in ACM, and our two year viability approval was received with positive encouragement about the steps we’ve taken to help ensure and promote the ongoing health, visibility, and growth of SIGDOC. This is a wonderful result and bodes well for our current stability and ongoing potential for an improved future under the newly elected board and beyond.

**Annual Board meeting**

Many constructive discussions and decisions were made in the annual board meeting that was held in Seattle before the start of the 2012 conference. Discussion and steps focused on new leadership, membership growth and fiscal policy were discussed, reviewed, and executed and additional plans made for the future. The ongoing dialog for reaching decisions on changes has included current board members, former leaders, and key members at large.

In addition to discussing some of the next steps to be taken, we discussed our by-laws and updated them and submitted the update to ACM. The updates becoming official is still in progress by ACM at the time of this writing.

Membership growth, which increased (17.6%) last year, remained stable, and plans made last year to curb costs were successful.

**New leaders**

Following a number of years where there have been the same leaders a new board is now in place as of July 1 for the next two years. They’ve already begun to initiate steps that should help make the activity level, visibility, and relevance of SIGDOC move forward.

**ACM SIGDOC Mission Statement**

[**http://sigdoc.acm.org/about/**](http://sigdoc.acm.org/about/)

SIGDOC’s mission is to advance the state of knowledge, encourage the research, and support the interdisciplinary practice of the design of communication.

The ACM Special Interest Group for Design of Communication provides a forum for researchers and practitioners of the design of communication, including information architecture, information design, user assistance, help, and documentation (traditional and user-contributed) as well as technology that supports and enhances communication, including blogs, forums, chat, and wikis.

The mission of SIGDOC includes:

* encouraging interdisciplinary problem solving related to the [user-centered] design of informational communication
* promoting the application of theory to practice by connecting member contributions from research and industry
* studying and encouraging emerging modes of communication across organizations
* promoting the professional development of communication designers
* providing avenues for publication of research and exchange of best practices
* supporting the research and development of communication and processes, including applications, networks, and services

SIGDOC emphasizes the following areas of special interest to its members:

* design and evaluation methodologies that improve communication, such as user-centered and activity-centered design, participatory design, contextual design, and usability studies
* types of designed communication, including interface elements, information design, information architecture, documentation, and user assistance
* project management and content management as it relates to communication design projects
* qualitative and quantitative studies of how communications are designed and used
* practices, research, and theories relevant to any of these areas

**What is Design of Communication?**

Until 2003, ACM SIGDOC focused on documentation for hardware and software. With the shift in focus from documentation to the “design of communication,” SIGDOC better positioned itself to emphasize the potentials, the practices, and the problems of multiple kinds of communication technologies, such as Web applications, user interfaces, and online and print documentation.

SIGDOC focuses on the design of communication as it is taught, practiced, researched, and theorized in various fields, including technical communication, software engineering, information architecture, and usability.

While the name change for the DOC portion of SIGDOC has created some degree of less clarity in the scope of SIGDOC, the mission continues to be the same and has never been more relevant to computing machinery. The previous notion of “documentation” in both academia and industry has changed more to “communication” and “user technologies.” The name change accurately reflects the realities of current changes in the practices around technical communication – whereas writers used to create hard-copy documents (“DOC”) they now design, develop, and deliver user assistance (and other forms of information, including documentation), and commonly do this for many different languages.

The newer name for what DOC represents is a good reflection of the real world of current technical communication and of how both industry and academia have modified their scope and definition of former technical communication and computer science departments.

For example, at Indiana University, Bloomington, where SIGDOC 2009 took place, there is now a School of Informatics in which Computer Science is a department. Similarly, at the University of Washington, where the 2012 conference takes place in October, the school’s technical communication department was renamed to Department of Human Centered Design & Engineering (HCDE). The focus of this school is on designing and building innovative technologies and systems - research, design, and engineering interactions between humans and technology. Technical writing is currently a certificate program and a fraction of the department’s faculty and students.

Design of communication in SIGDOC is far more relevant to informatics and human centered design and engineering than is just documentation or technical communication.

In industry, job titles were and still are changing. For example, technical writing involves so much more than writing. Technical writing is more commonly known as information development and documentation is now just one form of user assistance. Former documentation groups work in user technologies groups which includes designers and usability professionals.

So, while the spectrum of subject areas for “design of communication” is broad, and not always completely clear and fixed to all parties, it does in fact encompass the multidisciplinary aspect of what is most definitely NOT just documentation anymore, and as such makes SIGDOC an important and relevant group in ACM.

The past 5 years have seen the discussion and forum for this discussion broaden. We’ve had presentations, panels, newsletter articles, and columns on this topic, and like the Talmud, it is healthy to NOT be pinned down as a fixed entity. SIGDOC Conference attendees seem to agree.

**ACM SIGDOC Officers**

Rob Pierce, IBM Rational Software, USA Chair

Liza Potts, Michigan State University, USA Vice-Chair

Kathy Gossett, Iowa State University, USA Secretary/Treasurer, 2013 Program Chair

Jen Riehle, NC State University, USA Information Director

Sarah Egan Warren, NC State University, USA Student Chapter Officer

Michael Albers and Liza Potts, USA CDQ Editors

Michael Albers, East Carolina University, USA Graduate Competition Chair, 2013 General Chair,

2012 Poster Sessions Chair

Carlos J. Costa, ISCTE, Portugal EuroSIGDOC Chair and 2012 Program Co-Chair

Aristides Protopsaltis, Serious Games Institute, UK European Representative

Mark Zachry, University of Washington, USA 2012 General Chair

Clay Spinuzzi, University of Texas at Austin, USA 2012 Program Chair, and Member-at-Large

David Novick, University of Texas at El Paso, USA Senior Academic Representative

Jason Swarts, North Carolina State University, USA Academic Representative

Kathy Haramundanis, Hewlett Packard Company, USA Senior Industry Representative

Gerianne Bartocci, Intuitive Co., PA, USA Industry Representative

Junia Anacleto, UFSCar, Brazil South American Representative

Manuela Aparicio, Adetti/ ISCTE, Portugal European Representative

Brad Mehlenbacher, NC State University, USA Past Chair

Scott Tilley, Florida Institute of Technology, USA Member-at-Large

Irene Frawley, ACM HQ, USA ACM Program Coordinator

**Conferences**

**ACM SIGDOC 2012 Conference Summary**

The ACM SIGDOC 30th International Conference on Design of Communication was held in Seattle, Washington on October 3-5, 2012. (http://sigdoc2012.org) and included collaboration and support from University of Washington.

The conference was the most profitable in several years, and as in previous conferences, attendees cite the size as an attractive aspect of the conference and how it nurtures closer communication between attendees (Total Attendance: 73; Surplus of $9,682).

The conference included a broad range of papers but was small enough to encourage lively conversations and collaborations. The conference attracted attendees from the University of Washington and the Seattle area as well as its usual mix of academics and industry professionals from several different countries.

This year’s conference had what was the most well attended and vibrant poster session of the past ten years and set a new example of how to manage such sessions in future conferences. In particular, it was held during its own time block during one of the days and thus was attended by almost all conference attendees and provided a vibrant forum for discussions and networking.

The SIGDOC 2012 Conference Committee:

* Conference Chair: Mark Zachry, University of Washington – Seattle
* Program Chair: Clay Spinuzzi, University of Texas, Austin
* Posters Chair – Stewart Whittemore, Auburn University
* Experience Reports Chair – Huatong Sun, University of Washington – Tacoma

The program committee had 46 members comprising many academic and industry representatives from several different countries. For more information, see <http://sigdoc2012.org/conference-committee/>.

The conference call for papers attracted a wide range of papers, experience reports, workshops, and posters on the design of communication and games, organizational contexts, social media, the future of documentation, accessibility, interface design, and learning (<http://sigdoc2012.org/attending-sigdoc/conference-program/>).

This was the second year that the conference did not produce a printed version of the conference proceedings. This change is similar to what other SIGs and organizations have done and seems to be a prudent change.

The *Proceedings of the 30th Conference on Design of Communication* (ACM Press) were made available as a download to conference attendees and is also available in the ACM-DL (Digital Library).

**Awards**

**Gerhard Fischer – Rigo award winner**

Gerhard Fischer was voted by the board as this year’s winner for his research on new conceptual frameworks and new media for learning, working, and collaborating; human-computer interaction; design; domain oriented design environments; distributed cognition; universal design (assistive technologies); and socio-technical environments.

**Planning for future conferences**

To stem potential loss of opportunity for existing members to attend the annual conference, changes were made to promote more domestic conference activity. A new leader to help with student chapter creation was also appointed, and gave a presentation at the 2012 conference.

* ACM SIGDOC 2013, to be held in September at East Carolina University, in, Greenville, NC. This domestic location was agreed upon once we decided that the annual conference needed to be kept closer to where the majority of SIGDOC members reside.

**Chapters**

SIGDOC has active chapters and plans are in progress for new regional and student chapters. Efforts are currently underway for establishing new AsiaSIGDOC and LatinAmerica chapters as well as new student chapters at Michigan State and Iowa State.

**EuroSIGDOC: ACM SIGDOC European Chapter** [**http://eurosigdoc.acm.org/**](http://eurosigdoc.acm.org/)

EuroSIGDOC has now hosted workshops on Open Source and Design of Communication in Lisbon, Portugal for the past several years. (<http://eurosigdoc.acm.org/osdoc2010/> , <http://eurosigdoc.acm.org/osdoc2011/> , <http://eurosigdoc.acm.org/osdoc2012/>, <http://eurosigdoc.acm.org/osdoc2013/>

Additional efforts are underway for a EuroSIGDOC event to be held in the Netherlands in 2014.

**Programs and Services**

Many efforts that were begun last year are now completed for addressing the need for an immediate call to action based on the most recent SIGDOC viability review.

Next steps are currently focused on the new leadership promoting other activities such as:

* New information director enhancing the website and other social computing channels of communication
* Continued promotion of the new journal-like newsletter
* Ongoing availability of all back issues in the DL
* Efforts to expand membership contributions to the various activities

SIGDOC sponsored a women’s luncheon in this year’s ATTW conference to help promote women in technology and in technical communication as well as to increase its own visibility. And SIGDOC continues to support DocEng2012 and other relevant ACM SIG conferences as requested.

In addition to annual conferences, maintaining a website and publishing a quarterly newsletter, ACM SIGDOC is also actively engaged in various social media spaces (for example, Facebook, LinkedIn, Slideshare, Twitter, and Wikipedia).

**Membership**

**ACM SIGDOC Membership**

ACM SIGDOC began FY 2012 with 187 members and grew to 220 members.

This was the first membership increase in several years and indicated a significant increase (17.6%) for 2012 membership growth despite dwindling membership over several previous years also seen in similar organizations. It was largely due to a one time email offer to all previous members to join at a discounted rate.

In FY 2013, total members =224 as of June 30.2013. This is a modest 3% growth in membership but a second year in a row of increasing membership. New leaders, sponsorships, and growth initiatives will work on continuing membership growth.

Membership brochure made available on our Website:

<http://sigdoc.acm.org/wp-content/uploads/2011/11/sigdocBrochure-press.pdf>

**Website**

The SIGDOC web site continues to become a more dynamic information portal for the SIG and has a new communications director in 2013 – Guiseppe Getto. This site offers a collaborative environment for member contributions with current enhancements planned and underway by Guiseppe. It also has updated and improved history, mission statement, and membership benefits sections, in part to try attracting more people to join SIGDOC (<http://sigdoc.acm.org/join/>) in addition to encouraging existing members to volunteer (<http://sigdoc.acm.org/members/get-involved/>).

The SIGDOC Board continued to focus on strategies for addressing membership numbers and the number of volunteers. We continue to aim at encouraging greater student/campus involvement, to establish international collaborations and membership, and to reach out to the broader communities of writers, information engineers, technical communicators, and information technology professionals working with information. Sponsoring a luncheon at the ATTW conference and providing information about ACM SIGDOC was one example of making strategic efforts at increased visibility and growth.

**ACM SIGDOC Publications**

The ACM SIGDOC quarterly newsletter is made available on the SIG website and as of 2012 is also available in the ACM digital library.

Release of the newsletter is announced each quarter via the ACM SIGDOC members’ listserv and is available in general via the ACM SIGDOC website (<http://sigdoc.acm.org/publications/newsletter/>). Archived versions of all past newsletters are also available in pdf format on the ACM digital library.

For the available past newsletters on the ACM digital library, see the Table of Contents tab from here: <http://dl.acm.org/citation.cfm?id=J1351&CFID=125274874&CFTOKEN=16792716>

**Communication Design Quarterly**

New in 2012 is a much enhanced journal-like format for our newsletter, and renamed to the Communication Design Quarterly. There are now three editions of this newer format.

See, <http://sigdoc.acm.org/publications/>

This new publication offers members and potential members the opportunity to read or contribute additional articles of value in the diverse fields comprising the design of technical communication.

**Key issues for next 2-3 years**

**Key Issues for ACM SIGDOC in coming year include:**

* Support the development of new (regional and student) SIG chapters (such as EuroSIGDOC), and develop policies for managing them effectively and for increasing SIG chapter activities. Having a student chapter leader has helped these efforts.
* Better connections between the SIGDOC website and other social computing sites can help create a larger community.
* Serve the needs of our current members and find ways to increase our membership by attracting new members, volunteers, and board officers. Good efforts were made in 2012 and lessons were learned that should help continue to drive future improvements.
* Promote Communication Design Quarterly (CDQ), our redesigned and much more robust newsletter for cutting edge research in the design of communication.
* Nurture publication of papers in newer focus areas both for theory and practice such as learning resources and design of communication for a wider diversity of audiences and contexts in terms of culture, language, education, and economic resources.
* Continue to generate and act on ideas for improving our visibility. For example:
  + Let’s build up a history page for ACM SIGDOC to increase our visibility! We are looking for a contributor to help work with ACM to create a new SIGDOC History page from this ACM history page: <http://historywiki.acm.org/sigs/Main_Page> Who would like to begin creating a new page for SIGDOC? (historywiki.acm.org/sigs/SIGDOC)
  + Spread the news that the SIGDOC 2013 call for presentations is now available at: <http://sigdoc.acm.org/2013/>
  + Spread the news that the International Conference on Information Systems and Design of Communication (ISDOC2013), a SIGDOC European Chapter event, was recently approved by ACM and this workshop will be held in Lisbon on July 11. See <http://eurosigdoc.acm.org/isdoc2013/index.html>
  + SIGDOC member Scott Tilley is now an ACM Distinguished Lecturer. See [http://dsp.acm.org/view\_lecturer.cfm?lecturer\_id=3D4483#lecturer\_id#](http://dsp.acm.org/view_lecturer.cfm?lecturer_id=3D4483#lecturer_id)

At the ACM SGB in March, I was struck by how successful some of the SIGs are—they have ongoing support and stability due to a wider based of contributors who keep their SIG vital and relevant to their research and practice. One of the other SIGs with a relatively small membership got a positive viability review in part, I believe, because their perceived reach is far wider than their membership. While both our SIG and theirs have about 200 members, they (SIGSAM) have various group lists that people can join from their SIG web site with a total population of over 5000 members amongst those communities. So, while they do not have membership revenue and conference results so very different from SIGDOC, they do have a much broader visibility that is part of their community. I believe that we clearly have an opportunity to do something similar to that in the upcoming years.

**SIGeCom Annual Report**

**July 2012 - June 2013  
Submitted by: David C. Parkes, Chair**

SIGecom's three primary activities are its annual Conference on Electronic Commerce (EC), its electronic newsletter SIGecom Exchanges, and its new journal, ACM Transactions on Economics and Computation (TEAC).

The Fourteenth ACM Conference on Electronic Commerce (EC'13) was held June 16-20, 2013 at U. Pennsylvania, Philadelphia PA. The Program Co-chairs were Preston McAfee (Google) and Eva Tardos (Cornell) and the General Chair was Michael Kearns (U Penn). Over 210 people attended and the conference attracted more than 200 submissions and strong financial backing from Facebook, Microsoft and Google. The ACM EC'13 Best Paper and Best Student Paper went to "Mechanism Design via Optimal Transport," by Constantinos Daskalakis, Alan Deckelbaum, and Christos Tzamos. Plenary speakers included the recent Nobel award winner (Economics), Alvin Roth of Stanford, and Jon Kleinberg (Cornell.)

We had a very strong technical program, and continued the structure from 2012, with three tracks for the purpose of structuring the review process and then some parallel tracks during the conference itself. The accepted papers covered a range of topics from core theoretical foundations to practical innovations, including those of typical strength, such as social networks, mechanism design, matching and prediction markets, as well as applications to areas such as internet advertising and crowd-sourcing.

In order to serve as a hub for the growing number of researchers and venues at the intersection of computer science and economics, the SIG continues to work to establish in-cooperation agreements with high quality related conferences and workshops. For the 2012-13 year, we had an in-cooperation agreement with the 8th Workshop on Internet and Network Economics. The new ACM TEAC journal is doing well and continues to receive high quality submissions and has expanded its board over the past couple of months.

In terms of completed business during the year, most significant is the completion of a formalized policy for:

(a) the EC Best Paper Award and EC Best Student Paper Award

(b) an EC best Ph.D. dissertation Award at the intersection of computer science and economics.

(c) a test-of-time award.

The main challenge for next 2-3 years is to maintain our strength in theoretical and foundational research at the intersection of economics and computer science, while at the same time keep connected to practice, while continuing to find paths to encourage more application-related contributions in the conference program. Maintaining this balance and reaching out for opportunities in emerging areas will be a key focus of the conference officials for next year and beyond. Another issue that is under active debate is in regard to the appropriate name for our flagship conference and whether there should be a second conference sponsored by the SIG.

**SIGEVO FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Wolfgang Banzhaf, Chair**

**LEADERSHIP OF SIG**

SIGEVO, the SIG on Genetic and Evolutionary Computation, held elections for one third of its 18 member strong executive board. Two members were not available anymore for a further period. Four board members were re-elected: Kalyanmoy Deb, John Holland, Marc Schoenauer and Darrell Whitley. Two new board members were elected to complete the slate of six. These are:

Michael O’Neill and Terence Soule, after a tie had been broken for the last elected person. Jason Moore, who was tied with Terence Soule withdrew his candidacy. With this election we continue our renewal of leadership, getting younger members into responsible positions. Our inclusive strategy for the organization of GECCO has in time yielded capable people to become candidates for these positions on the executive board.

This was the second year of activity of our elected officers Wolfgang Banzhaf (chair), Una-May O’Reilly (vice chair), Franz Rothlauf (treasurer) and Marc Schoenauer (secretary). A business meeting of the Executive Committee was held in Amsterdam, at the occasion of GECCO-2013 on July 8, 2013. The meeting confirmed the leadership for a further two years.

**BUSINESS MEETING IN AMSTERDAM**

GECCO 2013 is formally outside the report period, but very close, so I shall report on the results of the business meeting. Besides the EC, the chairs and E-i-Cs of the 2012 and the 2013 GECCO conferences were invited. Not in attendance this year was the E-i-C of MIT Press’s Journal Evolutionary Computation which is closely affiliated with the SIG.

The following decisions were made at the meeting:

1. The GECCO two-track system will continue after the glitches have been worked out from the online submission system. This allows GECCO authors to indicate a primary and secondary track for consideration for their papers. In the future, we shall add more pro-active decision making by the track chairs and general chair. So even if a paper has not designated a secondary track, reviewers from a secondary track as determined by the chairs can be asked for input on a paper.
2. SIGEVO has not yet decided on an Asia/Pacific venue for a GECCO. However, the selection of countries was extended to include South Korea and Singapore. Also, South America has been added as a possible continent where to go to with GECCO in 2016.
3. Progress on the inclusion of GECCO proceedings volumes in the ISI Web of Science database has been slow. After some conversation with both ACM and ISI Thompson, we still do not have a consistent and systematic solution for all GECCO volumes. It was found that this fluctuation (some volumes being added, some others being removed from the SCI) has had negative consequences for our journal impact ratings.
4. There is progress on the inclusion of SIGEVO topics in the ACM Classification System for Computer Science (CCS). While nothing is official, our suggestions have been received by ACM, Bernie Rous, with a promise to get them approved.
5. We shall make use (and promote) the ACM Authorizer tool.
6. The new wiki collaborative website for SIGEVO operates since about a year. We shall need some more content workers for the website, and anticipate contracting out more web-related work.
7. A new SIGEVO Special Group for Women has been founded at this year’s GECCO. Promotional material has been distributed, a meeting has taken place and a plan is being developed as to how to more systematically promote women in Evolutionary Computation. One first step (to be implemented at next year’s GECCO) is that child care will be provided at the conference.
8. Efforts to form an ad-hoc award committee have not yet come to fruition. Currently, membership is not yet complete, although two volunteers have already been identified. U-M O’Reilly and W Banzhaf will work on the terms of reference for the ad-hoc committee, to start work in September.
9. SIGEVO Summer Schools proposed last year have not yet moved into realization stage, but first discussions have taken place, and a proposal is in preparation.

**GECCO 2012**

GECCO 2012 was held in Philadelphia, PA, in July 2012. In even years we usually go to a site in North America, while in odd years we go to a site in Europe. Due to other conferences on similar topics, we have smaller numbers in even years than in odd years, and 2012 proved to be in line with that expectation. Nevertheless, the Philadelphia conference was quite a success. We received almost 467 submissions, and had an attendance of 409 individuals. Acceptance rates for GECCOs have gone down now for the second time, to 37%, after hovering between 46% and 41% for a long time before. The General Chair of GECCO 2012 was Jason Moore (Medical School, Dartmouth College) and the E-i-C was Terence Soule (U Idaho). GECCO 20112 was the second time we worked with Executive Events as conference management. Things went very well, and SIGEVO looks forward to continue this successful relationship.

Both, Drs. Moore and Soule were candidates for the recent election to the executive of SIGEVO, and were tied in the end for a place.

**FUTURE GECCOS**

Briefly: GECCO 2013 was recently held in Europe again, in Amsterdam, which proved to be an attractive choice with about 525 attendees. The VU (Free University of) Amsterdam was chosen as venue, our second time we used that model in GECCO’s history.

The venue for GECCO 2014 has been determined: a hotel in Vancouver, BC, Canada. This is in line with our plans to alternate between North America and Europe. Our general chair will be Dirk Arnold, Dalhousie University.

Planning is moving ahead for GECCO 2015. The General Chair, EiC and organization team is in place, with a venue being considered in Spain.

Venue solicitation has not yet started for conferences further out. We plan to install a process by which people could submit places.

**FOGA 2013**

The FOGA workshop 2013 was held in January 2013 in Australia, at the University of Adelaide, with help (student sponsoring) from SIGEVO. It was organized by Frank Neumann (U Adelaide) and Ken de Jong (GMU). Due to the choice of the workshop location, attendance was somewhat down this year.

**SIGEVO FINANCES**

As has been the case in previous years, SIGEVO is in good shape financially, with events usually not producing deficits. Our reserves are healthy, and we are looking at ways (cf. Award ad-hoc Committee) to use surplus for rewarding our membership through higher visibility.

Student support at GECCO has been steady at approximately $20-25K per year. We have also started to sponsor students to attend the biannual FOGA workshop.

**AWARDS**

Seven competitions were held at GECCO-2012 with awards and prizes presented at the SIGEVO Annual Meeting. The areas of the competitions were:

* Evolutionary Art, Design and Creativity
* GPUs for GEC
* Simulated Car Racing Championship
* Visualizing Evolutionary Computation
* Industrial Challenge
* EvoRoboCode

The most prominent competition is the Humies Award for the best human-competitive application of Evolutionary Computation methods published in the last year (July 2011 - June 2012). Strict criteria are applied for what work becomes eligible in the competition, and a panel of five independent judges is responsible for the selection of winners of $10,000 in cash prizes donated by Third Millenium Online Products Inc.

The HUMIES Gold Medal Winner for 2012 was Cameron Browne for the design of a board game called ***Yavalath*** using evolutionary computation techniques. He received the $5,000 cash prize accompanying the Gold Medal.

*Yavalath:* Sample Chapter from *C. Browne, Evolutionary Game Design.*

*Springer, UK, 2011.*

C.Browne, Imperial College London

In 2013, the same competitions were held at GECCO 2013, again with winners awarded donated cash or equipment prizes.

In 2013, the HUMIES Gold Medal was awarded to two different entries which the judges found equally qualified for best prize:

*Search for a Grand Tour of the Jupiter Galilean Moons*

*Genetic and Evolutionary Computation Conference, 2013.*

D. Izzo, L. Simies, M. Maertens, G. de Croon, A. Heritier, C.H. Yam

ESA, VU Amsterdam, U Delft, Hong Kong U of Science and Technology

*Evolutionary Design of FreeCell Solvers.*

*IEEE Transactions on Computational Intelligenceand AI in Games, 2012.*

1. Elyasaf, A. Hauptpman, M. Sipper

Ben-Gurion University of the Negev

Both receive a cash prize of $4,000 together with a certificate.

For the third time, the “SIGEVO Impact Award” was given in 2013 to recognize up to 3 high impact papers that were published in the GECCO conference proceedings 10 years earlier. Criteria for selection are high citation counts and impact deemed to be seminal. Selection is made by the SIGEVO Executive Committee.

This year the Impact Award was given to:

**A Non-dominated Sorting Particle Swarm Optimizer for Multiobjective Optimization*.***

*Genetic and Evolutionary Computation Conference, 2003.*

Xiaodong Li

GECCO Best Paper Awards were given in different categories. We have somewhat consolidated the field by lumping smaller program tracks together. The minimum submission numbers for a best paper award are 20, with smaller tracks collaborating to select a best paper among their union set.

**SIGGRAPH FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Jeff Jortner, President**

1. ***Awards***

ACM SIGGRAPH presented its 2012 awards during the Keynote session at SIGGRAPH in Los Angeles.

* Computer Graphics Achievement Award: Greg Turk
* Significant New Researcher Award: Karen Liu
* Award for Lifetime Achievement in Digital Art: Jean-Pierre Hébert
* Outstanding Service Award: David Kasik

The Computer Animation Festival presented the world's most innovative, accomplished, and amazing creators of digital gaming, film, and video. A total of 91 films were shown during the Festival. In addition to film screenings, the Festival included interactive sessions and exclusive learning opportunities to gain industry secrets and advice from some of the most successful professionals in the field.

SIGGRAPH 2012 Computer Animation Festival Awards

Best in Show Award: Réflexion

Directed by Yoshimichi Tamura, PlanKtoon; France

Jury Award: How To Eat Your Apple

Directed by Erick Oh, Independent; USA and South Korea

Best Student Project Prize: Estefan

Directed by Jeff Call, Brigham Young University; USA

Best Student Project Prize Runner-Up: Globosome

Directed by Sascha Geddert, Filmakademie Baden-Württemberg; Germany

Best Student Project Prize Runner-Up: Herr Hoppe und der Atommüll

Directed by Jan Lachauer and Thorsten Löffler, Filmakademie Baden-Württemberg; Germany

Well-Told Fable Prize: Rosette

Directed by: Romain Borrel, Gaël Falzowski, Benjamin Rabaste, and Vincent Tonelli, Supinfocom , Arles, France

SIGGRAPH Asia 2012 Computer Animation Festival

Best in Show Award: The People Who Never

Stop by Florian Piento from Autour de Minuit Production.

Jury Award Oh Sheep! by Gottfried Mentor and Leonid

Godik from Filmakademie-Baden-Württemberg.

1. ***Significant papers on new areas that were published in proceedings***

SIGGRAPH 2012 featured 94 Technical Papers and SIGGRAPH Asia featured 79 Technical Papers. The Technical Papers detailed new advances across many fronts, including 3D display technology, photographic prints for HDR images, textile design, and more.

1. ***Significant programs that provided a springboard for further technical efforts***

**SIGGRAPH**

SIGGRAPH 2012, the world's premier conference on computer graphics and interactive techniques, welcomed 21,212 artists, research scientists, gaming experts and developers, filmmakers, students, and academics from 83 countries around the globe to Los Angeles. In addition, 161 industry organizations exhibited at SIGGRAPH. A total of 19 countries were represented on the show floor.

In all, more than 1,200 speakers and contributors participated in the conference through a variety of talks, sessions, panels, papers, presentations, tutorials, and screenings. Jane McGonigal, director of game research and development at the Institute for the Future (IFTF), gave the keynote speaker at SIGGRAPH 2012. McGonigal’s research at IFTF focuses on how games are transforming the way we lead our real lives, and how they can be used to increase our resilience and well-being.

In conjunction with the 2012 conference, SIGGRAPH held its second annual Business Symposium, The Symposium provided an intimate, interactive forum for open, frank conversations among leaders and executives in the visual effects, gaming, and media arenas as they explore the present and future of the industry. SIGGRAPH 2012 welcomed visionary leaders and experts from a broad spectrum of the computer graphics industry, including animation, education, motion pictures, gaming, and visual effects. This full-day event provided an exclusive opportunity for attendees to gain high-level, experiential vantage point insight from the producers and executives who have all forged unique paths to their current roles and now design the industry’s direction.

**SIGGRAPH Asia 2012**

The 5th ACM SIGGRAPH Asia Conference and Exhibition drew more than 4,250 attendees from 56 countries, of which 22 percent were students from educational institutions across the region. In all, 68 percent of all attendees came from outside Singapore. SIGGRAPH Asia’s featured speakers were co-founder of PDI/DreamWorks Richard Chuang, and the ‘Father of the MP3’ Karlheinz Overall, 321 presentations, talks and panels took place across all programs. Vibrant and engaging discussions on the developments, innovations and future trends of computer graphics and interactive techniques were seen by attendees from all around the world.

1. ***Innovative programs which provide service to some part of your technical community***

*Digital Arts*

The Digital Arts Committee’s primary social networking site (NING) is nearing 800 members. Of these, 261 report as being official SIGGRAPH members (last year’s figures were 700/238). This is slow but steady growth, with a minimum of advertising and no new shows to promote the group this past year.

There are two social sites for the DAC. In addition to the NING site, DAC has a Facebook page that is growing rapidly in popularity. There are currently 400 members in this group. People are using this site to post news articles, announcements about shows or their own work, and professional development class offerings. We have yet to take advantage of hash tags in the social sites. We may want to expand in this mode for the upcoming year.

*Education*

One of the major objectives of the ACM SIGGRAPH Education Committee is to help establish a worldwide network of computer graphics educators. Our international ACM SIGGRAPH Education Committee members have active roles in the planning and organization of education-related Computer Graphics events in several countries, which offers an excellent opportunity for us to exchange information and promote our ACM SIGGRAPH educational activities worldwide.

In 2012-2013 ACM SIGGRAPH Education Committee initiatives and the SIGGRAPH conference were promoted at conferences and events held in Brazil, Germany, and Mexico.

The Education Committee presented an Education track at Eurographics on May 9, 2013, in Girona, Spain, featuring four papers and one discussion:

* Project-Based Learning of Advanced Computer Graphics and Interaction Romero, M.
* Student Project – Racing Launcher Game Anderson, E.F.
* Introductory graphics for very diverse audiences Pelechano, N. & Fairen M.
* Scene graph creation and management for Undergraduates  Shesh, A. & Jones M.
* Moderated discussion: “The progress of computer graphics programs in meeting the Bologna requirements” Moderator: Jean-Jacques Bourdin

Undergraduate Research Alliance

The purpose of the Alliance is to foster and support original undergraduate research in computer graphics and related disciplines. More importantly, the Alliance attempts to facilitate the creation of inter-institutional projects, where students from different schools can share their respective expertise. Our SIGGRAPH 2012 Birds-of-a-Feather session attracted more than two dozen attendees, demonstrating a strong interest in both the Alliance and undergraduate research in general.

The Education Committee collaborated with Unity 3D to present a Training Seminar at SIGGRAPH 2012. This in-depth overview of the Unity platform for creating games and 2D and 3D applications for the desktop, the web, mobile devices, and consoles is designed for educators at the high school level and above.

The Education Committee supported the Autodesk Education Summit at SIGGRAPH 2012. This annual Education Summit brings together the worldwide community of post-secondary and technical educators, program directors, trainers, and more to discuss key industry trends and best practices, network with their peers and learn about Autodesk products and programs, including a special focus on virtual production techniques.

*Small Conferences*

In 2012, the Small Conference Committee approved 6 sponsored, 6 co-sponsored and 12 in-cooperation conferences.

In addition, several conferences co-located with SIGGRAPH 2012, including DigiPro 2012, Web3D, and ACM Symposium on Applied Perception – APGV.

*Student Services*

Student Services Committee provided resume/portfolio reviews for about 144 students at SIGGRAPH 2012. Over the course of the year, they held three webinars for students:

* November 27th, 2012 VR and AR. What are they and where are they going?
* March 27th ACM SIGGRAPH Student Chapters: What are they and how do I start one?
* July 2nd SIGGRAPH SV 2013: Is Your Brain Ready For This?

*Communications*

ACM SIGGRAPH continued producing its monthly e-newsletter Interactions. This monthly touch-base with the members includes information on upcoming conference and chapter events, elections, and awards.

Social Media remains a major priority for Communications as we continued to keep all of our social media channels up to date, fresh and interactive.

The first official draft of the ACM SIGGRAPH Social Media Guidelines has been completed and submitted for final approval to the EC and ACM. These guidelines include general rules and suggestion, as well as more specific instructions for organization volunteers, Chapters and the annual SIGGRAPH Conferences. Our social media channels have grown even more in the past year and have hit several milestones. They have become a great way of reaching our membership as well as fans of the conference and organization. It has also been shown that our feeds/channels have had a great influence on submissions for the conferences.

Current numbers for the feeds the Communications Committee maintains daily are as follows:

* Twitter has 17,727 followers; gained 5,373 followers since SIGGRAPH 2012.
* Facebook (SIGGRAPH Conferences) has 16,985 fans; gained 7,365 fans since SIGGRAPH 2012.
* Facebook (ACM SIGGRAPH Group) has 3,203 members; gained 644 members since SIGGRAPH 2012.
* Facebook (ACM SIGGRAPH) has 802 fans; gained 629 fans since SIGGRAPH 2012.
* LinkedIn has 8.543 professionals in our group; gained 1,681 fans since SIGGRAPH 2012.
* YouTube channel has 7,065 subscribers and 2,267,315 views; gained 4,396 subscribers and 1,339,801 views since SIGGRAPH 2012.
* Tech Papers 2013 Preview has 841,089 views alone; made it to the front page of reddit.
* CAF 2013 Trailer has 73,895 views in 10 days since posting.
* Google+ (ACM SIGGRAPH) is in 504 circles; gained 415 circles since SIGGRAPH 2012.

The Communications Committee had representatives attend SIGGRAPH Asia 2012 and provide live social media coverage; they also worked with the SCOOP team to produce podcasts in Singapore.

*Chapters*

ACM SIGGRAPH Chapters Events

Our chapters (currently 50 Professional and Student Chapters) host activities for their local communities throughout the year. Here are some examples of chapter events from the past year: I recommend revising this.

* NYC ACM SIGGRAPH : MetroCAF 2012
* The largest college computer animation festival in the NYC-region, 2012 was the tenth anniversary edition of this chapter event.
* Bogota ACM SIGGRAPH : Bogota ACM SIGGRAPH 2012
* A three-day festival that features an impressive list of speakers, last year’s event drew over 800 attendees.
* Vancouver ACM SIGGRAPH : Syd Mead Presents: n2it
* A presentation by the iconic Syd Mead.
* Los Angeles ACM SIGGRAPH : 3D Printing & Scanning
* A panel discussion on various aspects of 3D printing and scanning.
* San Francisco ACM SIGGRAPH : Student Entertainment Summit
* Silicon Valley ACM SIGGRAPH : The Future of Successful AR Development
* Paris ACM SIGGRAPH : Historical Architectural Visualization

The Chapters Committee hosted a number of events and activities at SIGGRAPH 2012, including the following:

* Chapters Development Workshop-- Roughly 20 different chapters (40 people) attended our annual training workshop in Los Angeles
* ACM SIGGRAPH Chapters Party --Over 1,500 people attended one of the social and networking highlights at the annual conference
* Chapters Start-Up Meeting--Over 20 students and professionals attended this meeting on how to start an ACM SIGGRAPH Professional or Student Chapter
* Chapters Business Meeting

1. **Key issues that the membership of that SIG will have to deal with in the next 2-3 years.**

ACM SIGGRAPH is looking to better position the organization for the future given the trends impacting the industry, membership organizations and our community members’ lives. Two major issues that leadership will be looking at are the decreasing conference attendance and shrinking conference revenues. We have long had a reputation for excellent and exciting content at our conferences, and want to expand this to provide year-round content and networking for our community. The ACM SIGGRAPH newly designed web site is the first step toward this. Additionally, a strategic task force has been put into place to facilitate discussions about our future.

**SIGGHPC FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Cherri M. Pancake, Chair**

**Awards**

SIGHPC instituted two types of travel grants that will be available as of FY14:

* SIG + ACM-W support for women students to attend the annual SC conference
* SIGHPC travel grants to attend SIGHPC-related conferences

In addition, we have been working with the Anita Borg Institute to establish a new joint award for the “SIGHPC/ABI Emerging Leader in Technical Computing.” As of the close of FY13, it has been approved by SGB but must still be approved by the Awards Committee and ACM Council.

**Significant Papers on New Areas Published in Proceedings**

* A Framework for Low-Communication 1-D FFT (Proceedings of SC12; winner of Best Paper Award)
* 4.45 Pflops astrophysical N-body simulation on K computer: the gravitational trillion-body problem (Proceedings of SC12; winner of ACM Gordon Bell Prize)
* Toward real-time modeling of human heart ventricles at cellular resolution: simulation of drug-induced arrhythmias (Proceedings of SC12)
* MPI Runtime Error Detection with MUST - Advances in Deadlock Detection (Proceedings of SC12; Best Paper finalist)
* Compass - A Scalable Simulator for an Architecture for Cognitive Computing (Proceedings of SC12; Best Paper finalist)
* Characterizing and Mitigating Work Time Inflation in Task Parallel Programs (Proceedings of SC12; winner of Best Student Paper Award)
* A Divide and Conquer Strategy for Scaling Weather Simulations with Multiple Regions of Interest (Proceedings of SC12; Best Student Paper finalist)

**Significant programs that provided a springboard for further technical efforts**

None yet

**Innovative programs which provide service to some part of your technical community**

None yet, although one is planned for FY14

**Events/programs that broadened participation**

Both our travel grants and the new SIGHPC/ABI award are intended to primarily support underrepresented groups (which we define to include groups from developing countries)

**Key issues the membership will have to deal with in the next 2-3 years**

* HPC workforce development: Despite a significant increase in open positions related primarily to scientific computing, there are almost no academic programs addressing the need for people who understand the interactions of computing and the sciences.
* Ubiquitous parallelism: Soon, every technological device will need to employ parallelism and manage multi-level memories. Software tools/technology are simply not keeping up at the pace required, nor are vehicles for professional development.
* Parallelism at extreme scales: The first million-plus-cores machines are already in use, and we’re seeing an explosion in mid-scale machines (thousands of cores). Programming models and software tools are almost a decade behind, and losing ground every year.
* Safety concerns with large-scale parallelism: With software tools and technology so far behind the hardware curve, serious concerns have emerged about the reliability and robustness of large-scale parallel/distributed applications (the latest jetliners are an example). Will it take a series of disasters before we’re willing to invest in better software methods?

**SIGGIR FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: James Allen, Past Chair**

**Overview**

The year just completed has again been a successful one for SIGIR. The SIG remains in a healthy position financially, with rising income from the ACM Digital Library and direct sponsorships of several well-attended annual conferences. We have 967 professional, student, and affiliate members of the SIG. The current EC has completed its third year successfully, supported by an active group of officers and volunteers. The SIG’s management will be handed off to a new group of officers in July. The research focus of SIGIR continues to be of key and increasing significance to the world at large.

**Finances**

The Executive Committee attempts to run a “break even” budget in which SIGIR neither gains nor loses much money. However, we are glad to report that SIGIR has a projected surplus of $45K for the FY2012 year. This is largely a result of several successful conferences in 2011 and 2012. Other income included $104K from 308K downloads from the ACM Digital Library, and membership income around $33K.

The SIG’s reserves remain greater than one times the annual conference expenditure. After the ACM conference overheads, the largest single budget expense for the SIG in 2012 was $112K paid for student travel support to attend the SIGIR conference in Portland; this includes $15K in externally sponsored travel awards for students living or studying in developing countries and women pursuing their Ph.D. In 2013, SIGIR budgeted and has committed $102K in student travel support, plus another $10K available from sponsorships. The EC is comfortable with these expenses as the future of the SIG and our field as a whole is dependent on our future researchers, whom we now support as students.

The SIGIR Executive Committee has decided not to raise dues for the coming year.

**Volunteers**

In addition to the elected officers, SIGIR is served by a large community of volunteers, including some with named roles:

Asia Regional Representative to the EC: Tetsuya Sakai

Forum Editors, June edition: Raman Chandrasekar

Forum Editor, December edition: Fernando Diaz (new this year)

SIG-IRList Editor: Claudia Huff (new this year)

Information Director: Djoerd Hiemstra (ending July 2013)

Krisztian Balog (starting July 2013)

Awards Chair: Shlomo Geva

JCDL Liaison: Edie Rasmussen

CIKM Liaison: Charlie Clarke

WSDM Liaison: Ricardo Baeza-Yates

SIGIR thanks them all for their work on behalf of the IR community during the last year.

**Conferences**

SIGIR sponsors, co-sponsors, and cooperates with other technical groups on several conferences and / or workshops during the year. The main conference is the annual SIGIR conference, which is located on a 3-year rotation in: (1) The Americas (2012 Portland OR, 2015 Santiago, Chile, 2018…); (2) Europe, Africa, or the Middle East (2013 Dublin, Ireland, 2016 Pisa, Italy, 2019…); and (3) Asia or Australia (2011 Beijing, 2014 Gold Cost Australia, 2017…).

**SIGIR**

The thirty-sixth Annual ACM SIGIR International Conference on Research and Development in Information Retrieval, SIGIR’13, will be held in Dublin, Ireland, July 28-Aug 1, 2013

SIGIR 2014 will be held in Gold Coast, Australia; SIGIR 2015 will be held in Santiago, Chile; and SIGIR 2016 will be held in Pisa, Italy.

Preliminary expressions of interest will be presented at the 2013 conference for SIGIR 2017, which is a year for Asia or Australia to host SIGIR. Interested groups will be asked to prepare formal bid documentation to be reviewed by the Executive Committee, following the ACM protocol. The bid process is documented at http://sigir.org/bid.html.

**Other Conferences**

SIGIR also co-sponsors three other ACM conferences, CIKM, JCDL, and WSDM. Each of these upcoming conferences will be reported on at the SIGIR ’13 Conference,

**In Cooperation**

In addition to the four conferences that SIGIR sponsors or co-sponsors, we “cooperate” with several other IR-related conferences but have no financial stake in them. These conferences complement the technical focus of our own conferences. As a cooperating society, SIGIR members obtain reduced registration fees and other member benefits at these conferences. Upcoming and recent “in cooperation” events include:

* International Conference on the Theory of Information Retrieval, ICTIR 2013 will be in Copenhagen, Denmark, September 30-October 2.
* Open Research Areas in Information Retrieval, OAIR 2013, was held May 22-24 in Lisbon, Portugal.
* European Conference on Information Retrieval: ECIR 2013 was held Moscow, Russia, March 24-28.

**Publications**

The SIGIR Web site is maintained by SIGIR's Information Officer, Krisztian Balog (replacing Djeord Hiemstra). It provides timely information about SIGIR-sponsored conferences, “in cooperation” conferences, and SIGIR activities, as well as Business Meeting slides, the annual report, and other information about how SIGIR operates and SIGIR’s history. In addition to providing information about the organization, the SIGIR web site also hosts the SIGIR Forum and SIG-IRList sites.

The SIGIR Forum is co-edited by Fernando Diaz and Raman Chandrasekar. The Forum is published three times a year. The Special issue is the SIGIR Proceedings; the December and June issues cover IR conferences, workshops and symposia, as well as in-depth essays based on the Salton Award Lecture and other keynote addresses, as well as short papers on current research trends. The Forum appears both online (<http://www.acm.org/sigir/forum/>) and in paper.

The SIG-IRList is a SIGIR-sponsored electronic newsletter (<http://www.acm.org/sigir/sigirlist/>), edited by Claudia Huff. The SIG-IRList provides a regular newsletter of IR information and nicely compliments the archival publication SIGIR Forum. The SIG-IRList contains job announcements, notices of publications, conferences, workshops, calls for participation, and project announcements. It is a much valued and appreciated service of SIGIR for its members.

**Membership and Membership Programs**

SIGIR offers members the following benefits: SIGIR Forum (paper & online); reduced conference registration fees to sponsored and “in cooperation” conferences; access to the ACM Digital Library, in particular SIGIR, CIKM, JCDL, and WSDM conference proceedings; as well as optional Proceedings Packages, and the SIG-IRList electronic newsletter. The SIGIR Proceedings Package includes copies of the CIKM and JCDL conference proceedings.

SIGIR has recently made hard copy versions of the SIGIR conference proceedings available only by special request and at an additional cost. Starting with SIGIR 2013, the option for a hard copy of the proceedings is being dropped.

**Awards given by SIGIR this fiscal year**

In addition to Best Paper Award(s), SIGIR provides the triennial Gerard Salton Award (to be awarded next in 2015), and funds JCDL’s Vannevar Bush Award jointly with SIGWEB. SIGIR continues working to put forth deserving nominees for the general ACM Awards. All SIGIR awards are documented on the SIGIR web site.

The Awards Chair position within SIGIR was unfilled for a few years. Shlomo Geva has recently accepted the position and we look forward to his help on awards.

**Gerard Salton Award**

This award is presented every three years to an individual who has made "... significant, sustained and continuing contributions to research in information retrieval". It was established as the SIGIR Award in 1983 and renamed in 1997 in honor of Professor Gerard Salton, who is considered by many to be the person most responsible for the establishment, survival, and recognition of the field of IR. The Salton Award Committee is comprised of the available prior winners of the Salton Award, in consultation with the SIGIR Chair. This award was most recently presented in 2012 to Norbert Fuhr who gave a keynote talk at SIGIR 2012 entitled “Information Retrieval as Engineering Science.”

**Vannevar Bush Best Paper Award**

Along with SIGWEB, SIGIR jointly funds the Vannevar Bush award honoring the best paper at the Joint Conference for Digital Libraries. The 2013 award has not yet been selected, but will be presented at the 2013 conference in July.

**SIGIR Best Paper Awards**

The SIGIR 2013 conference Best Paper awards will be presented in August 2012. A parallel Best Student Paper award is given if the Best Paper award is not given to a student paper.

For 2012 (the most recent awards)

* Mark D. Smucker and Charles L. A. Clarke received the Best Paper Award for their paper “Time-Based Calibration of Effectiveness Measures”
* The paper “Top-k learning to rank: labeling, ranking and evaluation,” by Shuzi Niu, Jiafeng Guo, Yanyan Lan, and Xueqi Cheng received the Best Student Paper Award
* Lidan Wang, Paul N. Bennett, and Kevyn Collins-Thompson were acknowledged with an Honerable Mention for their paper, “Robust ranking models via risk-averse optimization”

**Significant publications**

The annual SIGIR conference (2013) continues to be the leading conference in the field of Information Retrieval. It received a total of 366 submissions and accepted 73, or 19.9%. This rate is the target acceptance rate for the conference. The number of submissions was down this year compared to previous years; we do not yet know if this is aberration or a concern. One possible explanation is that the SIGIR conference expanded its “poster papers” from 2 pages to 4 page “short papers”, making them more substantial publications. There was a significant rise in short paper submissions, suggesting that some people opted for that route rather than a full paper. We will be monitoring this situation over the coming years.

Papers at the conference cover topics in Click Models, Diversity, Efficiency, Evaluation, Multimedia, Queries, Recommender Systems, Retrieval Models and Ranking, Search Sessions, Social Media and Network Analysis, Topic Modeling, User Behaviour, and Users and Interactive IR.

The conference will be held July 28 to August 1 in Dublin Ireland. As of this report, the conference has received external sponsorship from Baidu, Google, Microsoft Research, Yahoo! Labs, AOL, IBM Research, Yandex, facebook, and has exhibitions by Springer, Now Publishers, Morgan & Claypool Publishers, and Qatar Computing Research Institute.

**Programs which provide service to some part of the SIGIR community**

Because of heavy industrial activity in the Information Retrieval community, the SIGIR conference has run an “industry track” at the conference. The track started as a separate event in 2007 and was integrated into the main conference starting in 2009. The track has been very popular, highlighting key industrial issues and challenges as well as attracting industrial researchers to the main technical conference.

SIGIR has been collecting archive publications from the early days of the Information Retrieval field. Most of the information is unavailable anywhere on-line, so this archive provides new access to the historical information. A description of the gathered information is available at <http://sigir.org/museum/contents.html>. It continues to be updated with new (old) material on an on-going basis, as the information is found and can be scanned. SIGIR is exploring ways to make this information a more valuable resource for the community.

**Key issues facing SIGIR in the next 2-3 years**

Overall, SIGIR is a healthy and thriving community of researchers and practitioners. Things can always be improved, though, so here a couple of issues that the EC sees as possible challenges.

There continues to be strong concern but sharply divided opinion among members of the community regarding publications that are based upon proprietary data available to no or very few members of the community. SIGIR 2012 included a panel to debate/discuss the multiple perspectives and a summary of that panel was published in the December issue of *SIGIR Forum*. The EC has continued to encourage the program chairs to update reviewing questions to raise this issue to the forefront of consideration, whether or not it is an explicit aspect for consideration.

With the large international community participating in IR, most of the major IR conferences are now outside of North America for at least two thirds of the time. In addition, many other regions of the world have established regional workshops, symposia, or conferences. An unexpected result of this is that the US and Canadian researchers find themselves surprisingly short-changed in terms of their own regional conferences. The EC has been discussing this issue and is considering the establishment of a smaller conference located in North America, with the goal of not conflicting with existing major conferences.

In addition to those efforts, the SIGIR EC is continuing an effort to locate procedural documents related to the SIG and to move them onto the SIGIR web site (<http://sigir.org>) so that they are easily available to the SIGIR EC and publicly available to all interested members of the community.

**Summary**

SIGIR had another productive and successful year, with important intellectual and social contributions. Our conferences have been successful in all senses (with strong technical content and good international participation), and our financial situation is quite healthy. Perhaps most importantly, we continue to have very strong participation in ACM SIGIR by the international IR community, especially in a willingness to serve as volunteers for conference and SIG-related activities.

**SIGGITE FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Rob Friedman, Chair**

The 13th Annual Conference on Information Technology Education, hosted by Mount Royal University, was held in Calgary, Alberta, Canada, October 11-13, 2012. Co-located was the 1st Annual Research in IT Conference. 113 registrants attended 50 technical papers, five panels and a poster session at the Hotel Arts in downtown Calgary.

***At the 2012 SIGITE/RIIT Conferences, best paper awards were presented as follows:***

Best Paper, SIGITE 2012: Comparing Achievement of Intended Learning Outcomes in Online Programming Classes with Blended Offerings, Waleed Farag, Indiana University of Pennsylvania  
  
Best Paper, RIIT 2012: Improving Accuracy in Face Tracking User Interfaces using Consumer Devices, Norman Villaroman & Dale Rowe, Brigham Young University

*Based on downloads, there were several significant papers that were published in the SIGITE 2012 proceedings, including:*

Teaching mobile web application development: challenges faced and lessons learnedPeter Alston

Three years of design-based research to reform a software engineering curriculumMatti Luukkainen, Arto Vihavainen, Thomas Vikberg

Multi-faceted support for MOOC in programmingArto Vihavainen, Matti Luukkainen, Jaakko Kurhila

IPv6 certification and course developmentJohn Pickard, John Spence, Phil Lunsford

Use of a mobile application to promote scientific discovery learning: students' perceptions towards and practical adoption of a mobile application

Sunmi Seol, Aaron Sharp, Paul Kim

IT service management education in Tanzania: an organizational and grassroots-level perspectiveJyri Kemppainen, Matti Tedre, Erkki Sutinen

Game-based forensics course for first year studentsYin Pan, Sumita Mishra, Bo Yuan, Bill Stackpole, David Schwartz

***Significant programs that provided a springboard for further technical efforts****.*

SIGITE was represented at the NSF Cyber Curriculum Summit, July 9 and 10, 2013, hosted by Intel in Hillsboro, OR. Awareness of IT as an information assurance-centric computing subarea was raised.

***A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years.***

Bylaws: we need to find an acceptable, agreeable way to modify our bylaws so that we can expand formal participation through representation on the executive committee.

Conference location: attendance improves when venues are attractive to participants. We will be discussing moving from our membership-based hosting protocols to easily reached sites.

Conference paper and attendance metrics: we need to increase the number of submissions and reduce the acceptance rate while also increasing registrations.

Professional accreditation: we need to improve the communication/coordination flow between SIGITE, CSAB and ABET/CAC.

**SIGGKDD FY’13 Annual Report**

**July 2012 - June 2013**

**Submitted by: Usama Fayyad, Past Chair**

The SIGKDD Executive Committee consists of the following individuals who are in their fourth and final year in these roles in SIGKDD:

Usama Fayyad, Oasis500, Jordan & ChoozOn Corp, USA (Chairman)

Osmar Zaiane, University of Alberta, Canada (Secretary/Treasurer)

Johannes Gehrke, Cornell University, USA

Robert Grossman, U. Illinois Chicago & Open Data Partners LLC, USA

David Jensen, U. of Massachusetts Amherst, USA

Raghu Ramakrishnan, Yahoo! Research, USA

Sunita Sarawagi, IIT Bombay, India

Ramakrishnan Srikant, Google, USA

This being the last year of service for the SIGKDD EC, an election was conducted during calendar 2013 and a new EC was elected and will be announced at KDD-2013 in Chicago (Aug 11-14, 2013).

**1. Annual Awards**

The ACM SIGKDD presents two prestigious awards every year in two categories: Innovation and Service Awards. The nomination process and the selection of award winners is conducted by a committee of experts typically chaired by the winner of the prior year’s Service Award winner. When the prior year winner of the Service Award cannot serve, a prior winner is selected. The 2012 SIGKDD Awards Selection Committee consisted of:

**2012 ACM SIGKDD Awards Committee**

**Ramasamy Uthurusamy – Chair** (prior winner of the SIGKDD Service Award and past chair)

Chid Apte, IBM Research

Christos Faloutsos, Carnegie Mellon University

Bing Liu, University of Illinois at Chicago

Gregory Piatetsky-Shapiro, KD Nuggets

Daryl Pregibon, Google

J. Ross Quinlan, Rulequest

Ted Senator, SAIC

Padhraic Smyth, University of California at Irvine

Qiang Yang, Hong Kong University of Science & Technology

Osmar R. Zaiane, University of Alberta, **Past Year Chair**

**ACM SIGKDD 2012 Innovation Award** was awarded to **Prof. Vipin Kumar** of the University of Minnesota (USA) on Aug. 12, 2012 with Citation: “Graph partitioning, clustering, association analysis, high performance and parallel data mining, and data driven discovery methods for analyzing global climate and ecosystem data.”

ACM SIGKDD Innovation Award is the highest award for technical excellence in the field of Knowledge Discovery and Data Mining (KDD). It is conferred on one individual or one group of collaborators whose outstanding technical innovations in the KDD field have had a lasting impact in advancing the theory and practice of the field. The contributions must have significantly influenced the direction of research and development of the field or transferred to practice in significant and innovative ways and/or enabled the development of commercial systems. ***The award includes a plaque and a check for $2,500***

**Past winners of the SIGKDD Innovation award are:**

**YEAR: Awardee**

2000: Rakesh Agrawal

2002: Jerome Friedman

2003: Heikki Mannila

2004: Jiawei Han

2005: Leo Breiman

2006: Ramakrishnan Srikant

2007: Usama M. Fayyad

2008: Raghu Ramakrishnan

2009: Padhraic Smyth

2010: Christos Faloutsos

2011: J. Ross Quinlan

**ACM SIGKDD 2012 Service Award** was awarded to **Dr. Ying Li** of Microsoft & Concurix (USA). The award was awarded on Aug. 12, 2012 with Citation: “for her substantial technical contributions to the practice and application of data mining and for her outstanding service to the global KDD community.”

ACM SIGKDD Service Award is the highest service award in the field of knowledge discovery and data mining (KDD). It is conferred on one individual or one group for their outstanding professional services and contributions to the KDD field. Services recognized include significant contributions to the activities of professional KDD societies and conferences, leading organizations or projects that contribute technically to the field as a whole, furthering education of students, researchers and practitioners of KDD, funding R&D activities of the KDD community, professional volunteer services in disseminating technical information to the field, and contributions to society at large through applications of KDD concepts to improve global medical care, education, disaster/crisis management, environment, etc. ***The award includes a plaque and a check for $2,500***

**Past winners of the SIGKDD Service award are:**

**YEAR: Awardee**

2000: Gregory Piatetsky-Shapiro

2002: Ramasamy Uthurusamy

2003: Usama M. Fayyad

2004: Xindong Wu

2005: The WEKA Team led by Ian Witten and Eibe Frank

2006: Won Kim

2007: Robert L. Grossman

2009: Sunita Sarawagi

2010: Osmar R. Zaïane

2011: R. Bharat Rao

**1.2 SIGKDD Distinguished Dissertation Award**

The Distinguished Dissertation award was established to recognize excellent research contributions by a doctoral candidate in the field of data mining and knowledge discovery. Nominations limited to one doctoral dissertation per academic unit with initial vetting done by individual university departments who can only nominate a single candidate from their academic unit.

The Selection Committee Chairman was Prof. Bamshad Mobasher of DePaul University (USA). The selection committee consisted of:

Tanya Berger-Wolf, University of Illinois, Chicago, USA

Christos Faloutsos, Carnegie Mellon University, USA

C. Lee Giles, Pennsylvania State University, USA

Dimitrios Gunopulos, The University of Athens, Greece

Mohammad Al Hassan, Indiana University-Purdue University, USA

Ee-Peng Lim, Singapore Management University, Singapore

Sofus Macskassy, Fetch Technologies, USA

Jennifer Neville, Purdue University, USA

Myra Spiliopoulou, Otto von Guericke University Magdeburg, Germany

Ming-Syan Chen, National Taiwan University, Taiwan

Shusaku Tsumoto, Shimane University, Japan

Jaideep Vaidya, Rutgers University, USA

Xiaoxin Yin, Microsoft, USA

The 2012 SIGKDD Doctoral Dissertation award has attracted a high number of excellent applicants. 10 nominees survived the initial selection process for 2012. 3 finalists selected by the committee as winner and two runners up. For this year, the selection committee felt that one additional nominee should be selected for honorable mention. The winner receives a check for $2,500 from SIGKDD and the winner and runners-up are recognized at KDD conference and have their dissertations featured on SIGKDD Web site.

The 5th annual Doctoral Dissertation award for SIGKDD was awarded to Dr. Amr Ahmed of Carnegie-Mellon University, USA for his dissertation titled: “*Modeling Content and Users: Structured Probabilistic Representation and Scalable Inference Algorithms*”

Advisor: Proj. Eric Xing, CMU

The runners-up were, in order:

1. Dr. Abdullah Al Mueen of University of California, Irvine (USA) for his dissertation titled “Exact Primitives for Time Series Data Mining” - Advisor: Prof. Eamonn Keogh, UC Irvine
2. Dr. Lei Li of Carnegie-Mellon University (USA) for her dissertation titled “Fast Algorithms for Mining Co-evolving Time Series” - Advisor: Prof. Christos Faloutsos, CMU
3. *Honorable Mention:* Dr. Xiang Zhang of the University of North Carolina, Chapel Hill for his dissertation titled “Efficient Algorithms for Detecting Genetic Interactions in Genome-Wide Association Study”- Advisor: Prof. Wei Wang, UNC, Chapel Hill

All annual awards were presented at KDD-2012 Conference as part of the opening ceremony to the conference on August 12, 2012 in Beijing, China.

The 2013 Dissertation Awards will be announced in July 2012 and will be awarded at the KDD-2013 conference in Chicago, IL on August 11, 2013.

**2. Significant Publications: The KDD-2012 Conference Proceedings and New Program components**

The KDD 2012 annual conference maintained SIGKDD’s position as the leading conference on data mining and knowledge discovery, with a new all time record of 734 submissions of full papers in the academically oriented Research and Industry/Government Applications tracks. The program committee consisted of over 350 members with 50 senior PC members to help distribute the significant paper review load as each paper got 3 reviews.

Of the 734 papers submitted, the program committee accepted 133 papers for publication, representing a very selective acceptance rate of only about 18.1%. We also maintained the new form of track in the conference: The Industry Experience Expo – which attracted a very selective set of 15 presentations on actual deployed and significant applications or systems presented by industry leaders.

The breadth of topics covered in this year's research program is correspondingly diverse, including social networks, privacy, text mining, predictive modeling, time-series forecasting, spatial data analysis, and more. These areas were in addition to traditional data mining classification, clustering, research and applications papers.

New Features added to KDD Conference in 2012:

1. **New Videos** feature was added to the conference, called “KDD Madness” in which every paper was given the chance to produce a 30 second video summary of their paper. The videos were run in breaks and through the plenary sessions to serve as educational and “advertisement” for the papers. This featured proved to be extremely popular with conference attendees and with authors!
2. **Asia-Pacific Track**, special focus on local research and practice, Chaired by David Wai-Lok Cheung, HKU & Wei Wang, UCLA
3. **Summer School on Data Mining**, chaired and organized by Summer School Maosong Sun, Tsinghua & Xiaoyong Du, Remin U & Hang Li of Huawei
4. **Industry Practice Expo,** chaired and organized by Young Li and Rajesh Parekh – while this is the second time we held it, it was solid proof of the fact that adding this new experimental track that focuses on invited talks only was the right move as it attracted great presentations and had standing room only attendance. We believe this will grow into a major feature or an independent conference.

The conference included 4 world-class keynote speakers this year, providing expert overviews of the latest advances. The program included four outstanding keynote speakers: Robin Li, Jiawei Han, Michael Jordan, and Michael Kearns. A panel discussion on Big Data was held as part of the closing session and attracted a record attendance of over 1000 attendees – the largest ever for a panel or closing session at KDD.

The conference organizing committee was extensive and was led by:

**Conference Program Chairs:** Deepak Agarwal, Linkedin, USA & Jian Pei, Simon Fraser University, Canada

**General Conference Chair:** Qiang Yang of Hong Kong University of Science and Technology – and Huawei, Hong Kong.

**Assoc. General Conference Chair:**  Dou Shen of Huawei, Hong Kong

**Industry/Government Chairs**: Michael Zeller, Zementis (USA) & Hui Xiong, Rutgers University (USA)

**Industry Practice Expo Chairs:**  Rajesh Parekh, Groupon (USA) & Ying Li, Concurix (USA)

The high level of interest at the I/G Applications track (academic papers) continued to attract authors and attendees. Our positive experience with the second year of running the “Industry Practice Expo” track which consisted primarily of invited speakers and heavily edited presentations by the program committee – we believe some of the best applications in our field are deployed by teams who do not have the time or permissions to write full papers that are evaluated based on classical research criteria.

**2.1 KDD-2012 Conference Dates and Attendance**

KDD 2012 was held in Beijing, China starting Sunday August 12th to Wednesday August 15th, 2012. Saturday August 11th was provided as an extra day for extended workshops as well as the new Summer School on Data Mining. Conference Workshops took place on August 11-12, and Tutorials on August 12th. The opening session with awards ceremony was held on August 12th evening as part of the plenary opening session of the formal conference. ***The conference attracted an all-time record high for KDD of over 1200 registrants.***  We believe this is a healthy growth trend and will continue in next few years.

**2012 SIGKDD Best Research Paper Awards**

The award recognizes papers presented at the annual SIGKDD conference that advance the fundamental understanding of the field of knowledge discovery in data and data mining. For more information please refer to the [SIGKDD Best Research Paper Award page](http://www.sigkdd.org/awards_best_r_paper.php). Awards were sponsored by Huawei of China. The selection committee was chaired by: Rich Caruana (Microsoft) & Ke Wang (SFU). The committee decided to give three awards:

* One best paper
* Two best student papers

All three papers had students as First Author

**KDD 2012 Best Research Paper:**

“Searching and Mining Trillions of Time Series Subsequences under Dynamic Time Warping” by Thanawin Rakthanmanon, Bilson Campana, Abdullah Mueen, Gustavo Batista, Brandon Westover, Qiang Zhu, Jesin Zakaria, Eamonn Keogh.

Quotations from reviewers and selection committee memebers included:

* “… describes algorithms for similarity search in time series that have been implemented in very fast software that many researchers and practitioners will really want to use.”
* “… paper will have a strong effect on the practical conduct of time-series analysis.”
* “… faster than all competitors …”

**Best Student Paper Awards: (Research)**

KDD 2011 Best Student Paper had two awardees this year which were viewed as equally compelling of this honor:

1. Integrating Meta-Path Selection with User-Guided Object Clustering in Heterogeneous Information Networks, by Yizhou Sun, Brandon Norick, Jiawei Han, Xifeng Yan, Philip S. Yu, Xiao Yu.

* Judge quote: “… most interesting paper in my batch. I liked the problem definition and approach. … how they perform guided clustering is quite interesting.”

1. “Intrusion as (Anti)social Communication: Characterization and Detection”, by Qi Ding, Natallia Katenka, Paul Barford, Eric Kolaczyk, Mark Crovella

* Judge quote: “Intrusion detection is a domain that really needs good new ideas. This paper presents one, and shows that it is successful.”

**2012 SIGKDD Application Paper Awards**

KDD-2012 Conference continued to have strong participation of the industrial researchers, as evidenced by the record 101 papers submitted to the industrial track (only 20 accepted). This year we enhanced the criteria for acceptance and raised the bar on what we considered a real application that is deployed and used in the field. This resulted in diminished acceptances but a much higher quality of content.

This year’s statistics on the Industry/Government application Track were as follows:

* Submissions: 113 (significant growth over 2011)
* Acceptances: 30
* These papers were distributed as follows:
  + 8 Deployed
  + 5 Discovery
  + 17 Emerging
* Papers were presented in 7 Sessions: Mobile Computing, Social Network Analysis, Web Applications, Computational Advertising, Medical Informatics, Business Intelligence, Intelligent Systems

**2012 SIGKDD Best Industry/Government Track Paper Award**

The award recognizes papers presented at the annual SIGKDD conference that advance the fundamental understanding of the field of knowledge discovery in data and data mining. This year's Best Industry/Government Track Paper Award is sponsored by Zamantis. For more information please refer to the [SIGKDD Best Industry/Government Track Paper page](http://www.sigkdd.org/awards_best_a_paper.php).

**Best Industry/Government Track Paper:**

“Bid Optimizing and Inventory Scoring in Targeted Online Advertising”

**Authors:** Claudia Perlich, Brian Dalessandro, Ori Stitelman, Rod Hook, Troy Raeder, Foster Provost m6d and NYU Stern School of Business

**2.2 Conference attendance and Budget Management**

The KDD-2012 conference continued a strong tradition of high attendance and continued healthy financial management and performance. **The conference attracted a total of over 1200 registrants.** This is an all-time high, breaking the record from KDD-2000 held just prior to the bursting of the Internet Bubble and represents over 25% growth in registrations over KDD-2011. We continue to thrive and draw interest even through years of crisis and low travel budgets.

**Revenue Summary:** These numbers represent ACM reported numbers, and we believe they are missing $150K worth of sponsorships that were not included – there has been a recurring problem with our financial/reporting results since KDD-2011)

1. Final registrations: 1200 Registrants, with 950 paid registrations
2. Revenue from Registrants: $773K
3. Revenue from Sponsorship: $270K (*this amount needs to be finalized more accurately*) - ACM is not tracking this amount properly we believe and has not been credited to our account – at least not to my satisfaction as Chair – some funds remain with our local partner account at Tsing Hua University
4. ACM Allocation: $99K
5. Conference Net: $55K (surplus)

The problem that persists is that ACM is still booking the conferences at a deficit even with attendance exceeding the target 750 in our budget. Hitting a deficit and not surplus at 900+ registrations requires further work on our part to investigate; and with almost 1000 paid registrations that cannot be reconciled. I will leave it to the next chair to work out the details with my help. However, the saving grace in KDD-2012 is that we collected about $270K in sponsorships, more than double what we have historically collected. It is deeply troubling to me and the EC that had we collected only the target $100K ***we would be running $100K in deficit despite having a record attendance!***I am documenting this surprising fact as words of warning to the next EC and organizing committee of KDD-2014 and beyond (it is too late to affect KDD-2013 at this point as it will be held in a month on Aug 11th, 2013).

**2.3 Workshops and Tutorials**

In addition, KDD 2012 hosted 20 Workshops (as opposed to 16 in 2011) and 6 Invited Tutorials (as opposed to 6 in 2011) – However, it is worthy to note that these Invited Tutorials were IN ADDITION to the 2-day Summer School on Data Mining held August 10-11 at Tsing Hua University as part of KDD-2012.

Workshops were held Sat-Sun August 11-12, 2012

* **UrbComp**: [The ACM SIGKDD International Workshop on Urban Computing](http://www.cs.uic.edu/%7Eurbcomp2012/)
* **SensorKDD:** [6th International Workshop on Knowledge Discovery from Sensor Data (SensorKDD-2011)](http://www.ornl.gov/sci/knowledgediscovery/SensorKDD-2011/index.html)
* **MDS**: [Mining Data Semantics in Information Networks](http://arnetminer.org/MDS2012)
* **SNAKDD:** [The Sixth International Workshop on Social Network Mining and Analysis (SNAKDD 2012)](http://www.snakdd.com/)
* **BigMine**: [1st International Workshop on Big Data, Streams and Heterogeneous Source Mining](http://big-data-mining.org/)
* **HotSocial**: [The First ACM International Workshop on Hot Topics on Interdisciplinary Social Networks Research](http://user.informatik.uni-goettingen.de/%7Efu/hotsocial/)
* **HI-KDD**: [ACM SIGKDD Workshop on Health Informatics](http://www.ischool.drexel.edu/hi-kdd2012/)
* **KDD CUP** [Workshop 2012](http://www.kddcup2012.org/workshop)
* **BioKDD**: [11th International Workshop on Data Mining in Bioinformatics](http://bio.informatics.iupui.edu/biokdd12/)
* **AdKDD:** [The Sixth International Workshop on Data Mining and Audience Intelligence for Online Advertising](http://adlab.microsoft.com/adkdd2011)
* **CrossMine**: [The First International Workshop on Cross Domain Knowledge Discovery in Web and Social Network Mining](http://www.cs.binghamton.edu/%7Eblong/cdkd2012/)
* **MDMKDD**: [The Twelfth International Workshop on Multimedia Data Mining](https://sites.google.com/site/mdmkdd2012/home)
* **SustKDD**: [SustKDD: Workshop on Data Mining Applications in Sustainability](http://www.marioberges.com/SustKDD12/)
* **SoftwareMining**: [The First International Workshop on Software Mining](http://lamda.nju.edu.cn/conf/softmine12/)
* **ISI-KDD**: [ACM SIGKDD Workshop on Intelligence and Security Informatics](http://www.ischool.drexel.edu/ISI-KDD2012/)
* **SOMA**: [Workshop on Social Media Analytics](http://compbio.cs.uic.edu/soma2012/)
* **CrowdKDD**: [CrowdKDD: Data Mining & Knowledge Discovery with Crowdsourcing](http://www.cse.ust.hk/%7Enliu/crowdkdd12/)
* **DMIKM**: [Data Mining and Intelligent Knowledge Management](http://www.feds.ac.cn/Pages/default.aspx)
* **ContextDD**: [International Workshop on Context Discovery and Data Mining](http://dm.ustc.edu.cn/ContextDD2012/)

The tutorials were held during the day Sunday August 12th, 2012 and consisted of the following tutorials:

1. Carlos Castillo, Wei Chen, Laks V. S. Lakshmanan: **Information and Influence Spread in Social Networks**
2. Xiaojin Zhu: **Graphical Models**
3. Jenn Wortman Vaughan, Jacob Abernethy: **Prediction, Belief, and Markets**
4. **Lars Schmidt-Thieme, Steffen Rendle: Factorization Models for Recommender Systems and Other Applications**
5. Edo Liberty: **Data mining in streams**
6. Tie-Yan Liu: **Learning to Rank and Its Applications in Web Search and Online Advertising**

**2.3 SIGKDD Video Releases: the KDD-2012 conference program videos**

Per ACM instructions, we changed service providers of conference videos from VideoLectures.net (which handled previous KDD conferences) to another vendor starting with KDD-2011. This process was not as successful and we experienced major delays in releasing the full video program of KDD-2011, all recorded material should be published in video format ACM Digital Library web site. We are seeing similar issues with KDD-2012 and it seems that a change is required at this point. We are hoping to restore videolectures.net as the video solution provider for 2012 and beyond. ACM should look into a better solution as video recordings are becoming a very important component in archival and reach in the new modern world.

**2.4 SIGKDD Explorations**

We announced a new Editorial team for SIGKDD Explorations at KDD-2010. The Editor-n-Chief as of July 2010 is: Bart Goethals of University of Antwerp and the Associate Editors are: Charu Aggarwal of IBM TJ Watson Research Center and Srinivasan Parthasarathy of The Ohio State University. During 2011 we added Ankur M. Teredesai of University of Washington as additional Associate Editor.

SIGKDD Explorations published two issues in the last fiscal year:

* July 2012, Volume 14, Issue 1: Special issue on “Clinical Data Mining” with Shipeng Yu and Bharat Rao as gues editors
* December 2012, Volume 14, Issue 2: no special issue, but with Editorial (by U. Fayyad) and 8 contributed articles.

**3. Significant programs that provided a springboard for further technical efforts**

ACM Transactions on Knowledge Discovery and Data Mining (TKDD) launched in 2007, http://tkdd.cs.uiuc.edu/, with Jiawei Han as editor in Chief, has continued as one of the two major journals in our field. TKDD published 5 issues in 2012 and 1 issues in 2013, so far.

The original major journal in our field, ***Data Mining and Knowledge Discovery,*** currently with Geoff Webb as Editor-in-Chief continues to be a top-cited journal internationally*.* This journal was launched in 1996 with Usama Fayyad as founding Editor-in-Chief.

**4. A very brief summary for key issues that the SIGKDD membership will have to deal with in the next 2-3 years.**

Some of the key issues for SIGKDD and SIGKDD members:

* Maintaining effective SIGKDD operation after transfer to new SIGKDD leadership.
* Creating a high quality magazine style publication which will form the next level growth for SIGKDD Explorations.
* Difficulty in getting industry participation in KDD conference which we are addressing with the new Industry Applications Experience track launched in KDD-2011
* Growing rift in the relevance of problems that academia can work on due to the difficulty of getting access to large real-world data, with some of the most important data and research problems locked inside Google, Yahoo, Microsoft, and other web “giants”. We are currently working on a solution to provide big compute platform for academic research
* Getting new membership and especially student members
* Negative perception of “data mining” in the US (and sometimes reality) that data mining is a technology which invades privacy (eg. Recent NH and VT laws prohibiting “prescription data mining”)
* Addressing issues of data privacy and the role of data mining positive or negative in that arena
* Competitive pressure from a new generation of APPLIED conferences that are drawing attention and causing some attention pressure. KDD-2010 is responding by creating an additional applied invited track on predictive analytics as well as new formats for fireside chat on important topic and special applied panels.
* Creating more forums for participation on-line as well as a professionally produced magazine for the field if the economics justify it.
* Creating a new generation, web 2.0 web presence for SIGKDD and KDD conferences. We started this effort in 2011 and hope to announce results at KDD-2011.

**5. Financial Snapshot**

SIGKDD continues to have a healthy financial balance sheet and surplus cash balance. The SIGKDD closed FY13 on June 30, 2013 with a cash balance of over one million Dollars ($1,050,000). Our cash balance re-enforces our financial feasibility as a SIG. The actual accounting for KDD-2012 shows a small surplus of $55K for the year, but we are still working with ACM to try to resolve this fact as we believe attendance numbers and sponsorships should have generated a significant surplus. As mentioned earlier in this report, this surplus was an unintended (but welcome) artifact of an being able to attract an unusually high level of industry sponsorship to KDD-2012, more than double our historical highs for sponsorships.

This inability to generate an organic surplus with high attendance has become a chronic problem repeating in 2011 and 2012, and starting originally in KDD-2010. With attendance of over 900, we believe the KDD conference should generate at least $100K in surplus without sponsorship money.

We plan to increase investment activities in the next fiscal year to institute some value added programs that increase the value of SIGKDD to members as well as enhance the field as a whole. We currently have contracted staff to handle PR and promotions and are considering hiring additional dedicated contractors to address issues that need more systematic attention, such as web site maintenance and marketing activities related to the field.

While we allocated over $20k budget to website revamping over the last year, our web presence did not improve significantly for the SIG or the conferences (past and future through our platform plan). This was not the plan, and the SIGKDD remains with a weak web presence for its conferences and its SIG and needs a major investment on this front as a necessary infrastructure expense. I plan to work with the new EC and Chair to rectify this situation.

**SIGMETRICS Annual Report**

**July 2012 - June 2013  
Submitted by: John Chi-Shing Lui Chair**

ACM SIGMETRICS had a very strong and active year, in particular, we had our annual conference ACM SIGMETRICS'13, which was held in Carnegie Mellon University, Pittsburgh, PA.   We have a very strong and well-balanced technical program at the conference, and we presented a number of awards:

**Achievement Award**

ACM SIGMETRICS is pleased to announce the selection of Prof. Jean Walrand of University of California at Berkeley as the recipient of the 2013 ACM SIGMETRICS Achievement Award in recognition of his work developing rigorous mathematical approaches for performance analysis which have led to results that have had significant industrial impact.

Dr. Walrand received his Ph.D. from the Department of Electrical Engineering and Computer Sciences at the University of California, Berkeley, and has been on the faculty of that department since 1982. He is the author of "An Introduction to Queueing Networks" (Prentice Hall, 1988) and of "Communication Networks: A First Course" (2nd ed. McGraw-Hill,1998) and co-author of "High-Performance Communication Networks" (2nd ed, Morgan Kaufman, 2000), "Communication Networks: A Concise Introduction" (Morgan & Claypool, 2010), and "Scheduling and Congestion Control for Communication and Processing networks" (Morgan & Claypool, 2010). His research interests include stochastic processes, queuing theory, communication networks, game theory, and the economics of the Internet.

Dr. Walrand has received numerous awards for his work over the years. He is a Fellow of the Belgian American Education Foundation and of the IEEE. Additionally, he is a recipient of the Lanchester Prize, the Stephen O. Rice Prize, and the IEEE Kobayashi Award.

For more information about Dr. Walrand, please visit his website: <http://www.eecs.berkeley.edu/Faculty/Homepages/walrand.html>.

**Rising Star Award**

ACM SIGMETRICS is pleased to announce the selection of Dr. Augustin Chaintreau of Columbia University as the recipient of the 2013 ACM SIGMETRICS Rising Star Researcher Award in recognition of his significant contributions to the analysis of emerging distributed digital and social networking systems.

Dr. Chaintreau is an Assistant Professor of Computer Science at Columbia University. His research, by experience in industry, is centered on real world impact and emerging computing trends, while his training, in mathematics and theoretical computer science, is focused on guiding principles. He designed and proved the first reliable, scalable and network-fair multicast architecture while working at IBM during his Ph.D. He conducted the first measurement experience of human mobility, studying how contacts deliver information within a group, while working for Intel. His work while at Technicolor (formerly, Thomson) showed that opportunistic caching in mobile networks can optimally take advantage of social properties. His current research focuses on the personal data we produce, the social networks on which they transit, and the revenue they generate, to reconcile our privacy with progress.

An ex student of the Ecole Normale Superieure in Paris, he earned a Ph.D in mathematics and computer science in 2006, and shared multiple best paper awards with his co-authors for their work. He has been an active member of the networking research community, serving in the program commitees of ACM SIGMETRICS, ACM SIGCOMM, ACM MobiCom, ACM WSDM, ACM WWW, ACM CoNEXT, ACM IMC, ACM MobiHoc, IEEE Infocom, and organized student shadow PCs for ACM CoNEXT and SIGMETRICS, as well as travel grants. He is also currently an editor for IEEE TMC, ACM SIGCOMM CCR, ACM SIGMOBILE MC2R.

**Test of Time Award**

Our SIG presented its  "Test of Time" award at the ACM SIGMETRICS 2013 conference as well. This award honours SIGMETRICS work published 10-12 years ago that still has significant impact today.  We chose the following paper:

Yin Zhang, Matthew Roughan, Nick Duffield, and Albert Greenberg.

"Fast Accurate Computation of Large-Scale IP Traffic Matrices from Link Loads."

In Proceedings of ACM SIGMETRICS 2003.

The paper presented a novel, remarkably fast, and accurate method for practical and rapid inference of traffic matrices in IP networks from link load measurements, augmented by readily available network and routing configuration information.

This year, we have the following awards for the conference:

**Best Paper Award & the Ken Sevcik Outstanding Student Paper Award:**

*Queueing System Topologies with Limited Flexibility*

John N. Tsitsiklis (Massachusetts Institute of Technology) and

Kuang Xu (Massachusetts Institute of Technology)

**Best Practical Paper Award:**

*Practical Conflict Graphs for Dynamic Spectrum Distribution*

Xia Zhou (UC Santa Barbara), Zengbin Zhang (UC Santa Barbara),

Gang Wang (UC Santa Barbara), Xiaoxiao Yu (Tsinghua University),

Ben Y. Zhao (UC Santa Barbara), Haitao Zheng (UC Santa Barbara)

**Conference Activities**

The annual ACM SIGMETRICS conference is the premier forum for performance evaluation research, which spans a wide range of application domains in computer and communication systems.  This year, the ACM SIGMETRICS conference was held at Carnegie Mellon University, Pittsburgh, PA, from Jun 17-21, 2013.   Professor Mor Harchol-Balter (CMU) was the General chair, and she did a wonderful job in organizing every detail of the conference. Furthermore, she did a fantastic job in seeking industrial donations, which helped the conference by providing more student travel grants.  The technical co-chairs were Dr. John Douceur (Microsoft Research, Redmond) and Professor Jun Xu (Georgia Tech).   They spent a lot of time and effort in coming up with an exciting technical program.

The registered attendance for our event this year was around 180, which is a very good number. We received healthy sponsorship from various companies so that we could reduce the conference registration fee. All in all, we expect have to a surplus, and the organizing committee decided to provide "conference vouchers" for students so as to encourage them to attend ACM SIGMETRICS'14.  All in all, we expect a surplus but the final amount is still under calculation.

The general feedback on the conference was very positive. The main conference and its related tutorials and workshops lasted five days, starting from June 17, 2013 with various tutorials, and ended on June 21 with various workshops.  The main conference lasted three days, from June 18-20, 2013.

We also had well-attended tutorials on Monday, and the tutorials were:

**(1)   Geo-Replication in Data Center Applications**

Speaker: Marcos K. Aguilera, Microsoft Research Silicon Valley

Abstract: Data center applications increasingly require a storage system that is geo-replicated, that is, replicated across many geographic locations. Geo-replication can reduce access latency, improve availability, and provide disaster tolerance. It turns out there are many techniques for geo-replication with different trade-offs. In this talk, we give an overview of these techniques, organized according to two orthogonal dimensions: level of synchrony (synchronous and asynchronous) and type of storage service (read-write, state machine, transaction). We explain the basic idea of these techniques, together with their applicability and trade-offs.

Bio: Marcos received a Ph.D. in Computer Science from Cornell University in 2000. He has worked as a researcher at Compaq's Systems Research Center and HP Labs. He is now a senior researcher at Microsoft Research Silicon Valley. His interests include distributed systems, distributed algorithms, fault tolerance, and storage systems.

**(2) The Fundamentals of Heavy-tails: Properties, Emergence, and Identification**

Speakers: Adam Wierman, Caltech; Jayakrishnan Nair, Caltech; Bert Zwart, CWI

Abstract: Heavy-tails are a continual source of excitement and confusion across disciplines as they are repeatedly "discovered" in new contexts. This is especially true within computer systems, where heavy-tails seemingly pop up everywhere -- from degree distributions in the internet and social networks to file sizes and interarrival times of workloads. However, despite nearly a decade of work on heavy-tails they are still treated as mysterious, surprising, and even controversial.  The goal of this tutorial is to show that heavy-tailed distributions need not be mysterious and should not be surprising or controversial. In particular, we will demystify heavy-tailed distributions by showing how to reason formally about their counter-intuitive properties; we will highlight that their emergence should be expected (not surprising) by showing that a wide variety of general processes lead to heavy-tailed distributions; and we will highlight that most of the controversy surrounding heavy-tails is the result of bad statistics, and can be avoided by using the proper tools.

Bios:

Adam Wierman is a Professor in the Department of Computing and Mathematical Sciences at the California Institute of Technology, where he is a member of the Rigorous Systems Research Group (RSRG). He received his Ph.D., M.Sc. and B.Sc. in Computer Science from Carnegie Mellon University in 2007, 2004, and 2001, respectively. His research interests center around resource allocation and scheduling decisions in computer systems and services. More specifically, his work focuses both on developing analytic techniques in stochastic modeling, queueing theory, scheduling theory, and game theory, and applying these techniques to application domains such as energy-efficient computing, data centers, social networks, and electricity markets. He received the 2011 ACM SIGMETRICS Rising Star award, and has been co-recipient of best paper awards at ACM SIGMETRICS, IEEE INFOCOM, IFIP Performance, IEEE Green Computing Conference, and ACM GREENMETRICS. He was named a Seibel Scholar, received an Okawa Foundation grant, and received an NSF CAREER grant. Additionally, his dissertation received the CMU School of Computer Science Distinguished Dissertation Award and was given an honorable mention for the INFORMS Doctoral Dissertation Award for Operations Research in Telecommunications. He has also received multiple teaching awards, including the Associated Students of the California Institute of Technology (ASCIT) Teaching Award. Dr. Wierman has more than 60 refereed publications and serves as an Associate Editor for the Operations Research journal and on the editorial board of the Performance Evaluation journal and the IEEE Transactions on Cloud Computing.

Bert Zwart is currently a senior researcher at CWI, where he leads the Probability and Stochastic Networks group. He also holds a full professor position at VU University Amsterdam, is senior fellow at Eurandom, and holds an adjunct professor position at the H. Milton Stewart School of Industrial and Systems Engineering at Georgia Institute of Technology, where he was holding a Coca-Cola Chair until 2008. Bert Zwart is the 2008 recipient of the Erlang prize for outstanding contributions to applied probability by a researcher not older than 35 years old, and an IBM faculty award. His research is concerned with the application of analytic and probabilistic asymptotic methods to applied probability models in computer systems, communication networks, customer contact centers, and manufacturing systems. Dr. Zwart has published more than 70 refereed publications and is council member of the Applied Probability Society of INFORMS. Dr. Zwart has been area editor of Stochastic Models for Operations Research, the flagship journal of his profession, from 2009-2011. In addition, Dr. Zwart is editor-in-chief (with J.K. Lenstra and M. Trick) of the journal Surveys in Operations Research and Management Science, and serves on the editorial board of Mathematics of Operations Research, Mathematical Methods of Operations Research, Operations Research, Queueing Systems and Stochastic Systems. He is a recipient of Veni and Vidi research grants from NWO.

Jayakrishnan Nair received his PhD from California Institute of Technology (Caltech) in 2012. His PhD thesis focused on scheduling for heavy-tailed and light-tailed workloads in queueing systems. He is currently a post-doctoral scholar at Caltech and will join CWI as a post-doctoral scholar in May 2013. His research interests include modeling, performance evaluation, and design issues in queueing systems and communication networks. Jayakrishnan was a recipient of the best paper award at IFIP Performance, 2010.

**(3) Profiling and Analyzing the I/O Performance of NoSQL DBs**

Speaker: Jiri Schindler, NetApp

Abstract: The advent of the so-called NoSQL databases has brought about a new model of using storage systems. While traditional relational database systems took advantage of features offered by centrally-managed, enterprise-class storage arrays, the new generation of database systems with weaker data consistency models is content with using and managing locally attached individual storage devices and providing data reliability and availability through high-level software features and protocols.

This tutorial aims to review the architecture of selected NoSQL DBs to lay the foundations for understanding how these new DB systems behave. In particular, it focuses on how (in)efficiently these new systems use I/O and other resources to accomplish their work. The tutorial examines the behavior of several NoSQL DBs with an emphasis on Cassandra - a popular NoSQL DB system. It uses I/O traces and resource utilization profiles caputred in private cloud deployments that use both dedicated directly attached storage as well as shared networked storage.

The material is geared specifically towards SIGMETRICS attendees who are familiar with system profiling and analysis both theoretically as well as through hands-on experiences as systems administrators. It does not assume any prior experience with NoSQL or relational DB systems. Nor does it require deep understanding of storage systems architecture. The necessary concepts are reviewed to establish a common ground and to relate the concepts of NoSQL DBs. The participant will be able to learn that NoSQL DB systems are not much different in their fundamentals from other systems for storing (semi)structured data even though their architecture (scale-out clustred shared-nothing model) and the use cases (with eventual consistency data models) are much different.

On Friday, we had several workshops. They are:

*- Greeenmetrics Workshop 2013*

*- The joint Workshop on Pricing and Incentives in Networks and Systems (W-PIN+NetEcon) 2013*

*- The Workshop on Mathematical performance Modeling and Analysis (MAMA)*

*- Big Data Analytics workshop*

Overall, the attendance at the tutorials and workshops was very good, however, more effort is needed to improve the attendance for future new tutorials/workshops.  We emphasized this point in the SIGMETRICS executive meeting, in particular, whether we want to have workshops/tutorials in ACM FCRC'15.

The technical program was very strong, as usual. We experimented with two changes to the review process this year. The first change to the review process was the addition of a rebuttal phase between the first and second review rounds, to give authors an opportunity to respond to questions raised in first-round reviews. To impede the addition of new substantive material in the rebuttals, and instead reserve rebuttals for merely highlighting information already contained in the submission, we strictly limited each rebuttal to 500 characters. It is not easy to gauge the effectiveness of the rebuttal process: There were many occasions during the PC meeting when reviewers commented on items in authors’ rebuttals, which suggests that the rebuttals provided additional information; however, reviewers mostly found that their opinions were unchanged by what they read in the rebuttals.

We received 196 submissions to this year’s conference, of which 26 appear in the program as full papers, which is a highly competitive acceptance ratio below 14%. An additional 28 submissions appear in the abbreviated form of poster presentations with brief summaries in the proceedings. As in some prior years, we performed reviews in two rounds. In the first round, each paper was assigned to four reviewers. In the second round, additional reviews were assigned to papers with fewer than three completed reviews and papers with highly divergent review opinions and fewer than two high- confidence reviews. Overall, the program had a good mix of theory, systems, and networking topic areas.

The SIGMETRICS 2014 conference will take place at Austin, Texas.  The General Co-Chairs will be Prof. Sanjay Shakkottai and Prof. Sujay  Sanghavi, both professors at University of Texas at Austin.   The program co-chairs will be Prof. Marc Lelarge (ENS, France) and Prof. Bianca Schroeder (University of Toronto).

SIGMETRICS has decided to participate in FCRC'15, and the general co-chairs will be Prof. Bill Lin (UCSD) and Prof. Jun Xu (Georgia Tech.).

**New Initiatives**

An ongoing initiative for our SIG is a proposed new journal, tentatively called ACM Transactions on Performance Evaluation (ToPE). We are currently updating our proposal based on feedback received from the ACM Publications Board, and have constituted a tentative editorial board and two Co-EiCs (Editor in Chief) for the journal. As of late July, Prof. John C.S. Lui, Prof. Don Towsley, and Dr. Mark S. Squillante have completed the revision and addressed all questions raised by the ACM Publications Board, and we have submitted our revised proposal back to ACM for final approval.

**Issues and Challenges**

An ongoing challenge for our SIG is the slowly declining membership, which has been a trend for many SIGs since the introduction of the ACM Digital Library. We hope that the new journal, our awards program, and our increased visibility from co-sponsored and "in cooperation"   events will help to promote the value of SIGMETRICS membership, and allow us to grow our membership base in the years ahead. We are also exploring how to increase membership in regions outside USA/Europe, for example, one can consider the growing interest of performance evaluation in Asia (e.g, China, Taiwan, India, Singapore,…etc) as well as Australia.

Other issues that the officers are discussing:

- Should we change the submission format for SIGMETRICS conference and try to follow the VLDB format?

- Should SIGMETRICS slightly increase the number of papers, including long and short papers, so as to increase the size of our community and participation?

- Discuss and strategize important research areas which are of interest to our community, and proactively organize workshops so as to enhance the research?

- How can we help our members to achieve senior membership in ACM, like ACM Distinguished Engineers or ACM Fellows?

**SIGMICRO Annual Report**

**July 2012 - June 2013  
Submitted by: Pradip Bose, Chair**

The following are highlights of SIGMICRO's activities during fiscal year 2013 (July 2012 – July 2013).

**SIGMICRO** has worked to ensure the success of our flagship MICRO conference. MICRO celebrated its 45th anniversary last year in Vancouver, Canada. The conference offered an excellent technical program, and outing. Attendance was 281 and still a bit below the peak of recent prior MICRO conference sizes. SIGMICRO has also helped start and support several other major conferences since 2001: CASES, CGO, and Computing Frontiers. All are doing well as reported below. As also reported below, we have a strong program to encourage attendance at our conferences by students and those facing financial hardship, with numerous travel grants provided to help defray cost of attendance, in addition to heavily discounted student registration rates.

As also reported last year, our ambitious history project has completed its first phase under the leadership of Yan Solihin, who with the help of historian Paul Edwards of the University of Michigan compiled excellent interviews with Bob Colwell and Edward Davidson. These interviews – both transcripts and oral recordings – are available on the SIGMICRO Newsletter site: <http://newsletter.sigmicro.org/sigmicro-oral-history-transcripts>. Unfortunately, we have not been able to fill the position as of June 30, 2013. SIGMICRO awarded plaques to the three 2013 inductees to the Micro Hall of Fame (<http://newsletter.sigmicro.org/micro-hof.txt/view>), Hyesoon Kim, Eric Rotenberg and Youfeng Wu.

SIGMICRO successfully passed its due viability review in March 2013.

**SIGMICRO CONFERENCE Activities**

**MICRO-45:** December 1 – 5, 2012

<http://www.microarch.org/micro45>

SIGMICRO's flagship conference was reasonably successful with a turnout of slightly over 300 people. Attendance was down ostensibly due to the following factors: (a) non-US location; (b) depressed world-wide economy; (c) visa-related difficulties for some; (d) poor administration of the allocated student travel grants. The conference had 228 submissions. Of them, 40 were accepted, implying a very competitive 17.5 % accept rate. There were also 7 workshops and 2 tutorials. The MICRO-45 conference allocated $10,000 for student travel grants, of which $5000 was committed by ACM SIGMICRO – all students who were granted the awards applied for reimbursement of expenses and received payment.

Micro enjoyed excellent technical talks, keynotes, workshops, and tutorials. SIGMICRO polled attendees using surveymonkey.com as in prior years. The satisfaction levels showed a marked improvement over MICRO-2011, as the quality of conference organization got elevated back up to what the community has been used to prior to the 2011 conference.

**Location**: Vancouver, British Columbia, Canada.

**Outing:** Bus ride to Vancouver Aquarium (followed by conference banquet).

**General Chair:** Stephen Melvin, Consultant.

**Program Chair**: Onur Mutlu, Carnegie-Mellon University

**Keynotes**: (1) Charles Webb, IBM; Chief Architect, System z Mainframe Systems

(2) Turner Whitted, Microsoft Research

**3Tutorials (compared to 4 in 2011):**

* *MARSS: Micro-ARchitectural and System Simulator for x86 based Systems*
* *GPGPU-Sim 3.x: A Performance Simulator for Manycore Accelerator Research*
* *Cross-Platform FPGA Accelerator Development Using the CoRAM Virtual Architecture*

**6 Workshops (compared to 5 in 2011):**

* **NoCArc:** Workshop on Network on Chip Architectures
* **WNTC:** Workshop on Near-Threshold Computing
* **WRA**: Workshop on Resilient Architectures
* **HASP:** Workshop on Hardware and Architectural Support for Security and Privacy
* **First Annual gem5 User Workshop**
* **Working Group for Simulators**

**Best Student Paper Award:**

**Best Paper Award:**

**MorphCore: An Energy-Efficient Microarchitecture for High Performance ILP and High Throughput TLP**, Khubaib (UT Austin), Aater Suleman (Calxeda/HPS), Milad Hashemi (UT Austin), Chris Wilkerson (Intel Labs), and Yale Patt (UT Austin)

Citation: "This paper was selected for the best paper award, based on conceptual novelty and anticipated long term impact. It attempts to solve a general problem: that of balancing single-thread performance against throughput performance using a single "morphable" core. The approach is different from prior work in that the starting point is a complex core, from which an energy-efficient, multi-threaded core is systematically (or justifiably) derived."

**Best Paper Runners Up:**

**Cache-Conscious Wavefront Scheduling**, Timothy G. Rogers (University of British Columbia), Mike O'Connor (AMD Research), and Tor M. Aamodt (University of British Columbia)

**Fundamental Latency Trade-offs in Architecting DRAM Caches**, Moinuddin Qureshi (Georgia Institute of Technology), Gabriel H. Loh (AMD Research)

**Best Lightning Session Presentation Award:**

**Adrian Sampson (University of Washington)**, Neural Acceleration for General-Purpose Approximate Programs

**Best Lightning Session Presentation Runners Up:**

**Rustam Miftakhutdinov (UT Austin)**, Predicting Performance Impact of DVFS for Realistic Memory System

**Tim Rogers (University of British Columbia)**, Cache-Conscious Wavefront Scheduling

**Student travel:** $5000 allocated for donation by SIGMICRO; fully utilized by MICRO.

**CGO 2012: February 23-27, 2013 (co-located with HPCA and PPoP)**

http://www.cgo.org/cgo2013

*Also Co-Sponsored by ACM SIGPLAN.*

**CGO** [**C**ode **G**eneration and **O**ptimization] was held in San Jose, CA. Submissions: 31 papers were accepted (~29% acceptance rate). CGO 2013 featured two keynotes (one of which was actually designated as an “invited” technical talk), a welcome reception / student poster session, and numerous workshops and tutorials. There were a total of 8 tutorials and workshops (compared to 9 in 2011).

**Location**: Shenzen, China.

**General Chairs**: Chenggang Wu, Institute of Computing Technologies (ICT), China

Jack Davidson, University of Virginia

**Program Chairs**: Kathryn McKinley, Microsoft Research and University of Texax, Austin

Lieven Eeckhout, Ghent University

**Keynotes**: Kevin Nowka, IBM Austin Research Lab

Katherine Yelick, UC Berkely and Lawrence Berkely National Laboratory

**5 Tutorials:**

* [OpenCL for embedded heterogeneous architectures](http://comparch.gatech.edu/hparch/LCL_tutorial.html):
* [Code Generation Techniques for Graphics Processing Units](http://homepages.dcc.ufmg.br/~fernando/classes/gpuOpt/):
* [MCLinker and LLVM](http://code.google.com/p/mclinker/wiki/2013CGOTutorial) :
* [Pin](https://sites.google.com/site/pintutorial/home/cgo2013)
* [Optimizing with OpenCL on Intel Xeon Phi](https://docs.google.com/document/d/1IZE6Xsfqc-XJLlzfPrY3ESMABciaYDuLOWiUqIoA0No/pub):

**3 Workshops:**

* [The second Asia-Pacific Programming Languages and Compilers Workshop (APPLC)](http://applc13.iis.sinica.edu.tw/):
* [ODES-10: 10th workshop on Optimizations for DSP and Embedded Systems](http://www.imec.be/odes/): [COSMIC:international workshop on Code OptimiSation for MultI and many Cores](http://workshops.inf.ed.ac.uk/cosmic/):
* [COSMIC:international workshop on Code OptimiSation for MultI and many Cores](http://workshops.inf.ed.ac.uk/cosmic/):

**Awards**

**Best Paper Award**

Yulei Sui, Yue Li, and Jingling Xue for “Query-Directed Adaptive Heap Cloning For Optimizing Compilers”

Bin Ren, Gagan Agrawal, Jim Larus, Todd Mytkowicz, Tomi Poutanen, and Wolfram Schulte for “SIMD Parallelization of Applications that Traverse Irregular Data Structures”

**Most Influential Paper**

Derek Bruening, Timothy Garnett, and Saman Amarasinghe for “An infrastructure for adaptive dynamic optimization”

**Best Student Presentation**

Dominik Grewe for “Portable Mapping of Data-Parallel [Programs](http://www.cgo.org/cgo2013/awards/index.html) to OpenCL for Heterogeneous Systems”

Feng Li for “Effective Fault Localization Based on Minimum Debugging [Frontier](http://www.cgo.org/cgo2013/awards/index.html) Set”

**CASES 2012:** October 9-14, 2012

http://esweek.acm.org/esweek2012/cases/

*Also in cooperation with ACM SIGBED*

**CASES** [**C**ompilers, **A**rchitecture, and **S**ynthesis for **E**mbedded **S**ystems] joined two other embedded systems conferences in 2006 to create a larger "*ESWeek"* grouping and promote cross-fertilization of efforts in the embedded area. The combination of conferences was a success, and *ESWeek* has been repeated ever since, with the 2012 version in Tampere, Finland. In all, 18 papers were accepted out of 61 submitted at a competitive acceptance rate (29.5%).

**Location**: Tampere, Finland

One of 3 Conferences in Embedded Systems Week: http://www.esweek.org

* CASES
* CODES+ISSS (Co-sponsored by ACM SIGDA and SIGBED)
* EMSOFT (Sponsored by ACM SIGBED)

**Program Chairs:**  Rodric Rabbah (IBM Research) and Vincent Mooney (Georgia Tech)

**Keynotes:**

|  |
| --- |
| Satnam Singh, Technical Infrastructure division, Google, USA  Hannu Kauppinen, Vice President, Nokia Research Center  Jong-Deok Choi, Executive Vice President, Samsung Electronics, Korea |
| **Best Paper Award:**  Power Agnostic Technique for Efficient Temperature Estimation of Multicore Embedded Systems; *Authors:*  Devendra Rai, Hoeseok Yang, Iuliana Bacivarov and Lothar Thiele | |

**Computing Frontiers 2013:** May 14 - 16, 2013

http://www.computingfrontiers.org/2013

Computing Frontiers was held this year in Ischia, Italy. It continued to attract high quality papers on futuristic ideas on the frontier of computing, with a program consisting of **30** full papers and 7 posters. Reflecting the high quality of Computing Frontiers, selected papers have been invited for an extended special issue of the Springer International Journal of Parallel Programming.

**Location:**

Ischia, Italy

**General Chair:**

Hubertus Franke, IBM T.J. Watson Research Center, USA

**Program Co-Chairs:**

Krishna Palem, Rice University, US and Nanyang Technological University, SG  
Eli Upfal, Brown University, US

**Keynote:**

Oskar Mencer, Maxeler Technologies and Imperial College

Aya Soffer, IBM Research

**Best Paper Award:**

*Experimental Evaluation of an Adiabatic Quantum System for Combinatorial Optimization* Catherine McGeoch and Cong Wang

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**FUTURE PLANS**

We are working to improve the value of SIGMICRO to its members:

* Begun in 2008, SIGMICRO has been expanding the Micro Hall of Fame: <http://newsletter.sigmicro.org/micro-hof.txt/view>. The Micro Hall recognizes those authors with 8 or more papers since the conference inception in 1967. For the first time in 2010, SIGMICRO presented plaques at the conference to recipients; this was repeated in 2011 and 2012. The Hall of Fame currently has 39 members, with three new members inducted in 2012: Hyesoon Kim, Eric Rotenberg and Youfeng Wu
* In 2010, under the auspices of the larger ACM oral history project, the prior term SIGMICRO chair Erik Altman oversaw the completion of the first round of the SIGMICRO Oral History Project. Yan Solihin of North Carolina State led the effort, working with historian Paul Edwards of the University of Michigan. Prof Edwards compiled excellent interviews with Bob Colwell and Edward Davidson. These interviews – both transcripts and oral recordings – are available on the SIGMICRO Newsletter site: <http://newsletter.sigmicro.org/sigmicro-oral-history-transcripts>. They contain a vast array of information from the personal (Bob Colwell growing up as one of six children of a milkman and Ed Davidson’s fighting uncle to Intel’s concern in the 1990s about the imminent demise of the x86 architecture in the face of the RISC onslaught and Ed Davidson’s thoughts about advising graduate students.) Soon we hope to make the transcripts available in the ACM Digital Library as well, but wanted SIGMICRO to showcase them first. Due to the unavailability of Yan Solihin, the SIGMICRO executive committee is now searching for a qualified and eager replacement. The goal is to continue this fine effort by adding on to the successful compilation already in place.
* As the Hall of Fame and Oral History project sites may suggest, the SIGMICRO Newsletter continues under the editorship of Russ Joseph, who is a member of the newly elected SIGMICRO Executive Committee.
* We have considered other ways to add value, some of which have been suggested by the prior term executive committee:
  + Increasing the allocation of surplus funds to provide for more student travel grants in SIGMICRO-sponsored conferences.
  + Providing funded sponsorship of worthy forums that promote the participation of women and minorities in research areas of relevance to SIGMICRO. **For example, SIGMICRO sponsored a career-building CRA-W workshop, held in August 2012.**
  + Providing simplified mechanism for ACM and SIGMICRO membership when registering for our flagship MICRO Conference.
  + Encouraging qualified members of SIGMICRO to become Senior and Distinguished ACM Members.
  + Providing a discount on SIGMICRO membership for members of other SIGs. Joint membership helps encourage cross-pollination of ideas and areas, which often leads to productive results.
  + Minimizing conflicts between conferences dates.
  + Encouraging and developing SIGMICRO members to become ACM Distinguished Lecturers; SIGMICRO Chair’s (P. Bose) new role as member of ACM Distingusihed Speaker Program executive committee is being leveraged.
  + Revamped SIGMICRO website, now in place for better information dissemination amongst members.
  + Reviving the effort to publish a few top SIGMICRO papers in CACM or proposing a new mechanism for highlighting the topmost SIGMICRO-relevant conference papers through a special issue in a reputed journal or magazine.
    - We now have a formal “process” document in place for the CACM highlights special issue nomination.

**LEADERSHIP**

The current leadership of SIGMICRO reflects the new executive committee that took over from the prior one chaired by Erik Altman a couple of years ago.

**Chair:**

Pradip Bose *(IBM)*

**Vice-Chair:**

David Brooks *(Harvard)*

**Secretary-Treasurer:**

Vijayalakshmi Srinivasan *(IBM)*

**Members-at-Large:**

Michael Gschwind *(IBM) – Industry Issues Editor*

Russ Joseph *(Northwestern University) – Newsletter Editor*

Milos Prvulovic *(Georgia Tech) – Chief Technical Strategst*

Erik Altman *(IBM) – Past Chair and SGB Liaison*

Jason Mars *(U of Virginia) – Website Editor*

**SIGMIS Annual Report**

**July 2012 - June 2013  
Submitted by: Janice C. Sipior, Chair**

**Mission and Overview**

SIGMIS is the Special Interest Group on Management Information Systems of the ACM. Members of SIGMIS are interested in information systems and technologies for management and the management of these systems and technologies. SIGMIS was founded in 1961 as the Special Interest Group on Business Data Processing and later was known as the Special Interest Group on Business Information Technology. SIGMIS publishes *The Data Base for Advances in Information Systems* (*Data Base,* for short) and holds the annual SIGMIS CPR conference dedicated to research addressing computers and people. SIGMIS also participates in the annual International Conference on Information Systems (ICIS) and the annual International Federation for Information Processing (IFIP) TC8 committee, as well as other conferences. SIGMIS promotes student achievement and partners with other organizations to provide services to members and to the profession.

**Summary of Recent Accomplishments**

During FY’13, some of the major events and accomplishments of SIGMIS include:

* Held the SIGMIS CPR Conference May 30 – June 1, 2013 in Cincinnati, Ohio, USA
  + Awarded the “Magid Igbaria Outstanding Conference Paper of the Year Award”
  + Held the SIGMIS Computers and People Doctoral Consortium
  + Provided travel grants to Doctoral Consortium participants
* At the International Conference on Information Systems (ICIS2012) in Orlando Florida, USA from December 16-19, 2012.
  + Sponsored the Doctoral Dissertation Paper Award
* Continued to represent ACM as a member of a select group to develop model curriculum for education in IS, both at the undergraduate and graduate level
* Continued to fund a representative to the International Federation for Information Processing (IFIP)

**1. Awards**

Beginning with ICIS 1995, SIGMIS became the sponsor of the ICIS MIS Doctoral Dissertation Award. In 2012, the award was given to Beibei Li, supervised by Anindya Ghose at New York University, for the dissertation entitled “Analyzing Consumer Behavior on Product Search Engines: Interplay between Search and Social Media.” The First Runner‐Up is Wietske van Osch, supervised by Michel Avital at Amsterdam University, for the dissertation entitled “Generative Collectives.” The Second Runner‐Up is Shachar Reichman, supervised by Gal Oestreicher‐Singer at Tel Aviv University, for the dissertation entitled “The Quest for Content: How User‐Generated Links Can Facilitate Online Exploration.”

The recipients of the “Magid Igbaria Outstanding Conference Paper of the Year Award” at the 2013 SIGMIS CPR Conference are Violet Ho of the University of Richmond, Jonathan Whitaker of the University of Richmond, Sunil Mithas of the University of Maryland, and Prasanto Roy of Cybermedia, for their paper entitled “Success is More Than a Resume: The Role of Social and Psychological Capital in Compensation for Offshore BPO Professionals.”

**2. Papers**

SIGMIS held the SIGMIS CPR Conference May 30 – June 1, 2013 in Cincinnati, Ohio, USA. The conference program is available from the SIGMIS CPR conference website at:

<http://www.sigmis.org/SIGCPR2013/confprogram.html> or directly at:

<http://www.sigmis.org/SIGCPR2013/ACM%20SIGMIS%20CPR2013_FinalProgramMay28.pdf> .

Additionally, SIGMIS publishes *The Data Base for Advances in Information Systems* (*Data Base,* for short), a quarterly peer-reviewed publication devoted to communicating advances in research and best practice in MIS. Beginning in January 2012, the editorship transitioned to Co-Editors-in-Chief Andrew Schwarz, Louisiana State University, and David Salisbury, University of Dayton. Colleen Schwarz of Louisiana State University is the Managing Editor. For information about *Data Base*, please visit the SIGMIS website at: <http://www.sigmis.org/DataBase.html> .

**3. Programs**

Since 2006, SIGMIS has held the Computers and People Doctoral Consortium. This year’s CPR Doctoral Consortium was held on Thursday, May 30, 2013 at the SIGMIS CPR Conference May 30 – June 1, 2013 in Cincinnati, Ohio, USA. Beginning with the CPR 2011 conference, SIGMIS is providing travel grants to Doctoral Consortium participants.

**4. Service to MIS Community**

In conjunction with representatives of the Association for Information Systems (AIS), SIGMIS has been involved in the development of model curriculum for education in information systems both at the undergraduate and graduate levels. The latest version of the curriculum, IS 2010 Curriculum Guidelines for Undergraduate Degree Programs in Information Systems, was finalized. IS 2010 is available as a Communications of the Association for Information Systems (CAIS) article at <http://aisel.aisnet.org/cais/vol26/iss1/18> . The ACM news release is available at: <http://www.acm.org/press-room/news-releases/2010/is-2010-curriculum-report/view> .

Additionally, the ACM and the IEEE Computing Society are founders of the International Federation for Information Processing (IFIP). IFIP acts on behalf of member societies in carrying out international cooperation to advance the information processing profession. SIGMIS continues to fund the attendance of the ACM's representative for one of the annual meetings of IFIP to promote involvement among the membership of SIGMIS and IFIP.

**5. Key Issues**

We discussed potential hosts for forthcoming annual CPR Conferences at the SIGMIS Business Meeting at CPR 2013. The 2014 conference will be held in Singapore from May 29-31, 2014. The Conference Co-Chairs are Damien Joseph, Nanyang Technological University in Singapore and Conrad Shayo, Cal State San Bernardino in USA. The conference theme is “The Globalization of IT Work.” Plans are underway for CPR 2015, to be held May 28-31, 2015 in Frankfurt, Germany. The theme will be “The IT Workforce – Transition from “Dr. No” to “Movers and Shakers.” CPR 2016 is planned to be held on the U.S. East Coast (specific location TBD).

We need to replace our Information Director as Nita Brooks expressed a desire to not continue in this role.

**SIGMM Annual Report**

**July 2012 - June 2013  
Submitted by: Klara Nahrstedt, Past Chair**

1. **Awards**

Over the last year 2012-2013, we have given out two SIGMM-wide awards, the SIGMM Technical Achievement Award 2012 and the SIGMM Best PhD Thesis Award2012.

**SIGMM Technical Achievement Award 2012:** At the ACM Multimedia 2012, held in Nara, Japan, we have presented our 4th SIGMM Award for Outstanding Technical Contributions Award to Multimedia Computing, Communications and Applications (shortly Technical Achievement Award) to Dr. Hong-Jiang Zhang, who is the CEO at Kingsoft for his technical achievements to media computing and outstanding service to the community. The awardee for the SIGMM Technical Achievement Award 2012 was selected by the SIGMM Awards Committee Prof. Rainer Lienhart (SIGMM officer and chair of the committee) from University of Augsburg, Germany, Dr. Larry Rowe from FXPal and Prof. Tat-Seng Chua from National University of Singapore.

Dr. Hong-Jiang Zhang gave a technical presentation “Reflections from an Industrial Perspective ” in the plenary session on Wednesday Morning October 31, 2012.

The second SIGMM award went to Dr. Wanmin Wu who received the SIGMM Best PhD Thesis Award. She gave a presentation “Identifying and Incorporating Human Psycho-physical Factors along with Traditional QoS to Improve Experience”. She gave her presentation also on Wednesday Morning, October 31, 2012.

Besides the SIGMM-wide awards, our flagship journal, ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP) acknowledges the work of the associate editors and gives out the **best TOMCCAP associate editor** award to an editor who provides most excellent services to authors and the community. In 2012, Changsheng Xu from Institute of Automation, Chinese Academy of Sciences, was named the best associate editor of ACM TOMCCAP. The TOMCCAP Editor-in-Chief Prof. Ralf Steinmetz from Technical University of Darmstadt, Germany, presented the award at the banquet of the ACM Multimedia 2012 conference in Nara, Japan.

In 2012, the editor-in-chief(EiC) of TOMCCAP, Ralf Steinmetz, announced the first **ACM TOMCCAP Nicolas Georganas named award** for Best Paper, published in the TOMCCAP journal, to honor the memory and outstanding work of Prof. Nicolas Georganas, the founder and first EiC of TOMCCAP, who passed away in July 2010. The first winner of the Nicolas Georganas TOMCCAP Best Paper Award was Pavel Korshunov and Wei Tsang Ooi for their paper “Video Quality for Face Detection, Recognition and Tracking (TOMCCAP vol 7. No. 3).

At our SIGMM-sponsored conferences, we have given out numerous conference-specific awards to celebrate the outstanding research as follows:

* 1. **ACM International Conference on Multimedia (ACM Multimedia)**

The ACM International Conference on Multimedia is the SIGMM flagship conference, and the ACM Multimedia 2012 was held in Nara, Japan, October 29 – November 2, 2012.

1. **Best Paper Award 2012**: Zhi Wang, Lifeng Sun, Xiangwen Chen, Wenwu Zhu, Jiangchuan Liu, Minghua Chen, Shiqiang Yang: “ Propagation-based social-aware replication for social video contents”
2. **Best Student Paper Award 2012**: Shi-Yao Lin, Chuen-kai Shie, Shen-chi Chen, Yi-Ping Hung: “ Action recognition for human-marionette interaction”.
3. **Best Technical Demo Award 2011**: D. Monaghan, J. O’Sullivan, N. O’Conner, “Low-cost Creation of a 3D Interactive Museum Exhibition”, team from Dublin City University.
4. **Multimedia Grand Challenge 2012**:
   1. Grand Challenge 1st Prize went to Ju-Chiang Wang, Yi-Hsuan Yang, I-Hong Jhuo, Yen-Yu Lin, Hsin-Min Wang, “The acoustic-visual emotion Gaussian model for automatic generation of music video”
   2. Grand Challenge 2nd Prize went to
      1. Xiaohui Wang, Jia Jia, Peiyun Hu, Sen Wu, Jie Tang, Lianhong Cai: “Understanding the emotional impact of images” and
      2. Vassilios Vonikakis, Stefan Winkler: “Emotion-based sequence of family photos”
   3. Grand Challenge Multimodal Prize (sponsored by TECHNICOLOR) went to Zhiyu Wang, Peng Cui, Lexing Xie, Hao Chen, Wenwu Zhu, Shiqiang Yang, “Analyzing social media via event facets”.
5. **Best Open Source Software Competition Awards 2012:** There was one award given to Petr Holub, Jiri Matela, Martin Pulec, Martin Srom, “ UltraGrid: Low-latency high-quality video transmission on commodity hardware”
6. **Technical Demonstrations 2012:** The best technical demonstration award went to Si Liu, Tam V. Nguyen, Jiashi Feng, Meng Wang, Shuicheng Yan, “Hi, Magic closet, tell me what to wear!” There were two demonstration runner-ups for Best Technical Demonstration:
   * 1. Hanwang Zhang, Zhen-jun Zha, Jingwen Bian, Yue Hao, Huanbo Luan, Tat-sent Chua, “Attribute Feedback”
     2. Toshiharu Horiuchi, Hiroshi Sankoh, Tsueno Kato, Sei Naito, “ Interactive music video application for smartphones based on free-viewpoint video and audio rendering.
7. **Best Doctoral Symposium Paper 2012**: This award went to Yan-Ying Chen: People search and activity mining in large-scale community-contributed photos”.
   1. **ACM International Conference on Multimedia Retrieval (ICMR)**

The ICMR 2013 conference was a SIGMM-sponsored conference. This was the 2nd conference after the merger of ACM CIVR (Conference on Image and Video Retrieval) conference and ACM MIR (Multimedia Information Retrieval) workshop, both SIGMM-sponsored events, The ICMR 2013 was held in Dallas, Texas, April 16-19, 2013. ICMR had three special awards.

* **The best paper award** was received by Liyan Zhang, Dmitri V. Kalashnikov and Sharad Mehrotra from the University of California, Irvine for the paper “A Unified Framework for Context Assisted Face Clustering”
* **The best doctoral symposium award** went to Abhinav Dhall from Austrialian National University for the paper “Expression Analysis in the Wild: From Individual to Groups”.
* **The best demonstration award** was given to Shuang Wang, Yunfeng Xue, Lingyang Chu and Shuqiang Jian of the Chinese Academy of Sciences and Yuhao Jiang of the Shandong University of Science and Technology for their work “ ObjectSense: A Scalable Multi-object Recognition System based on Partial – Duplicate Image Retrieval”.

1. **Significant programs**

Throughout the SIGMM-sponsored conferences we had several significant programs that provided a springboard for future technical efforts:

* 1. ***ACM Multimedia 2012***
* Highlight of this conference was again the ***Multimedia Grand Challenge program*** organized for the fourth time as a part of the conference program. Multimedia Grand Challenge is a set of problems and issues from a number of industry leaders geared to engage the multimedia research community in solving relevant, interesting and challenging questions about the industry’s 2-5 year horizon for multimedia. Researchers were encouraged to submit working systems in response to the challenge. A large number of submissions were received for this first edition of the competition. We will be continuing with this challenge in ACM Multimedia 2013.
* In 2012, ACM Multimedia was the **20th anniversary** of its existence. To celebrate this anniversary, we have organized multiple events at ACM Multimedia 2012. We have started with the 20th **anniversary keynote speaker Masahiro Fujita from Sony Corporation**, Japan who spoke about “Future Direction of Digital Content”. The second major event was the **20th anniversary panel, called “Coulda, Woulda, Shoulda: 20 Years of Multimedia Opportunities”**, organized by Klara Nahrstedt (University of Illinois at Urbana-Champaign) and Malcolm Slaney (Microsoft, USA). The four panelists where Dick Bulterman (CWI, Vrije University), Ramesh Jain (University of California, Irvine), Larry Rowe (University of California at Berkeley/FXPAL, USA), Ralf Steinmetz (Technical University Darmstadt, Germany). The panelists discussed the state of the multimedia area, achievements we have celebrated through the years at ACM Multimedia conferences, but also the missed opportunities that we have not seen coming in the industry. The discussion was very lively with audience participating via variety of questions.
* We have also welcomed two PhD students who received scholarship from ACM-W to attend the conference since SIGMM participates in this program. The SIGMM chair, Klara Nahrstedt, met and communicated with them, informing the students about the conference and its various events, sessions and possibilities.
  1. ***ACM MMSys 2013, NOSSDAV 2013 and MoVid 2013***

Three interesting events ACM MMSys 2013, NOSSDAV 2013 and MoVid 2013 were held in Oslo together. This was the first time that MMSys was collocated with the two workshops, NOSSDAV and MoVid. The colocation of the events worked out very well since authors and attendees could listen to talks and keynotes in all three events. There were *two interesting* ***keynote talks*** talking about 3D video. The first keynote speaker spoke at **NOSSDAV 2013 and it was Dr. Aljosa Smolic from Disney Research Zurich.** He talked about “**Advanced 3D Video processing and coding”**. **Rui Casais from Funcom talked about “Technical challenges of developing MMOGs**”. Both speakers were from industry providing very different perspective on multimedia systems area.

In this conference, the organizers also arranged for a special session on “**3D Technology in Multimedia**” which included three papers ranging from mobile 3D content support to 3D collaborative tools. MMSys 2013 also continued with the gathering, advertising and disseminating very interesting **datasets** such as social event detection dataset, mobile video datasets, 3G network traces, P2P live streaming session traces, and distributed DASH datasets.

One important aspect I would like to stress is that this conference was being held at the University of Oslo and the organizers managed to **record all presentations** that are now available on YouTube. This also means that participants who were not at the conference, are able to access the slides and presentation svia videos and listen to material discussed and presented at MMSys 2013.

* 1. ***ACM ICMR 2013***

The conference continued with the “*Practitioners Session*” bringing in industry researchers and discussing problems faced by the practitioners.

The SIGMM-sponsored ACM ICMR 2013 conference continued to have one interesting special session with interesting papers. It was called the “**Social Events in Web Multimedia**” session. In addition to the interesting session, ICMR 2013 organized an exciting **panel “Recommendation Systems Have Taken Control: Is Multimedia Retrieval Still Relevant?** “

* 1. ACM TOMCCAP Special Issue on 20th Anniversary of ACM Multimedia

In addition to significant programs and events at SIGMM-sponsored conferences, we have also organized a **special issue in** **ACM TOMCCAP** to celebrate the **20th anniversary of ACM Multimedia**. The guest editors Klara Nahrstedt from University of Illinois at Urbana-Champaign, Rainer Lienhart from University of Augsburg and Malcolm Slaney from Microsoft, Inc. have selected four long papers that surveyed the 20 years of topics ranging from multimedia synchronization and multimedia streaming to multimedia authoring and image search. In addition to long papers, a group of leading researchers in multimedia was invited to contribute short notes and contributions to present their personal view on the last 20 years in multimedia area and insights for the future. The special issue will come out in October 2013 and will be widely distributed at ACM Multimedia 2013 and other multimedia venues that come after October 2013.

1. **Innovative programs**

Several SIGMM-sponsored conferences had innovative programs which provided service to the technical community:

* 1. ***ACM Multimedia 2012***
* **Open Source Competition** brings major service to the technical community since software is then released to the community with corresponding agreements in place.
* We have organized the “**Networking of Multimedia Women**” event in the form of lunch. The event was led by Prof. Susanne Boll.
* We have continued to provide state of the art **tutorial presentations free** (because of all inclusive registration fees) to conference participants.
* All accepted short papers were included in the **Poster Plenary Sessions**.
* The art exhibitions were open for two weeks to give conference participants and other visitors a chance to see the art work by selected and invited artists.
* Student travel grants were expanded and provided to 59 students.
* The conference organizers created a web and smartphone application, called mmap, which allowed mobile participants the access to program time table, information for transformation and other vital information.
  1. ***ACM MMSys 2013***

The **co-location of the MoVid** and NOSSDAV 2013 workshops with MMSys’12 worked very well. Many participants stayed the full three days and attended the various presentations of the Mobile Video (MoVid) and NOSSDAV Workshops. Since MoVid and NOSSDAV were run in parallel, they shared the keynote speaker. The **keynote speaker** was **Dr. Aljosa Smolic** from Disney Research Zurich. He talked about “Advanced 3D Video processing and coding”. Overall, the talk was very well received.

* 1. ***ACM ICMR 2013***

The **two tutorial sessions** were very interesting. Their themes were (a) Advanced Machine Learning Techniques for Temporal, Multimedia and Relational Data, and (b) Similarity Indexing for Multimedia Data. The themes were very actual and very well received.

Another interesting event was the **panel** on “Recommendation Systems have taken Control: Is Multimedia Retrieval still Relevant?”

The **special session** “Social Events in Web Multimedia” has been expanded at this conference and split into two parts due to very strong popularity.

The industry session of the “**Practitioner Day**” had several interesting topics ranging from “ social curation”, presented by Nippon Teleraph and “user behavior analysis” from Yahoo! Inc, to “reasoning with Cyc from event descriptions to the details of structure and appearance” by Cycorp, Inc.”.

The conference was also running **demonstrations** and **PhD doctoral symposium** which were successful and highly attended.

1. **Brief summary for the key issues that the memberships of SIGMM will have to deal with in the next 2 years**

The key issues are:

1. Come up with a **sustainable funding model** for the **multimedia art community** within the SIGMM community and their participation at our premier ACM Multimedia conference.
2. Expand SIGMM presence in various social networks.
   1. At ACM Multimedia 2012, we had used **Twitter** to collect opinions, **Facebook**, the **SIGMM website**, and organizers built the ‘**mmap’ web and smartphone application** to assist the mobile conference participants. However, more needs to be done to effectively use the social networks at SIGMM-sponsored conferences and increase presence of the conference events among participants.
   2. Good examples to continue and expand are: At ACM Multimedia 2011 we have introduced the **social media award**, and more needs to be done. At ICMR’12, a **photo-slide presentation** has been prepared and posted on the conference website. At ACM Multimedia 2012 and ICMR’13 Facebook accounts were widely used.
3. Increase **industry participation** in SIGMM activities to strengthen ties and increase impact between industry and academia.
   1. ACM Multimedia 2012 brought in “**Industry Exhibits and Technical Demos**” together. The **Open Source Software Challenge** is a very strong program to accomplish the goal. Including panelists from industry is another approach. At ACM Multimedia 2012, the panelists on “Content is Dead. Long Live Content!”, several panelists were from the industry such as NTT Docomo and Microsoft, Inc.
   2. ACM ICMR 2013 did a good job with the “**Practitioner Day**” session, although it was shorter and with less industry representation than in the previous years.
   3. ACM MMSys/NOSSDAV/MoVid 2013 brought again **keynote speakers** from Disney Research Zurich and Funcom (an online game company) which provided very strong industrial relevance to the multimedia systems research.
4. Automate process for talks content, web, other **SIGMM material preservation** at SIGMM venues. We have established a preservation committee for ACM Multimedia conference as part of the organizing committee, but for other SIGMM-sponsored events, we do not have anorganized effort and it depends on the chair and culture of the conference. We need to do more in this area. We have a SIGMM preservation representative, who is the associate editor on the sigmm.org editorial board, Mohammed Hafeeda. However, he mostly aims to preserve the main pages of the conference websites, not talks or other content from a conference.
   1. ACM MMSys 2013 did a very good job video-taping all presentations and making them available via the conference website.
5. Increase **SIGMM participation of female researchers**. We have started to go in this direction at ACM Multimedia event, but other SIGMM-sponsored events do not have coordinated events, and we need to do more.
   1. We have started this task with **lunch at ACM Multimedia 2010**, the event “**Networking of Multimedia Women**” including a discussion and panel at ACM Multimedia 2011 and lunch at ACM Multimedia 2012. We are planning another lunch event at ACM Multimedia 2013.
   2. SIGMM has partnered with **ACM-W** to fund one female student to attend the premier SIGMM conference in her area of interest. At ACM Multimedia 2012 we have had PhD students (two) who came through the ACM-W program.
6. Build up the next generation of **SIGMM volunteers** to serve as SIGMM officers, chairs, leaders of various SIGMM sponsored activities and venues.
   1. We have a very active group of volunteers that drive very diverse activities of ACM SIGMM, but we need to bring new members in, hence increasing the SIGMM membership would be one of the important tasks.
7. Consider **additional SIGMM-wide award(s)** to recognize wider multimedia community achievements such as service, education, mid-level research achievements, etc. The goal is to propose SIGMM Educational Award, “Test of Time Paper Award”, and “Rising Star Award” over the next few years.
8. Ensure **location selection for ACM Multimedia 2016** in Europe and assist with preparation of ACM Multimedia 2014 in Orlando, USA.
9. Expand **interactions with other SIGs and professional groups** through collaborative activities such as joint event sponsorships.

1. **Other Highlights in SIGMM activities**
2. Prof. Mohan Kankanhalli, the SIGMM Director of Conferences, again worked with the ACM Multimedia 2012 organizing team to execute what was proposed by the ***review committee*** which was charged to review the efficiency and organization of our premier ACM Multimedia conference. The chair of the committee was Prof. Tat-Seng Chua. The committee ***reviewed two aspects of ACM Multimedia*** and related conferences: (a) the conference organization and (b) the procedures for the management and review of papers for the SIGMM-sponsored conferences. The recommendations were successfully implemented for the first time at ACM Multimedia 2011 conference, held in Scottsdale, Arizona, and the success followed at ACM Multimedia 2012 conference, held in Nara, Japan.
3. The streamlined process for the ACM Multimedia conference location bidding works very well. This year at ACM Multimedia 2012, we have decided that ***ACM Multimedia 2015*** will in Brisbane, Australia.
4. Our SIGMM e-newsletter, called SIGMM Records, has a ***variety of articles on multimedia tools, PhD theses abstracts****,* **announcements, SIGMM Educational Column** featuring various courses in multimedia area, and much other information. It is a tremendous resource to the community.
5. We have made significant progress in ***SIGMM preservation efforts*** via the preservation committee, led by Dr. Mohamed Hefeeda, who set up a website to preserve past SIGMM-sponsored venues as well as establish processes towards presentation of SIGMM-sponsored venues and their websites, proceedings, etc.
6. The new ***ACM TOMCCAP Nicolas Georganas named award*** for “Best Paper of the Year” published in ACM Transactions on Multimedia Computing, Communications, and Applications was successfully implemented and awarded for the first time at ACM Multimedia 2012, in Nara, Japan.
7. The ***SIGMM-specific educational committee*** compiles and keeps up-to-date educational material in the area of multimedia computing, communications, and applications. This effort is led by Dr. Wei Tsang Ooi. This committee now has an editor on the SIGMM e-newsletter editorial board to bring articles on multimedia education to a broader community.
8. The ***SIGMM chapter in China*** is flourishing. The chapter’s own conference, International Conference on Internet Multimedia Computing and Communication (ICIMCS 2010) had its second event December 30-31, 2010 in Harbin, China, and the 3rd ICIMCS 2011 was in August 5-7, 2011 in Chengdu, China. The 4th ICIMCS event was in September 9-11, 2012 in Wuhan, China, and the SIGMM chair Klara Nahrstedt visited the conference site, gave a keynote speech and congratulated female participants who received the SIGMM travel grants.
9. All SIGMM-sponsored events had a very strong ***government and industry sponsorship*** and/or industry participation via talks, papers, demonstrations, including National Science Foundation, and companies such as Microsoft Research, FXPal, Yahoo!, Google, HP Labs, Springer, Simula Research Laboratory, IAD, the Research Council of Norway, Institute of Informatik in U. Oslo, Huwei, IBM Research, NTT Docomo, Technicolor, KDDI R&D, Mistubishi Electric, Omron, Panasonic, Sharp, Facebook, Foo.LOG, Fuji Xerox, Gree, IBM, Netcompass, Nikon, NTT Data, Toshiba, DeNA, Aruba Networks, CiC, JSP, and others.
10. The **ACM Multimedia 2012** conference had around **646 attendees**. It received 331 long papers and 407 short papers in 11 multimedia areas. Overall acceptance rate was 20.2% for long papers and 31.2% for short papers. The number of submissions was the highest ever for this conference and the attendance was the second highest we had (after Florence).
11. We are actively participating in **ACM-W** as well as promoting attendance of **female students** to be active in the multimedia area through the “Networking of Multimedia Women” at the ACM Multimedia events,

**SIGMOBILE Annual Report**

**July 2012 - June 2013  
Submitted by: Roy Want, Past Chair**

**Introduction**

SIGMOBILE is the ACM Special Interest Group on the Mobility of Systems, Users, Data, and Computing. Engaging with the mobile industry, academic, and government research communities, its scope includes all aspects of mobile computing and communications, such as mobile systems and applications, wireless networking protocols and algorithms, and mobile information access and management. In 2013 mobile computing is a fast moving, topical, and exciting area of computer science and engineering. Supporting the mobile research community, SIGMOBILE sponsors many successful conferences and workshops that are well attended by its members, and generating high-quality and widely cited publications.

These are valuable services for SIGMOBILE’s members and the community, resulting in a strong Special Interest Group, with about 700 members, and with positive income with a fund increase of 4.5% in the last year. In the spring of 2013, SIGMOBILE held its leadership elections, resulting in a new Executive Committee taking the helm on July 1st, 2013.

The new elected officers in SIGMOBILE’s Executive Committee (EC) are listed below:

* Chair: *Prof. Suman Banerjee* (University of Wisconsin-Madison)
* Vice Chair: *Prof. Lili Qiu* (University of Texas at Austin, USA).
* Secretary: *Dr. Alex Wolman* (Microsoft Research, Redmond)
* Treasurer: *Prof. Marco Gruteser* (Rutgers University)

Following SIGMOBILE’s bylaws, Roy Want (Google Inc.) remains on the Executive Committee as Past Chair. We thank the out-going committee for their hard work and valuable service to SIGMOBILE.

The previous officers and out-going elected Executive Committee are:

* Chair: *Dr. Roy Want* (Google Inc, USA);
* Vice Chair: *Prof. Robert Steele* (University of Sydney, Australia);
* Secretary: *Prof. Ramesh Govindan* (University of Southern California, USA); and
* Treasurer: *Prof. Lili Qiu* (University of Texas at Austin, USA).

The out-going Past Chair is *Prof. David B. Johnson* (Rice University, USA). This marks the end of Dave’s continuous run of EC service to SIGMOBILE (although we hope not the end of his unofficial service to SIGMOBILE), holding SIGMOBILE executive committee positions for the last 16 years. We thank him for his extensive contributions and source of sage advice for the SIG.

**Committee Appointed Positions**  
SIGMOBILE’s leadership has four committee appointed positions:

* Editor-in-Chief (EIC) for SIGMOBILE's journal/newsletter for our members (*Mobile Computing and Communications Review* or MC2R), *Prof. Suman Banerjee*  (Univ. of Wisconsin, Madison, USA)
* Information Director: Dr. Sharad Agarwal (Microsoft Research) – This is a New Appointment. The SIG thanks *Prof. Robert Steele* (University of Sydney, Australia), the out-going Information Director who served in this role for 8 years.
* Digital Library Coordinator:  *Dr. Guanling Chen* (University of Massachusetts Lowell, USA),
* Award Committee Chair: Edward W. Knightly (Rice University, USA)

**SIGMOBILE Mobile Computing Research Fund (MCRC)**

In January 2012 SIGMOBILE established the Mobile Computing Research Community (MCRC) fund to support research projects and activities that have wide benefit to the mobile research community. We solicit proposals for these awards based on the guidelines presented below:   
   
**Guidelines**   
MCRC proposals will typically support the following kinds of activity:

* Research data or benchmark archive. e.g. CRAWDAD at Dartmouth
* New community software: e.g. CAD, mobile research tools
* Maintenance of software already used by the community
* Education support for mobile computing
* Student conference sponsorships
* Open collaborative research project funding

**Call for Proposals**

**Submission Process**   
Using the format described here, proposals should be sent by email to the SIGMOBILE executive committee using the email address: [sigmobile-mcrcfund@acm.org](mailto:sigmobile-mcrcfund@acm.org) All proposals must have an a priori established SIGMOBILE Executive Committee member who is prepared to champion the proposal during the selection process. The committee endeavors to review a proposal, and either accept or reject a proposal within 1 month of submission.   
   
**Funding Criteria:**

* The proposal must be submitted by a SIGMOBILE member
* The project proposal must be judged to be of high-quality by the SIGMOBILE Executive Committee
* The project must be relevant to, and provide value for, a wide cross-section of the SIGMOBILE membership.
* An award should not exceed $20k in a calendar year.
* A proposal must be for a specified period of time, but not exceed 3 years.
* For proposals longer than one year, a 2-page report must be generated each year summarizing its achievements. Continued funding will be conditional on a positive review of the annual report by the Executive Committee.
* The project must disseminate its results to SIGMOBILE members through either the sigmobile.org website, MC2R quarterly publication, or at one of SIGMOBILE’s sponsored conferences or workshops.
* SIGMOBILE will not pay for hosting organization overhead fees, only for items that directly contribute to the project.

**Proposals should include:**

* Title: What is the project to be called?
* Subject matter: What is the purpose of this project?
* People: Who speaks for, and takes responsibility for this project? Who else is on the team? What are their qualifications, or track-record for carrying out this project?
* Requested Award: The total amount requested
* Duration: Will this project need on-going, continual funding? If so, how many years of seed money are being sought, and what is the plan for continuing funding?
* Schedule: When will it start and end?
* Prior work: What work has already been done in this area and how will this project build on it?
* Relevance: What SIGMOBILE membership is this project relevant to? Do they have similar projects already underway? How will they be involved?
* Potential value: What is the potential value of the proposed project to SIGMOBILE members?
* Deliverables: What will be the outcome of the project?
* Delivery vehicle: Who is the audience for this outcome? How will these people be informed of the outcome? Where applicable, how will they get access to it?
* Additional funding: Have you considered other sources of funding? Will someone match SIGMOBILE MCRC Funding?
* Dependency: What other things does the successful completion of this project depend upon?
* End-game: How will you know the project has succeeded?

**Format**

* Proposals should be 3 US-letter size pages typed in 10-pt Arial font. Additional supporting material such as CVs, resumes, figures or papers may be included in an appendix

**ACM Mobility Tech Pack**

ACM Tech Packs are “innovative learning packages by subject experts for serious computing professionals”, basically an annotated reading list of the most useful papers for students or professionals wanting to enter the field or refresh their knowledge about the latest significant publications in the area. The Mobility Tech Pack was created by the SIGMOBILE EC and has been available on the ACM website since the beginning of 2012; it can be found at the link <http://techpack.acm.org/mobility/>.SIGMOBILE is committed to keeping the Tech Pack up to date as the subject evolves over time.

**Sponsorship for the Mobile Computing Research Community**

In 2012-13, SIGMOBILE has provided sponsorship in the form of financial support for three programs in the mobile computing research community:

* **The Community Resource for Archiving Wireless Data At Dartmouth (CRAWDAD)** continues to be a thriving resource for the SIGMOBILE community.  At the end of June 2013 it contains 86 datasets, each containing one or more traces about wireless networks or mobile users, and 24 tools, many of which are designed to help researchers work with such datasets. There were 4 new datasets or tools released since the last report, and there are currently 6 datasets in the pipeline for release. There are now over 5,200 users from 95 countries around the world -- 7 new countries since last year's report!  CRAWDAD continues to be popular, with more than 1,000 new users registering within the past year. Although the primary archive is at Dartmouth, the CRAWDAD site and data are mirrored on servers located in the UK and Australia to guarantee uninterrupted service, and fast downloads to users all around the world.   
    
  CRAWDAD data has supported over 879 papers in the field, and continues to be the go-to place for authors wishing to share data they've collected, or to obtain data they can use for testing their system prototypes and algorithms. SIGMOBILE support makes it possible for the CRAWDAD project to retain a technical staff person (part time) to maintain the site. This year, we developed a new "self-serve" website that allows contributors to provide all the metadata needed to release a dataset, which we hope will streamline the process of releasing a new dataset, and will reduce our dependence on technical staff.  Furthermore, through the volunteer efforts of Prof. Chris McDonald of the University of Western Australia, we have completely rewritten the website, with a dramatically simpler underlying framework that will make it more robust, easier to maintain, and easier to set up mirror sites. Last year, SIGCOMM joined SIGMOBILE by adding its financial support.
* **Networking Networking Women (N2 Women)** is a discipline-specific community for researchers in the communications and networking research fields. The main goal of N2 Women is to foster connections among the under-represented women in computer networking and related research fields. N2 Women allows women to connect with other women who share the same research interests, who attend the same conferences, who face the same career hurdles, and who experience the same obstacles. To assist in their networking goals, N2 Women has an email list for the group: N2Women@acm.org. There are currently 639 members of N2 Women in July 2013.

N2 Women is an [ACM SIGMOBILE](http://www.sigmobile.org/) program that has been financially supported by SIGMOBILE, [Microsoft Research](http://research.microsoft.com/), [HP Labs](http://www.hpl.hp.com/), NSF, and CRA-W. In the past year, funds from SIGMOBILE were used for two purposes. First, SIGMOBILE funds were used to continue the successful N2 Women Student Fellowship program. A student applies for a Fellowship and, if selected, N2 Women partially covers the student's travel cost (up to $500) to a conference where an N2 Women event will be held. In exchange, the student must help organize the N2 Women meeting. The benefit of doing the organization, in addition to the travel funds, is for the student to connect with the organizers of the conference who are, typically, leaders in the research field. N2 Women arranges for a senior member of N2 Women to assist/mentor the student in this task. Since June 2012, there have been 13 N2 Women Student Fellows who organized N2 Women events at the following conferences:

* Anna Zakrzewska, DTU Technical University of Denmark (ICC 2013)
* Shuang Li, Ohio State University (INFOCOM 2013)
* Fatemah Afghah, University of Maine (SECON 2013)
* Yanyan Zhuang, University of Victoria (INFOCOM 2012)
* Tavakolifard Mozhgan, Norvegian Univ. of Science and Tech. (ICNC 2012)
* Xia Zhou, UCSB (SIGCOMM 2012)
* Sanorita Dey, University of South Carolina (MobiHoc 2012)
* Jingyao Zhang, Virginia Tech (SECON 2012)
* Yujin Li, North Carolina State University (ICC 2012)
* Shijia Pan, Carnegie Mellon University (SenSys 2012)
* Shruti Sanadhya, Georgie Tech (MobiCom 2012)
* Sanaz Barghi, University of California, Irvine (GlobeCom 2012)
* Parya Moinzadeh, University of Illinois at Urbana-Champaign (Dyspan 2012)

Second, SIGMOBILE funds were used to partially fund the keynote speaker’s (Anna Scaglione, Professor at University of California, Davis) travel expenses to the 3rd Networking Networking Women Workshop. The workshop was held in conjunction with INFOCOM on April 19, 2013 in Torino, Italy and had 30 attendees (20 faculty/industrial researchers and 10 students). The most recent N2 Women workshop attracted a smaller audience than the previous two workshops (both of which had 65 attendees); we believe the smaller size is a consequence of holding the workshop in Europe rather than North America (i.e., N2 Women has more than two times fewer members in Europe than in North America).

In all N2 Women announcements, SIGMOBILE (and other sponsors of N2 Women) are thanked. See <http://committees.comsoc.org/n2women/> for further details about N2 Women.

* **ACM-W:** In 2013, SIGMOBILE continues to sponsor ACM-W (ACM’s Women in Computing organization). “ACM-W's mission is to celebrate, inform and support women in computing, and work with the ACM-W community of computer scientists, educators, employers and policy makers to improve working and learning environments for women.” This is an organization that the Executive Committee (EC) whole-heartedly supports. Women in CS education can request sponsorship for SIGMOBILE conferences, and for eligible cases, the EC will provide sponsorship for travel and registration.

**ACM’s New Learning Webinar Series**

Last year SIGMOBILE helped to launch ACM’s new Learning Webinar series, on January 26, 2012, when David B. Johnson, SIGMOBILE’s Past Chair, served as the moderator for the pilot webinar in the series.  The webinar series continues to be a great success in 2013.

**SIGMOBILE Conferences and Workshops**

SIGMOBILE currently sponsors or co-sponsors five annual conferences, all recognized as the premier conferences and focus areas within the field:

* *MobiCom*: The Annual International Conference on Mobile Computing and Networking, covers all areas of mobile computing and mobile and wireless networking at the link layer and above. MobiCom has been held every year since 1995.
* *MobiHoc*: The ACM International Symposium on Mobile Ad Hoc Networking and Computing, addresses the challenges emerging from wireless ad hoc networking and computing, with the focus being on issues at and above the MAC layer. MobiHoc has been held every year since 2000.
* *MobiSys*: The International Conference on Mobile Systems, Applications, and Services, addresses broad systems research issues in mobile computing and mobile networking, particularly valuing the practical experience gained from designing, building, and using mobile systems, applications, and services. MobiSys has been held every year since 2003.
* *SenSys*: The ACM Conference on Embedded Networked Sensor Systems, focuses on systems issues in the emerging area of embedded, networked sensors, spanning multiple disciplines, including wireless communication, networking, operating systems, architecture, low-power circuits, distributed algorithms, data processing, scheduling, sensors, energy harvesting, and signal processing. SenSys has been held every year since 2003.
* *Ubicomp*: The International Conference on Ubiquitous Computing, addresses the interdisciplinary field of ubiquitous computing, which utilizes and integrates pervasive, wireless, embedded, wearable and/or mobile technologies to bridge the gap between the digital and physical worlds. Ubicomp has been held every year since 1999, and SIGMOBILE began sponsoring it in 2009.

**MobiCom 2012**, *the 18th Annual International Conference on Mobile Computing and Networking,* was held at the Hilton Istanbul, in Istanbul, Turkey, August 22-16, 2012. The General Chairs were [Özgür B. Akan](http://home.ku.edu.tr/~akan) (Koc University, Turkey) and [Eylem Ekici](http://www2.ece.ohio-state.edu/~ekici/) (The Ohio State University, USA), and the Program Co-Chairs were [Lili Qiu](http://www.cs.utexas.edu/~lili/) (University of Texas at Austin, USA) and [Alex C. Snoeren](http://cseweb.ucsd.edu/~snoeren/) (University of California, San Diego, USA).

The technical program featured two plenary speakers: The first, *Prof. Ian F. Akyildiz* (School of Electrical and Computer Engineering, Georgia Institute of Technology, USA) on *NanoNetworks: A New Frontier in Communications*; and *Three Theories for Delays, Clocks and Security in Wireless Networks*  by *Prof. P. R. Kumar* (Department of Electrical and Computer Engineering, Texas A&M University, USA).

The MobiCom 2012 program also included two days of workshops:

On Wednesday August 22nd:

* The 7thACM International Workshop on Challenged Networks (CHANTS 2012)
* The 7th ACM International Workshop on Mobility in the Evolving Internet Architecture (MobiArch 2012)
* The 7th ACM International Workshop on Wireless Network Testbeds, Experimental evaluation and Characterization (WiNTECH 2012)

And on Sunday, August 26th:

* The 4th ACM International Workshop on Wireless of the Students, by the Students, for the Students (S3 2012) ([CFP](http://www.cs.umd.edu/conference/s3_2012/call.html))
* The 1st ACM International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet 2012) ([CFP](http://www-personal.engin.umd.umich.edu/~hammari/MiSeNet_Workshop2012.html))
* The 1st ACM International Workshop on Practical Issues and Applications in Next Generation Wireless Networks (PINGEN 2012) ([CFP](http://www.sigmobile.org/mobicom/2012/PracticalNextGenerationWireless_v7.pdf))

MobiCom 2013 will be held September 30th – October 4th at the Hyatt Regency in Miami, Florida. The General Chair is Sumi Helal (University of Florida, USA), and the Program Co-Chairs are Ranveer Chandra (Microsoft, USA) and Robin Kravets (University of Illinois, Urbana-Champaign, USA).

**MobiHoc 2012** was covered in last year’s report**.** MobiHoc 2013, *the 14th International Symposium on Mobile Ad Hoc Networking,* will be held at the LaLit Ashok hotel Bangalore, India, July 29th to August 1st 2013. The General Chairs will be A. Chockalingam (Indian Institute of Science, Bangalore) and D. Manjunath (Indian Institute of Technology, Bombay). The Technical Program Chairs will be Massimo Fanceschetti (UC San Diego) and Leandros Tassiulas (University of Thessaly/CERTH).

Also, the MobiHoc 2014 conference is planned to be held in August 2014 in Philadelphia, PA, USA.

**MobiSys 2013**, *the 11th International Conference on Mobile Systems, Applications, and Services*, was held at the Sheraton Hotel, June 25th – 29th, 2013, in Taipei, Taiwan, in-cooperation with SIGOPS. The General Co-chairs were Hao-Hua Chu (National Taiwan University) and Polly Huang (National Taiwan University), and the Technical Program Chairs were Romit Roy Choudhury (Duke University) and Feng Zhao (Microsoft Research).

The MobiSys 2013 technical program began with a keynote talk by Prof. Patrick Baudisch (Hasso Plattner Institute) on*Natural User Interface Hardware*. On Day 2, a panel was held on Untold Stories of Research,

with Moderator: Romit Roy Choudhury (Duke University) and panelists: Jane Liu (Academia Sinica), Ashu Sabharwal (Rice University), Mahadev Satyanarayanan (CMU), Lin Zhong (Rice University).

The MobiSys program also featured 3 workshops, a tutorial, and a PhD Forum on Tuesday, June 25th.

* W1: The 4th ACM Workshop on Mobile Cloud Computing and Services (MCS)
* W2: VANET 2013: The 10th ACM International Workshop on VehiculAr Inter-NETworking, Systems and Applications.
* W3: 1st Workshop on Cellular Networks: Operations, Challenges and Future Design (CellNet)
* Tutorial: Mobile Location Sensing (MLS)
* PhD Forum on Mobile Systems, Applications, and Services

MobiSys 2014 is being planned for June 16 – 19, 2014 at the Mount Washington Hotel in Bretton Woods, New Hampshire. The General Co-Chairs will be Andrew Campbell and David Kotz (Dartmouth College) and the Co-Program Chairs will be Landon Cox (Duke University) and Morley Mao (University of Michigan)

**SenSys 2012**, *the 10th ACM Conference on Embedded Networked Sensor Systems*, was held November 6-9th 2012, Toronto, Canada. The General Chair was Rasit Eskicioglu (University of Manitoba) and the Program Co-Chairs were Andrew T. Campbell (Dartmouth College) and Koen Langendoen (Delft University of Technology). SenSys is co-sponsored by SIGMOBILE and SIGCOMM (30% each); and SIGARCH, SIGOPS, SIGMETRICS, and SIGBED (10% each) and the NSF.

The opening day began with a keynote presentation by Prof. David E. Culler(Chair EECS Associate CIO, College of Engineering, UC Berkeley, USA)titled, "Sustainable Energy Networks – a SenSys Grand Opportunity".

There were three workshops and a Doctoral Colloquium held on November 6th, 2012.

* W1: BuildSys'12: The 4th ACM Workshop on Embedded Sensing Systems for Energy Efficiency in Buildings
* W2: PhoneSense’12: The 3rd International Workshop on Sensing Applications on Mobile Phones
* W3: mHealthSys’12: International Workshop on Mobile Systems, Applications, and Services for Healthcare
* PhD (Doctoral) Colloquium 2011: a forum to provide a friendly, supportive, and constructive atmosphere where PhD students can present their research-in-progress for an open discussion, guided by a panel of experienced researchers and practitioners.
* Doctoral Colloquium (Chaired by Polly Huang)

In addition, the SenSys 2012 program included an N2 Women event on Wednesday, November 7th.

SenSys 2013 will be held November 11-15th, 2013, in Rome Italy. General Chair: Chiara Petrioli (University of Rome ‘La Sapienza’) and Program Co-Chairs, Landon Cox (Duke University) and Kamin Whitehouse (University of Virginia).

**Ubicomp 2012**, *the 14th International Conference on Ubiquitous Computing,* was held September 5-8th 2012, in Pittsburgh, Pennsylvania, and co-sponsored with SIGCHI. The General Chair was Anind K. Dey (Carnegie Mellon University, USA), and the Program Co-Chairs were Hao-Hua Chu (National Taiwan University) and Gillian Hayes (University of California, Irvine, USA).

A keynote launched the conference, presented by Steve Cousins (Willow Garage) on “*Personal Robots on the Horizon.”*

Ubicomp workshops were held on Sunday, 18th September

* W1: Location-Based Social Networks (LBSN 2012)
* W2: Situation, Activity, and Goal awareness (SAGAware 2012)
* W3: Systems and Infrastructure for the Digital Home (HomeSys)
* W4: Ubiquitous Mobile Instrumentation (UbiMI)
* W5: Methodical approaches to prove the effects of subliminal perception in Ubiquitous Computing Environments
* W6: Digital Object Memories for the Internet of Things (DOMe-IoT)
* W7: Context-Awareness for Self-Managing Systems (CASEMANS 2012)
* W8: Computer Mediated Social Offline Interactions (SOFTec 2012)
* W9: Pervasive Eye Tracking and Mobile Eye-Based Interaction (PETMEI 2012)
* W10: Adaptable Service Delivery in Smart Environments
* W11: Evaluating Off-the-Shelf Technologies for Personal Health Monitoring
* W12: Smart Gadgets Meet Ubiquitous and Social Robots on the Web (UbiRobs)

In 2013 ACM Ubicomp will merge with the long running independent Pervasive computing conference and become Ubicomp 2013. The conference will be held 8th – 12th September, 2013, in Zurich, Switzerland. The General Chairs will be Friedemann Mattern (ETH Zurich, CH) and Silvia Santini (TU Darmstadt, DE) and the Program Co-Chairs will be John F. Canny (UC Berkeley, USA), Marc Langheinrich (University of Lugano, CH), and Jun Rekimoto (University of Tokyo, Japan)

In addition to the conferences and co-located listed workshops above, SIGMOBILE also sponsors the HotMobile workshop (previously WMCSA) as a stand-alone event, not co-located with a conference. The HotMobile workshop series focuses on mobile applications, systems, and environments, as well as their underlying state-of-the-art technologies, in a small workshop format that makes it ideal for presenting and discussing new directions or controversial approaches. The Executive Committee encourages the MobiCom Program Committee meeting to be collocated with HotMobile to ensure that a representative selection of senior researchers attend the event. This workshop was previously sponsored each year by the IEEE Computer Society, but has been sponsored only by ACM SIGMOBILE since HotMobile 2008.

**HotMobile 2013**, *the 14th International Workshop on Mobile Computing Systems and Applications*, was held February 26-27th, 2013, in Jekyll Island, Georgia, USA. The General Chair was Sharad Agarwal (Microsoft Research, USA), and the Program Chair, Alexander Varshavasky (AT&T Labs, USA).

The conference opened with a keynote by Thad Starner (Georgia Institute of Technology), titled “*Wearable Computing: Through the Looking Glass*.”

HotMobile 2014 will be held February 26-27th, 2014, in Santa Barbara, California, USA. The General Chair is Matt Welsh (Google Inc), and the Program is Chair Stefan Sariou (Microsoft Reseach).

SIGMOBILE also sponsored the following high-value additional events over the last year. These are annual decisions and sponsorship one year does not guarantee support in a following year. If the standard remains high, SIGMOBILE is however likely to continue with its support.

* PerDis’2013: The 2nd International Symposium on Pervasive Displays, June 4-5th, 2013 at the Google campus in Mountain View, California, USA.
* WUWNet 2012: The 6th ACM International Workshop on Underwater Networks, November 5-6th,2012, Los Angeles, California, USA.

Each year, SIGMOBILE is also "in-cooperation" with a number of events sponsored by other organizations. Events offered "in-cooperation with" SIGMOBILE allow its members to register at the same discounted rate as for members of other sponsoring organizations for the event, providing a significant savings to SIGMOBILE members. During this past year (July 2012 through June 2013), SIGMOBILE was in-cooperation with the following events:

* The 5th International Conference on COMmunication Systems and NETworkS (COMSNETS 2013), Bangalore, India, 7-10 January, 2013
* Wireless Health Conference (Wireless Health 2012), San Diego, CA, USA, 23-25 October, 2012
* IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN 2012), Bellevue, WA, USA, 16-19 October, 2012
* The 14th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI 2012), San Francisco, USA, 21-24 September, 2012

SIGMOBILE continues to be fortunate to receive strong support for its conferences and workshops in the period July 2012-2013, from leading-edge companies and organizations from around the world. This last year, many organizations have contributed to SIGMOBILE conferences and workshops, helping to ensure their success. This include the following:

Academia Sinica, AirTight, Avealabs, AT&T, CDAC, CMU, COMSNETS Assoc., Dejan Research, Extreme Networks, facebook, Google, HP, IBM, Intel-ISTC (Social, NTU, PC), KOC University, Mediatek, Microsoft Research, Ministry of Economic Affaris, R.O.C, Motorola, National Taiwan University, NSC, NSF, Sapienza (Univ. of Rome), Taipei City Government, TATA Consultancy Services, Tejas Networks, Telifonica, TUBITAK, Qualcomm.

As always, SIGMOBILE is sincerely grateful for all contributions.

**SIGMOBILE Publications**

In addition to the proceedings for each of the conferences and workshops that SIGMOBILE sponsors, SIGMOBILE also publishes a peer-reviewed, quarterly journal/newsletter for SIGMOBILE members, *Mobile Computing and Communications Review* (MC2R). Non-members may also subscribe to MC2R, and the publication is also available in the ACM Digital Library.

The Editor-in-Chief for MC2R is *Prof. Suman Banerjee* (University of Wisconsin-Madison, USA). The current Area Editors for MC2R are *Dr. Sharad Agarwal* (Microsoft Research, USA), *Prof. Aditya Akella* (University of Wisconsin-Madison, USA), *Prof. Christian Bettstetter* (University of Klagenfurt, Germany), *Prof. Srdjan Capkun* (ETH, Zurich, Switzerland), *Prof. Augustin Chaintreau* (Columbia University, USA), *Prof. Eylem Ekici* (Ohio State University, USA), *Dr. Michelle Gong* (Google, USA) , *Prof. Marco Gruteser* (Rutgers University, USA), *Prof. Prashant Krishnamurthy* (University of Pittsburgh, USA), *Prof. Panos Papadimitratos* (EPFL, Switzerland), *Prof. Andreas Terzis* (Johns Hopkins University, USA), *Prof. Moustafa Youssef* (Egypt-Japan University of Science and Technology, Egypt), and *Prof. Lin Zhong* (Rice University, USA).

MC2R publishes articles that provide a balance between state-of-the-art research and practice, with a thorough pre-publication review of every article by experts in the field. Beyond papers reporting the latest research results in all areas related to SIGMOBILE's scope, MC2R keeps the SIGMOBILE community apprised of relevant happenings in the area, by providing regular features on the status of major international mobile computing and communications standards, such as those from IETF, ITU, ISO, and IEEE. The journal also provides a variety of additional resources, such as bibliographies of recent publications in other journals, paper and book reviews, workshop and conference reports, calls for papers, information on research groups throughout the world, bibliographies and locations of technical reports, and other general news in the field.

In addition, MC2R places a strong emphasis on quick publication of interesting completed, or work-in-progress technical work; the average turnaround time for papers published in MC2R is about 6 months. Papers in MC2R are selected mainly from an ongoing open call for papers, plus special sections based on conferences and workshops, occasional special topic issues, and some invited papers. The acceptance rate for papers submitted through the open call for papers is quite selective, remaining under about 20%.

In the recent issues, the following are some example articles that were published in the different categories described above: (i) interviews (expert testimonies) of leading researchers in our field conducted by graduate students at various universities, (ii) a survey of the ongoing efforts of standards groups, (iii) articles capturing experiences of different research groups in building large-scale wireless test-beds, (iv) report on different conferences and workshops, and (v) comments on approaches to judge the quality of different publication venues, e.g., conferences, workshops, and journals. In addition, for peer-reviewed articles that have been published in these issues, the editorial team has introduced a mechanism by which a summary of the reviews, and the author response to these reviews, are published along with the final manuscript. This allows the publication to capture more of the dialogue between the authors and reviewers in realizing the final version of the paper.

All aspects of the journal's operation are run entirely by volunteers, including final assembly of each issue.

**SIGMOBILE Newsletter**

SIGMOBILE also publishes a monthly E-Mail Newsletter for its members. This electronic newsletter was started in 2004 and is edited by SIGMOBILE's Information Director, Prof. Robert Steele (University of, Sydney, Australia). The newsletter includes SIGMOBILE announcements, pointers to relevant mainstream news articles of interest to SIGMOBILE members, a calendar of upcoming events of interest to our members, and pointers to developer news for active developers in the area of mobile computing and wireless networking.

**SIGMOBILE Website**

As an additional resource for our members and the community, SIGMOBILE maintains an extensive web site at <http://www.sigmobile.org>, including information about SIGMOBILE and its activities, information about our journal/newsletter MC2R, and information about membership in SIGMOBILE. This web site also contains archived copies of most SIGMOBILE conference web sites, including all previous years of MobiCom, MobiHoc, and MobiSys.

**SIGMOBILE Social Media**

SIGMOBILE makes use of social media to support interactive communication with its community. It has groups on LinkedIn and Facebook and has a SIGMOBILE Twitter feed.

**SIGMOBILE Local Chapters**

There are currently four Local Chapters of SIGMOBILE chartered with ACM – one added this year:

* Dublin Chapter: Mobile Computing Society Ireland (NEW 2013): This is a University based Chapter organized by the RINCE Institute, Dublin City University (DCU).
* *Nanyang Technological University Student Chapter*: This is a Student Chapter of SIGMOBILE, organized within the Nanyang Technological University (NTU) ACM club in Singapore.
* *Sydney Professional Chapter*: This is a Professional Chapter of SIGMOBILE, organized in Sydney, Australia.
* *Taiwan Chapter: This is a University based Chapter organized by the* Institute of Computer Science and Information Engineering, National I-lan University (NIU), Taiwan

Local Chapters provide a local focus for activities related to the area of SIGMOBILE, including mobile computing and wireless and mobile networking, and continue SIGMOBILE’s work within their local regions.

We encourage interested groups around the world to form a SIGMOBILE chapter in their local community, school, city, or region. For details about the benefits and procedures for forming a Local SIGMOBILE Chapter, see [*http://www.sigmobile.org/chaptera /*](http://www.sigmobile.org/chaptera%20/).

**SIGMOBILE Membership**

The SIG’s membership was 698 on June 30th 2013, down 4% from the previous year. The membership has spanned the 698-800 range for last 6 years, and for all time has been in the 437-872 range. SIGMOBILE provides substantial benefits to our members, including:

* The quarterly journal, and newsletter "Mobile Computing and Communications Review" (MC2R), which serves both as a newsletter keeping SIGMOBILE members informed, and as a scientific journal publishing high-quality peer-reviewed research papers on mobile computing and wireless and mobile networking.
* A monthly e-mail SIGMOBILE newsletter, including SIGMOBILE announcements, pointers to relevant mainstream news articles of interest to SIGMOBILE members, a calendar of upcoming events of interest to our members, and pointers to developer news for active developers in the area of mobile computing and wireless networking.
* Announcements via the moderated, members-only email distribution list, keeping you informed of the latest happenings in our field, such as conference Calls for Papers.
* Qualify for the lowest registration rates at conferences and workshops sponsored by SIGMOBILE, and for the many events that are "in cooperation" with SIGMOBILE. SIGMOBILE sponsors five conferences each year (MobiCom, MobiHoc, MobiSys, SenSys, and Ubicomp).
* Opportunities to share ideas, learn of new results and practices, network with colleagues, and be active in a vibrant community of colleagues in all areas of mobility of systems, users, data, and computing.
* Through the Member Value Plus program, automatically receive a CDROM after each of SIGMOBILE's five conferences, containing the full conference Proceedings

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In addition, SIGMOBILE provides additional benefits to the broader community served by SIGMOBILE:

* Organization and sponsorship of five annual conferences (MobiCom, MobiHoc, MobiSys, SenSys, and Ubicomp).
* Promotion of emerging new areas through sponsorship of numerous workshops each year.
* An ACM Mobility Tech Pack edited by the SIGMOBILE officers, providing an annotated reading list of the definitive mobile research papers to date; thus enabling somebody new to the field to rapidly come up to speed.
* The SIGMOBILE Outstanding Contribution Award, given to recognize an individual who has made a significant and lasting contribution to the research on mobile computing and communications and wireless networking.
* The SIGMOBILE Distinguished Service Award, given to recognize an individual who has made exceptional contributions to ACM SIGMOBILE, its conferences, publications, or its local activities.
* The SIGMOBILE RockStar Award, recognizes an individual who has made recent outstanding research, or product, contributions to the field of mobile computing during the early part of his, or her, career.
* Best paper awards are given at all five of our sponsored conferences and presented each year.
* Support for students at SIGMOBILE conferences and workshops, through reduced registration fees, student travel awards for some conferences (with NSF support), and student poster sessions.
* The SIGMOBILE web site, including a wealth of information for the community such as complete information on SIGMOBILE conferences and workshops, a Ph.D. thesis collection, paper formatting instructions for authors, reviewer guidelines, and a feedback questionnaire.
* SIGMOBILE also provides financial support for mobile networking community programs such as CRAWDAD (Community Resource for Archiving Wireless Data At Dartmouth) and N2 Women (Networking Networking Women).

**SIGMOBILE Awards**

**Outstanding Contribution Award 2012**

The highly prestigious SIGMOBILE Outstand Contributions Award (OCA) was presented to Professor P. R. Kumar (Texas A&M University) for “Pioneering contributions to the foundations of asymptotic performance analysis of large scale wireless networks”, at MobiCom, September 2012 in Istanbul, Turkey. P.R. Kumar is the 13th recipient of the OCA since the SIGMOBILE was formed. The SIGMOBILE Outstanding Contribution Award is given for significant and lasting contributions to research on mobile computing and communications, and wireless networking.

**Best Papers**

The SIGMOBILE Best Paper Award for each conference is given to the authors of the best paper from among all papers submitted to the conference that year. Typically the conference Technical Program Committee forms the Selection Committee for this award; additional awards are at the discretion of the conference organizers.

**MobiSys 2013, Best Paper Award**

*“Energy Characterization and Optimization of Image Sensing Toward Continuous Mobile Vision” by*  
*Robert LiKamWa (Rice University), Bodhi Priyantha, Matthai Philipose (Microsoft Research Redmond), Lin Zhong (Rice University), Paramvir Bahl (Microsoft Research Redmond)*

**MobiCom 2012**, **Best Paper Award**   
*“Distinguishing Users with Capacitive Touch Communication”,* by Tam Vu (Rutgers University, USA), Akash Baid (Rutgers University, USA), Simon Gao (Rutgers University, USA), Marco Gruteser (Rutgers University, USA), Richard Howard (Rutgers University, USA), Janne Lindqvist (Rutgers University, USA), Predag Spasojevic (Rutgers University, USA) and Jeffrey Walling (Rutgers University, USA)

**MobiHoc 2012, Best Paper Award**

“*Serendipity: Enabling Remote Computing among Intermittently Connected Mobile Devices*”, Cong Shi, Vasileios Lakafosis, Mostafa Ammar, and Ellen Zegura (Georgia Institute of Technology)

.

**SenSys 2012**, **Best Paper Award**   
*“Energy-Efficient GPS Sensing with Cloud Offloading”*by *Jie Liu* (Microsoft Research), *Bodhi Priyantha* (Microsoft Research), *Ted Hart* (Microsoft Research), *Heitor Ramos* (Federal University of Minas Gerais, Brazil), *Antonio A F Loureiro* (Federal University of Minas Gerais, Brazil), *Qiang Wang* (Harbin Institute of Technology, China)

**Ubicomp 2012**, **Best Paper Award**

“*An Ultra-Low-Power Human Body Motion Sensor Using Static Electric Field Sensing Gabe*” by Cohn (University of Washington and Microsoft Research consultant), Sidhant Gupta (University of Washington and Microsoft Research consultant), Tien-Jui Lee (University of Washington), Dan Morris (Microsoft Research and University of Washington affiliate professor), Josh Smith (University of Washington), Matt Reynolds (Duke University), Desney S. Tan (Microsoft Research, and University of Washington affiliate professor), and Shwetak Patel (University of Washington)

**ACM Student Research Competition (SRC)**

The SRC is an annual event sponsored by Microsoft Research at the MobiCom conference. The most recent event was in 2012, and had the following winners:

**First Place**: Peter Dely, Karlstadt University  
"CloudMAC - Torwards Software Defined WLANs"  
**Second Place**: Riccardo Crepaldi, University of Illinois Urbana Champaign  
"LoadingZones: Leveraging Street Parking to Enable Vehicular Internet Access"  
**Third Place**: Michele Segata, University of Insbruk  
"A Simulation Tool for Automated Platooning in Mixed Highway Scenarios"

**SIGMOBILE in the News**

Throughout the year, some of our SIGMOBILE publications have been reported in popular technical news articles. The list below captures some of the articles for MobiSys 2013 and MobiCom 2012, but this list is not comprehensive. It does, however, give readers a sense of the interest in SIGMOBILE research.

**MobiSys 2013**

* **Camera Tweaks Should Boost Gadget Battery Life**  
  MIT Technology Review | Rachel Metz | June 12, 2013
* **Researchers Tweak Camera Sensors to Boost Smartphone Battery Life**  
  PetaPixel | Eric Calouro | Jun 15, 2013u
* **Camera sensor tweaks could improve smartphone battery life**  
  CNET | Lexy Savvides | June 17, 2013
* **Microsoft Wants to Do Something about Your Mobile’s Power-Hungry Camera**  
  Gizmodo | Logan Booker | Jun 16, 2013
* **Mobile Ads Drain Battery Power**   
  Information Week | Thomas Calburn | June 26th, 2013
* **Advertising Consumes 23% of Mobile Phone Battery Power**  
  Business Wire | June 25th , 2013
* **Researchers Tweak Camera Sensors to Boost Smartphone Battery Life**  
  PetaPixel | Eric Calouro | June 15th, 2013
* **Many iPhone Apps Ignore Apple’s Privacy Advice, Study Says**  
  MIT Technology Review | Tom Simonite | June 25th, 2013

**MobiCom 2012**

* **Flickering lights help smartphones keep time**New Scientist | Jacobe Aron | 26 July 2012
* **Fluorescent lights keep smartphones from ten-second drifts**phys.org | Nancy Owano | July 28, 2012

**SIGMOBILE Business Meeting & Executive Committee Planning**Each year SIGMOBILE holds its business meeting as part of the ACM MobiCom conference program, usually at the end of the first day. In addition to a general discussion about the status of the SIG, the following topics were discussed in the open meeting.

**Open Access/Publication**

One of the hot discussion-topics in the ACM over the last year has been the extent to which the ACM should enable *open access* to the ACM digital library. We discussed this topic in the SIGMOBILE business meeting in order to understand the general position of the mobile research community. The prevailing sentiment is that *open access* is a good thing as long as it does not undermine the financial stability of the ACM, which is considered to be a well-run, supportive organization. Most people felt that they needed more information about the details of ACM’s finances in order to make a well-informed recommendation. In the meantime, the ACM has responded to the research community as a whole on this topic, and has taken the first steps towards *open access* as a three-year experiment. These can be summarized as:

* **Author-pays Open Access option**
  + You can now pay to have free access (forever) for your paper in the ACM DL
* **Enhanced Free proceedings posting options**
  + Conference chairs can make the papers in the proceedings *open access* from the conference website for up to a month total before and after the conference, using an authorizer link to the DL. Note: If a paper is made publicly available before the conference, this must have been stated clearly in the CFP, and on the conference website, to make authors aware of the up-coming disclosure date (e.g for patent considerations)
* **New License or Traditional Copyright option.**
  + Authors now have a choice whether to use the traditional exclusive ACM Copyright transfer option, or a non-exclusive license option. The full details can be found at:  
    **http://www.acm.org/publications/policies/copyright\_policy** and,   
    **http://www.acm.org/news/featured/author-rights-management**.

**Mobile Computing Community Research (MCRC) Fund**

At the business meeting we discussed the possibility of creating a SIGMOBILE fund to support projects that benefit the SIGMOBILE research community. This was generally considered a good thing to do by those attending the meeting. We briefly examined two other SIGS funds, currently in use 1) The SIGCHI Development fund [**http://www.sigchi.org/about/policies/devfund**](http://www.sigchi.org/about/policies/devfund), and 2) The SIGCOMM Community Projects fund [**http://www.sigcomm.org/content/acm-sigcomm-community-projects**](http://www.sigcomm.org/content/acm-sigcomm-community-projects). In January 2013 SIGMOBILE announced its own MCRC fund, with full details on the SIGMOBILE website.

**New Conferences for SIGMOBILE to Support**

In 2011, we had considered sponsoring the independent “Pervasive” conference through ACM SIGMOBILE due to its commonality with Ubicomp. However, it merged with ACM Ubicomp through a grass roots process in 2012, and thus has automatically become a SIGMOBILE event (the combination using the “Ubicomp” name). Also, this year we sponsored a new conference called “Pervasive Displays” (PerDis’13) which explores a new trend for mobile devices and fixed infrastructure to work together in support of ad hoc user interaction. PerDis is not part of our list of annual sponsored conferences at this time, but if it continues to grow, would be a future candidate for annual SIGMOBILE sponsorship.

**Summary**

Mobile computing is one of the fastest growing fields within computer science and engineering, and as a result SIGMOBILE continues to be a strong, successful, well-supported organization. Membership is relatively stable at about 700, and the SIG’s conferences and workshops are well attended, creating a wealth of publications for the ACM digital library and the SIG’s members. This year we also added a 4th SIGMOBLE local Chapter in Ireland. Furthermore, our financial situation has strengthened in 2013 with a 4.5% increase (a positive trend for 5 years now) providing the organization with fiscal flexibility, and the option to support additional high-value research programs. To this end, we have established the MCRC fund to support SIGMOBILE community projects and promote new activities that will benefit the SIG.

**SIGMOD FY’13 ANNUAL REPORT**

**July 2012 – June 2013**

**Submitted by: Yannis Ioannidis, Past Chair**

**Mission**

ACM SIGMOD (Special Interest Group on Management of Data) is concerned with the principles, techniques, and applications of database management systems and data management technology: “*The goal of SIGMOD is to be the premier international organization devoted to research in data management systems. It serves the academic and industrial community and offers a platform for innovative sharing and dissemination of knowledge concerning the management of data, broadly defined to include all aspects of data issues, such as semantic and structural modeling and representation, storage and indexing, querying and updating, analysis, integration, distribution and parallelization, integrity and consistency, curation and provenance, and privacy and security.*”

**Main Conferences and Newsletter**

*SIGMOD/PODS Conferences* — These continue to be very successful and highly regarded events that bring together theoreticians & experimentalists presenting high-quality research and other results. In 2013 the conferences were held in New York City, NY and had by far the largest attendance ever. The conferences’ value was enhanced by an extensive collection of co-located workshops: a dozen SIGMOD sponsored workshops, including the SIGMOD New Researcher Symposium and the SIGMOD/PODS Ph.D. Symposium; two PODS special events; and an IBM-organized workshop.

The executive committee of SIGMOD includes a Conference Coordinator who provides continuity in the organization of the conferences from year-to-year. During the reporting period, Professor K. Selçuk Candan (Arizona State University, USA) has taken over this role after Professor Sihem Amer-Yahia (CNRS, France) resigned.

*SIGMOD Record* — SIGMOD Record continues to be a high-quality quarterly newsletter and its coverage has been growing. Over the past years, several columns were added (influential papers, database principles, systems and prototypes, and standards). Dr. Ioana Manolescu (INRIA, France) is SIGMOD Record editor and heads a sizable team of associate editors.

**Awards**

SIGMOD sponsors several awards each year that recognize excellence in the database community. In 2013, these awards were given to the following researchers:

*SIGMOD Edgar F. Codd Innovations Award*: Stefano Ceri (Politecnico di Milano)

*SIGMOD Contributions Award*: H. V. Jagadish (University of Michigan)

*SIGMOD Jim Gray Doctoral Dissertation Award*: “Scalable and Elastic Transactional Data Stores for Cloud Computing Platforms”, Sudipto Das (University of California – Santa Barbara)

*SIGMOD Jim Gray Doctoral Dissertation Award – Honorable Mention*: “Automatic Tuning of Data-Intensive Analytical Workloads”, Herodotos Herodotou (Duke University)

*SIGMOD Jim Gray Doctoral Dissertation Award – Honorable Mention*: “Secure Time-aware Provenance for Distributed Systems”, Wenchao Zhou (University of Pennsylvania)

*SIGMOD Test-of-Time Award*: “The Design of an Acquisitional Query Processor for Sensor Networks”, Samuel Madden, Michael Franklin, Joseph M. Hellerstein, and Wei Hong (University of California – Berkeley)

*SIGMOD 2013 Best Paper Award*: “Massive Graph Triangulation”, Xiaocheng Hu (CUHK), Yufei Tao (CUHK), and Chin-Wan Chung (KAIST)

*PODS Alberto O. Mendelzon Test-of-Time Award*: “Revealing Information While Preserving Privacy”, Irit Dinur (Weizmann Institute of Science), Kobbi Nissim (Ben-Gurion University)

*PODS 2013 Best Paper Award*: “Verification of database-driven systems via amalgamation”, Mikolaj Bojanczyk (Warsaw University),Luc Segoufin (INRIA), and Szymon Toruńczyk (Warsaw University)

**Electronic Information**

As of early 2011, the SIG website and all physical information products outlined below are managed by our Information Director, Prof. Curtis Dyreson (Utah State University), and his team of Associate Information Directors.

*SIGMOD Online* — Our website (<http://www.sigmod.org/>) provides access to a wealth of content, including the proceedings of SIGMOD/PODS and other co-sponsored conferences, the newsletter issues, metadata for the ACM Collection on Digital Content (see below), and videos of interviews of distinguished database researchers. Improvement of the site’s usefulness, readability, and searchability is an ongoing activity.

*SIGMOD Blog*  — SIGMOD’s official blog site, at <http://wp.sigmod.org> came to life in early 2012 and is managed by Dr. Georgia Koutrika (HP Labs, USA). Its purpose is to catch the heartbeat of our community on exciting and controversial topics that are of interest to the community, and facilitate discussions among researchers on such topics. Blog posts by notable researchers and teachers in the database community appear regularly and have covered topics such as publication practices, historical perspectives, and entrepreneurship, in addition to more technical topics. The most popular was "Are we publishing too much?", which explored the issue of publication counts versus quality.

*SIGMOD Social Media Presence*  — In addition to the blog, SIGMOD also uses social media to inform and build the database community. SIGMOD has a Facebook group with nearly 300 members, a Facebook page, and a Google+ community with 154 members. Furthermore, as of last year, Twitter is being used during the SIGMOD/PODS conferences for both conference-wide and paper-specific discussions.

*DBJobs*  — The revived dbjobs service, at <http://www.dbjobs.org>, is a searchable collection of database jobs offered for free to the database community by SIGMOD. It is intended for use by job seekers that have a background in databases. Job postings are moderated, so they are guaranteed to be database-related. Job postings are automatically scraped and pulled in from DBWorld and other resources, so job seekers need only check dbjobs.

*ACM Collection on Digital Content* (*SIGMOD Digital Collection*) — Working with Wayne Graves of the ACM, we have created a collection of all material in the ACM Digital Library that is considered relevant to the SIGMOD community, whole journal volumes and conference proceedings but also individual papers. The ACM Collection on Digital Content, available at <http://dl.acm.org/collection.cfm?id=C6>, subsumes the contents of the following traditional SIGMOD publications, which we discontinued this year:

* *SIGMOD Anthology* — This is a collection of 6 volumes (CD/DVD) that contain over 130,000 digitized pages of database research literature, covering all historical SIGMOD-related research content that has been available to us. The Anthology effort has achieved its purpose with the publication of Volume 6.
* *SIGMOD Digital Symposium Collection (DiSC)* — This was an annual DVD publication containing the proceedings for that year for several conferences and newsletters, as well as video of some conference sessions. DiSC11 shipped during the reporting period and was the final one in the series.

With the ACM Collection on Digital Content, almost all Anthology and DiSC material and more becomes available online to SIGMOD members in an organized and curated form, enhanced with bibliometrics and other interesting metadata. This effort also serves the role of a pilot for ACM to make specialized collections of the ACM DL material available to specific research communities.

**Membership**

Professional SIGMOD membership is distinguished between *online* (at $15 per year, with benefits such as conference registration discounts and web access to significant content, e.g., quarterly SIGMOD Record issues and Anthology & DiSC metadata, being now expanded to the ACM Collection on Digital Content, linking to the ACM DL) and *print* (at $35 per year, which includes the additional benefit of print copies of the SIGMOD Record issues). Finally, student SIGMOD membership (at $10 per year for online and $30 per year for print), has the same benefits as the professional membership. Following the successful completion of the Anthology and DiSC initiatives, we have simplified the membership structure by dropping the earlier Member Plus option.

SIGMOD is the sixth largest SIG overall. Our membership has been relatively stable over the past several years, going from 1952 in 2009 to 1837 in 2013, corresponding to a drop of between 5% and 6%. Ideas for efforts aimed at increasing the membership are several: (a) introducing new superior benefits or refining and improving existing ones and (b) engaging in community mobilization activities and other initiatives. Students as well as researchers in developing countries are important target groups in these efforts. To help our work regarding item a, we have polled the community and have received useful input for issues that may be important to conference attendees (the annual SIGMOD conference is very important for recruiting and retaining members).

**Initiatives**

*Experiment repeatability* — After its launch in the 2008 SIGMOD conference, the program of evaluating the “repeatability” of experimental results reported in SIGMOD papers entered a trial period during which authors of accepted papers are extended the option of having the experimental aspects of their work validated by a separate SIGMOD-sponsored experimental program committee. This is de-coupled from the conference reviewing, both in terms of the program committees and timelines. Validated papers are listed in a SIGMOD Record article and can make reference to this, as an incentive for authors to participate in this effort to improve the standards of experimentation in the database field. The trial has been quite successful and participation has been stable in terms of number of submissions through the years. The community has learned several lessons from this activity, including the fact that we are still far from the vision of “executable papers”. The initiative will soon be thoroughly evaluated and the results of this activity will determine its future.

*Undergraduate and Graduate Scholarship Program* — As part of its educational mission, SIGMOD continued to subsidize the student registration fees for the conference for all students. In addition, SIGMOD supported undergraduate students from various institutions around the world to attend the 2013 SIGMOD/PODS conferences and present posters on their research work. It did the same for all students presenting their work at the PhD symposium, and also for a large number of graduate students who might otherwise not have been able to attend (applications for these travel grants were solicited through an open call and decided by a separate committee). In particular, a total of 66 students have been directly supported by SIGMOD to attend the 2013 SIGMOD/PODS Conference. In addition to SIGMOD’s own funds ($45K), a $20,000 student travel grant from NSF helped support part of the costs for some of the students, along with an extra $3,000, which came out of Google’s conference sponsorship, at their request.

*Traveling Speakers Program and Database Summer Schools* — Both are in collaboration with VLDB and are under development. The former will organize multi-day visits to major campuses in a chosen country by a pair of senior database researchers (plans for Romania are under way) while the latter will promote education in databases in developing countries.

*Open Acces* — SIGMOD has joined the great majority of SIGs and decided to participate in the 3-year experiment of ACM on Open Access. We decided to make the proceedings of our conferences freely available via the ACM DL for up to one month around the events, under the control of the particular conference leaders, as well as to maintain tables-of-content of the most recent conference in a series with ACM Authorizer links leading to the final versions of the papers in the ACM DL freely. The support from the entire community, including the SIGMOD Advisory Board, in doing this was overwhelming.

*Other* — SIGMOD has several additional ongoing or new initiatives that benefit the database community. These include support for DBLP (<http://www.informatik.uni-trier.de/~ley/db/>), a book donation program from SIGMOD/PODS attendees to research institutions in needy countries, and the PubZone non-profit discussion forum for publications in the database community (in cooperation with ETH Zurich).

**Collaborations and Collaborative Activities**

We continue to be in close collaboration with our sister societies, such as VLDB Endowment, IEEE TCDE, EDBT Association, and ICDT Council. Especially with VLDB, we have a series of joint activities, i.e., the Summer Schools and the Traveling Speakers Program, the inclusion of VLDB material in the ACM DL, the Digital Library Donation Program (contributes SIGMOD Anthology Silver Edition DVDs to research institutions in needy countries), and others. We are also carefully observing the PVLDB journal initiative, where VLDB conference presentations are associated with PVLDB journal papers published during the preceding year and are not chosen by a special program committee.

We are also cooperating closely with several other ACM SIGs on various activities, primarily conference co-sponsorship. Examples, include SIGKDD for the KDD Conference, SIGSOFT for the Distributed Event-Based Systems Conference (DEBS), and SIGKDD, SIGIR, and SIGWEB for the Web Search and Data Mining Conference (WSDM). A very successful relatively recent example is our collaboration with SIGOPS for the Symposium on Cloud Computing (SOCC), where both SIGs were instrumental in creating what promises to become an important annual conference. SOCC was held for the first time in 2010, co-located with SIGMOD/PODS, and for the second time in 2011, co-located with SOSP, and then launched its independent life where its locations (in CA mostly) and timings should not be tied to those of SIGMOD/PODS and SOSP. Hence, during the reporting period, the conference was held in San Jose, CA, while Santa Clara, CA, was chosen as the location for the fourth event this fall. The first three events were all very successful in terms of program quality (21 regular and 4 short papers were presented in the third event) and attendance.

**Finances**

SIGMOD is a thriving, very active SIG with healthy finances in spite of the economic downturn. This is largely thanks to the efforts of our corporate-sponsorship chairs of the last few years, who have been able to secure sponsorship funds for the SIGMOD conference in excess of $150,000 on the average annually (and sometimes over $200,000), ensuring profitability of the individual conferences as well as financial security of the SIG overall. Given this balance, as mentioned above, we have subsidized student registrations heavily during SIGMOD/PODS 2013 and provided a substantial number of travel grants to undergraduate and, primarily, graduate students, enabling them to attend the SIGMOD/PODS conferences.

**Current Status and Future Outlook**

SIGMOD continues to be a thriving, healthy, and very active SIG. There are certainly areas where it can improve even further, but we feel that SIGMOD is a strong organization and have every expectation of it continuing to provide useful benefits to its members, and thereby, continuing to grow.

**SIGOPS FY ’13 ANNUAL REPORT**

**July 2012-June 2013**

**Submitted by: Jeanna Matthews, Chair**

**Overview**

SIGOPS is a vibrant community of people with interests in “operating systems” in the broadest sense, including topics such as distributed computing, storage systems, security, concurrency, middleware, mobility, virtualization, networking, cloud computing, datacenter software, and Internet services. We sponsor a number of top conferences, provide travel grants to students, present yearly awards, disseminate information to members electronically, and collaborate with other SIGs on important programs for computing professionals.

**Officers**

It was the second year for officers: Jeanna Matthews (Clarkson University) as Chair, George Candea (EPFL) as Vice Chair, Dilma da Silva (Qualcomm) as Treasurer and Muli Ben-Yehuda (Technion) as Information Director. As has been typical, elected officers agreed to continue for a second and final two-year term beginning July 2013. Shan Lu (University of Wisconsin) will replace Muli Ben-Yehuda as Information Director as of August 2013.

**Awards**

We have an exciting new award to announce – the SIGOPS Dennis M. Ritchie Doctoral Dissertation Award. SIGOPS has long been lacking a doctoral dissertation award, such as those offered by SIGCOMM, Eurosys, SIGPLAN, and SIGMOD. This new award fills this gap and also honors the contributions to computer science that Dennis Ritchie made during his life. With this award, ACM SIGOPS will encourage the creativity that Ritchie embodied and provide a reminder of Ritchie's legacy and what a difference a person can make in the field of software systems research. The award is funded by AT&T Research and Alcatel-Lucent Bell Labs, companies that both have a strong connection to AT&T Bell Laboratories where Dennis Ritchie did his seminal work. Robbert Van Renesse (Cornell University) led the effort to establish the award.

Jeff Dean and Sanjay Ghemawat (Google) received the Mark Weiser Award at OSDI 2012 for creativity and innovation in operating systems research. The 2012Mark Weiser Award selection committee was chaired by Butler Lampson (Microsoft) and also included Peter Chen (University of Michigan) and Thomas Anderson (University of Washington). The committee for 2013 is Peter Chen (chair), Miguel Castro (Microsoft Research) and John Wilkes (Google).

The 2012 SIGOPS Hall of Fame Awards, which recognize the most influential systems papers, were presented at OSDI 2012 for the following papers:

* Brian M. Oki, Barbara H. Liskov. Viewstamped Replication: A New Primary Copy Method to Support Highly-Available Distributed Systems Proceedings of the Seventh Annual ACM Symposium on Principles of Distributed Computing (PODC 1988), Toronto, ON, Canada, Aug 1988, pp 8--17.
* Leslie Lamport. The Part Time Parliament ACM TOCS 16(2), May 1998, 133--169.
* Kai Li, Paul Hudak. Memory Coherence in Shared Virtual Memory Systems ACM TOCS 7(4), Nov 1989, pp 321--359.
* Mendel Rosenblum, John K. Ousterhout. The Design and Implementation of a Log-Structured File System ACM TOCS 10(1), Feb 1992, pp 26--52.

The 2012 Hall of Fame award selection committee was chaired by Peter Druschel (Max Planck Institute). The committee for 2013 will be chaired by Steve Hand (University of Cambridge).

The 2012 Edsger W. Dijkstra Prize in Distributed Computing, co-sponsored by SIGOPS, was awarded to the following two papers:

* Maurice Herlihy and J. Eliot B. Moss. Transactional Memory: Architectural Support for Lock-Free Data Structures. 20th Annual International Symposium on Computer Architecture, pages 289-300, May 1993.
* Nir Shavit and Dan Touitou. Software Transactional Memory. Distributed Computing 10(2):99-116, February 1997. (An earlier version appearing in the 14th ACM Symposium on Principles of Distributed Computing, pages 204-213, August 1995.)

The ASPLOS “Influential Paper Award” was awarded at ASPLOS 2013 to the following paper:

* Ravi Rajwar and James R. Goodman. Transactional lock-free execution of lock-based programs. Proceedings of the 10th international conference on Architectural support for programming languages and operating systems (ASPLOS 2002).

The recipient of the EuroSys ROGER NEEDHAM PhD AWARD (2013) is Asia Slowinska, Vrije Universiteit Amsterdam for her PhD thesis entitled "USING INFORMATION FLOW TRACKING TO PROTECT LEGACY BINARIES".

**Conferences**

* Planning for the next *ACM Symposium on Operating Systems* (SOSP), which is scheduled for November 3-6 2013 in Farmington, Pennsylvania, are well underway. SOSP is 100% sponsored by SIGOPS. Michael Kaminsky (Intel) is serving as the General Chair, and Michael Dahlin (University of Texas) is serving as the Program Chair. Seven workshops will be collocated with SOSP: Workshop on Diversity in Systems Research (Diversity), 9th Workshop on Hot Topics in Dependable Systems (HotDep), 5th Workshop on Power-Aware Computing and Systems (HotPower), 1st Workshop on Interactions of NVM/Flash with Operating Systems and Workloads (INFLOW), 7th Workshop on Large-Scale Distributed Systems and Middleware (LADIS), 7th Workshop on Programming Languages and Operating Systems (PLOS) and Conference on Timely Results in Operating Systems (TRIOS).
* The Eighth Eurosys Conference (Eurosys 2013) was held in Prague, Czech Republic on April 15-27. Eurosys is 100% sponsored by SIGOPS.
* The Ninth Annual International Conference on Virtual Execution Environments (VEE 2013) was held in Houston, Texas, USA, March 16–17 2013. VEE is sponsored 50% by SIGPLAN and 50% by SIGOPS.
* The 31st Annual ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC 2012) was held in Madeira, Portugal on July 16-18, 2012. PODC is sponsored 50% by SIGOPS and 50% by SIGACT.
* The Third ACM Symposium on Cloud Computing (SOCC 2012) was held in San Jose, California on October 14th-17th, 2012. SOCC is sponsored 50% by SIGOPS and 50% by SIGMOD.
* The Eighteenth International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS 2013) was held in Houston, Texas on March 16-20 2013. ASPLOS is sponsored 25% by SIGOPS, 50% by SIGARCH and 25% by SIGPLAN.
* The Tenth ACM SenSys (SenSys 2012) was held Nov 6-9, 2012 in Toronto, Canada. Sensys is sponsored 10% by SIGOPS, SIGARCH, SIGMETRICS and SIGBED, 30% by SIGMOBILE and 30% by SIGCOMM.
* The third *SIGOPS Asia-Pacific Workshop on Systems* (APSys) was held on July 23-14 2012 in Seoul, South Korea. SIGOPS is in-cooperation with APSys.
* Other In-cooperation events included OSDI 2012, TAPP 2013, FAST 2013, NSDI 2013, HotPar 2013, SYSTOR 2013 and Mobisys 2013.

**Scholarships**

SIGOPS encourages participation in conferences and career building activities for young members of the community. For example, substantial funding was provided this year as travel grants for students to attend conferences and diversity workshops, with many of these grants targeted at women and underrepresented minorities.

* SIGOPS is introducing a new professional travel scholarship program for SOSP. These scholarships are intended to increase the diversity of professional attendees at SOSP. Applications from professionals in areas of the world currently under-represented at systems conferences and from faculty who are teaching operating systems at institutions not typically represented at systems conferences are especially encouraged. The first awards will be made for travel to SOSP13.
* SIGOPS provided student travel scholarships for PODC, VEE and APSys.

**Operating System Review**

SIGOPS also publishes a quarterly newsletter, *Operating Systems Review (OSR)*, which focuses on specific research topics or research institutions, manages an electronic mailing list, which is used for announcements, and maintains a web site: <http://www.sigops.org/>. Jeanna Matthews and Tom Bressoud continue as co-editors of Operating System Review. John Chandy, Ashvin Goel and Antônio Augusto Fröhlich continue to serve on the OSR Individual Submission Committee with John Chandy as chair. There were 3 issues of OSR in 2012 (January, July and December) including an issue surveying the systems work at NetApp coordinated by John Strunk.

**Membership Services**

Professional SIGOPS membership dues remain at $15, and student membership is just $5 per year. We offer a “member plus” package (for $20) for those who wish to receive proceedings for the ASPLOS, Eurosys, and SOSP conferences. For the “member plus” package proceedings will be sent in the format produced for the conference itself. As conferences move away from printed proceedings altogether, printed proceedings may no longer be produced exclusively for the “member plus” recipients. This package is deliberately priced at lower than the cost of a single printed proceeding to allow for this evolution. If or when all three of the conferences in the “member plus” package choose not to produce printed proceedings, we will discontinue this option entirely. ACM is experimenting with a print-on-demand option for proceedings (approximately $75 per proceedings depending on length).

Strong arguments can be made for going completely “green”, i.e. paperless. SOSP 2011 had no printed proceedings, but did have a CD with proceedings. However, papers were still produced in two formats to support both the printed proceedings package and the digital versions. SOSP 2013 will be the first SIGOPS sponsored venue to have purely online proceedings. CDs will be produced and sent to members subscribing to the “member plus” package. SIGOPS is actively considering whether to continue producing printed proceedings and distributing the OSR newsletter in printed form.

**Open Access Options**

SIGOPS has been actively involved in lobbying for changes to the ACM copyright policies. Yannis Ioannidis (SIGMOD) and Jeanna Matthews (SIGOPS) attended the ACM Publications Board meeting in June 2012 proposing that authors retain copyright and grant to ACM a non-exclusive license to publish. A number of people influential in the SIGOPS community provided detailed input into the process including John Wilkes, Tom Anderson, Frans Kaashoek and Mike Freedman. Matthews and Ioannidis have continued to lobby heavily for changes at the ACM Sig Governance Board Meetings. We are happy to report that beginning in 2013, authors are able to choose copyright transfer, an exclusive license without copyright transfer or a non-exclusive license with the payment of an open access fee of roughly $1100 per paper. For SOSP2013, SIGOPS will pay these open access fees for all papers.

**SIGPLAN FY ’13 ANNUAL REPORT**

**July 2012-June 2013**

**Submitted by: Jan Vitek, Chair**

**Conferences**

SIGPLAN conferences are flourishing. Last year was marked by record attendances at our flagship events. ICFP moved to Europe and attracted 343 attendees to Copenhagen. PLDI's co-location with ECOOP in China was rewarded with 630 attendees from 36 countries. PLDI sponsors supported 72 PLDI student travel grants to Beijing. For its 40th birthday POPL set up camp in Rome and broke attendance records with 506 attendees. The Programming Languages Mentoring Workshop, co-located with POPL provided 86 students with scholarships. Finally, SPLASH, which now hosts OOPSLA and Onward!, was held in Tucson in October where it attracted 450 attendees.

SIGPLAN continues to sponsor a number of lively and exciting conferences that include: Architectural Support for Programming Languages and Operating Systems (ASPLOS), Dynamic Languages Symposium (DLS), Generative Programming: Concepts and Experiences (GPCE), Languages, Compilers, and Tools for Embedded Systems (LCTES), International Symposium on Memory Management (ISMM), Principles and Practices of Parallel Programming (PPOPP), and Virtual Execution Environments (VEE).

**Awards**

SIGPLAN made the following awards in FY 2013.

SIGPLAN Programming Languages Achievement Award: Patrick and Radhia Cousot. The award includes a cash prize of $5,000. Announced at PLDI 2013, presented at POPL 2014.

SIGPLAN Distinguished Service Award: Kathleen Fisher. The award includes a cash prize of $2,500. Presented at PLDI 2013.

SIGPLAN Programming Languages Software Award: The Coq Proof Assistant. The award includes a cash prize of $2,500. This is the fourth year this award was given. Announced at PLDI 2013, presented at POPL 2014.

SIGPLAN Robin Milner Young Researcher Award: Lars Birksedal. The award includes a cash prize of $2,500. Announced at PLDI 2013, presented at POPL 2014.

SIGPLAN Outstanding Doctoral Dissertation Award: Patrick Rondon University of California at San Diego. His advisor was Ranjit Jhala. The award includes a cash prize of $1,000. Presented at PLDI 2013.

John Vlissides Award: Gustavo Soares. The award includes a cash prize of $2,000.

Every year we convene four committees, one for each of the four major SIGPLAN conferences, to select one “most influential” paper among those presented at each conference 10 years earlier. These awards include a $1,000 cash prize and a presented at the corresponding conference. The following were chosen as the most influential papers from 10 years ago:

ICFP 2002: Robby Findler and Matthias Felleisen for Contracts for Higher-Order Functions

OOPSLA 2002: Emery Berger, Benjamin G. Zorn and Kathryn S. McKinley for Reconsidering Custom Memory Allocation

POPL 2003: David F. Bacon, Perry Cheng, and V.T. Rajan for A Real-Time Garbage Collector with Low Overhead and Consistent Utilization

PLDI 2003: David Gay, Philip Levis, J. Robert von Behren, Matt Welsh, Eric Brewer, and David E. Culler for The nesC Language: A Holistic Approach to Networked Embedded Systems

Information about SIGPLAN awards, including citations for all the awards above, is available from: <http://www.sigplan.org/Awards/Main>

**Research Highlights**

The CACM Research Highlight track publishes revised conference papers from all areas of computer science that are especially important and relevant for the 100,000+ membership of the ACM. The SIGPLAN Research Highlights Nominating Committee nominates SIGPLAN conference papers to the CACM Research Highlights Committee for consideration for the CACM Research Highlight track.

The committee nominated 9 new papers:

• Set-Theoretic Foundation of Parametric Polymorphism and Subtyping by Castagna and Xu, ICFP 2011

• And Then There Were None: A Stall-Free Real-Time Garbage Collector for Reconfigurable Hardware by Bacon, Cheng, and Shukla, PLDI 2012

• SuperC: Parsing All of C by Taming the Preprocessor by Gazzillo and Grimm, PLDI 2012

• Efficient Lookup-Table Protocol in Secure Multiparty Computation by Launchbury, Diatchki, DuBuisson, and Adams-Moran, ICFP 2012

• Experience Report: A Do-It-Yourself High-Assurance Compiler by Pike, Wegmann, Niller, and Goodloe, ICFP 2012

• Safe Haskell by Terei, Mazières, Marlow, and Peyton Jones, Haskell Symposium 2012

• Work-Stealing Without the Baggage by Kumar, Frampton, Blackburn, Grove, and Tardieu, OOPSLA 2012

• AutoMan: A Platform for Integrating Human-Based and Digital Computation by Barowy, Curtsinger, Berger, and McGregor, OOPSLA 2012

• On the Linear Ranking Problem for Integer Linear-Constraint Loops by Ben-Amram and Genaim, POPL 2013

Published since June 2012

• Spreadsheet Data Manipulation Using Examples by Gulwani and Harris from POPL 2011 and PLDI 2011, published in CACM August 2012.

• An Introduction to Data Representation Synthesis by Hawkins, Aiken, Fisher, Rinard, Sagiv from PLDI'11, published in CACM December 2012

Impact since 2009

11 of the 32 nominated papers have already appeared in CACM Research Highlights.

7 other SIGPLAN papers have appeared via direct solicitation by the CACM Committee.

**Open meeting**

The SIGPLAN Executive Committee reported on the state of SIGPLAN at the annual open meeting at PLDI in Seattle in June 2013. For the third year running, the meeting was conducted as a poster session followed by a short open discussion. The posters for the open meeting are available on the web: <http://www.sigplan.org/Resources/OMP>

**Mentoring**

SIGPLAN's role to foster the PL community starts with our next generation. We aim to ensure young students are introduced to our field early in their curriculum, especially those who may go on to become researchers. SIGPLAN has provided financial support to two initiatives, a fund to support conference attendance and a mentoring workshop.

The SIGPLAN Professional Activities Committee, or PAC, is our main tool for supporting student activities. It is open to all, even non-SIGPLAN members, who are attending SIGPLAN events. It can cover support for SIGPLAN memberships, registration fees, shared accommodations and travel. For more see [www.sigplan.org/pac.htm](http://www.sigplan.org/pac.htm).

The SIGPLAN Programming Languages Mentoring Workshop was started in 2012 by Kathleen Fisher, Ronald Garcia, and Stephanie Weirich. Its goal is to encourage graduate and undergraduate students to pursue careers in programming languages. The workshop was held a second time in 2013 in Rome and will be organized again in 2014 at POPL in San Diego. SIGPLAN supports this event through the PAC program which provides travel grants and by giving free ACM/SIGPLAN memberships to all registered attendees.

**NSF Coordination**

SIGPLAN is working with NSF to ensure the appointment of Program Directors knowledgeable about programming languages. Dan Grossman and Kathleen Fisher run an informal e-mail group to encourage discussion of how the community can increase its engagement with NSF. As a result of this activity, NSF appointed two members of the programming language community, Bill Pugh and John Reppy. The e-mail group continues.

**Summer School**

SIGPLAN sponsors the Oregon Summer School in Programming Languages. Further details of the 2013 school are available from: <http://www.cs.uoregon.edu/Research/summerschool/summer13/>

**Reviewing Process**

Over the years there has been copious discussion within our community on how to improve conference reviewing. While no consensus is forthcoming, many authors have complained about the quality of reviews and the seemingly random nature of rejections. To address these perceived problems a number of SIGPLAN conferences have conducted experiments:

\* Acceptance rate. Both PLDI and POPL decided to increase their acceptance rate in order to reduce the number of good papers rejected each year. POPL even set a target rate of 25%. While the number of papers increased from 29 accepted papers at POPL'04 to 43 papers in 2013, the acceptance rate did not change much (18% this year) as the number of submissions grew.

\* DBR. To reduce perceived bias in reviewing, variants of double-blind reviewing (DBR) have been tried at different venues. In 2012, PLDI used light double blind, which reveals authors’ names after the review is first submitted. POPL, on the other hand, went from double blind to single blind in 2013. The importance of DBR and its impact on the reviewing process are still under discussion.

\* 2PR. In order to improve the overall quality of reviews and better manage the workload, PLDI'12 used a form of two-phase reviewing (2PR), but, that year, authors were not allowed to revise their papers between phases. OOPSLA'13 is taking a step further, introducing a 2PR process in which the first phase is used to assess papers and give suggestions for improvements, and the second phase checks that the authors actually followed the reviewers' recommendations. This is a step towards aligning the conference reviewing process with the process used for journals.

\* Review History. This year, OOPSLA, following ICFP'11's lead, is allowing authors of papers previously rejected in other conferences to include the reviews from those previous submissions. This lets authors show reviewers that the previous concerns were addressed.

While SIGPLAN encourages experimentation, we believe that as with any scientific process any experiment should have clear goals and its outcomes should be measured to see if and how they meet the stated goals. To address this, the steering committee chairs of the flagship SIGPLAN conferences have been asked to codify their processes and rules in the form of public ``best-practice'' documents that will define essential organizational and reviewing policies. One such document, the Principles of POPL, was published in the April issue of SIGPLAN Notices.

**Software Evaluation**

In our field software artifacts play a central role. They are the embodiments of our research ideas and sometimes our contributions are the artifacts themselves. Yet when we publish, we are evaluated on our ability to describe those artifacts in prose. A number of conferences are experimenting with ideas for increasing the importance of artifacts.

In 2013, OOPSLA, ECOOP, FSE and SAS have all introduced the notion of Artifact Evaluation as part of their review process. Authors of accepted papers are encouraged to submit artifacts that will be evaluated by a separate committee and scored. These conferences do not require artifacts to be made public. The result of artifact evaluation does not influence the fate of the paper. There is a space here for a community discussion about how to best serve our field. Should artifacts be required or only strongly encouraged? Can they be used to inform the Program Committee? Should they be stored in the ACM DL with the paper? The April issue of SIGPLAN Notices includes an article by Shriram Krishnamurthi outlining his experience with running the Artifact Evaluation Committee at ESEC/FSE in 2011.

**Issues For the next 2 years**

\* SIGPLAN believes that the ACM Publication Board needs to offer a better platform for experiments linking journals and conferences. SIGPLAN will engage with the publications board to try to explore novel approaches for linking journals and conferences that better serve our community.

\* SIGPLAN membership has questioned the costs and transparency of the Digital Library. Given the move to open access, a transparent cost model that permits comparison with alternatives such as arXiv would be helpful. SIGPLAN will start by opening its own accounting to the public and will engage the DL to find ways to better explain its cost structure.

**SIGSAC FY ’13 ANNUAL REPORT**

**July 2012-June 2013**

**Submitted by: Elisa Bertino, Past Chair**

1. **SIGSAC CONFERENCES AND WORKSHOPS**

SIGSAC’s mission is to develop the information security profession by sponsoring high quality research conferences and workshops. SIGSAC’s first sponsored event was the ACM Conference on Computer and Communications Security (CCS) in 1993. Since then, it has been held twice in Fairfax, Virginia (1993, 1994), and once each in New Delhi, India (1996), Zurich, Switzerland (1997), San Francisco (1998), Singapore (1999), Athens, Greece (2000) and Philadelphia (2001). In the period 2002-2008, CCS was held in the Washington, DC metropolitan area (i.e., in Alexandria, VA). In 2009, 2010, and 2011 CCS was held in Chicago; these editions saw a major increase in attendance (with CCS 2011 having more than 540 attendees). The 2011 edition of CCS featured, in addition to the research paper program, a successful poster and demo program. The 2012 edition of CCS was held in Raleigh (NC); the conference received 439 submissions of which 81 were accepted - an increase over the number of papers accepted to the 2011 edition - and the conference was well attended. The 2013 edition will be held in Berlin (Germany); this edition received more than 560 submissions – the highest number of submissions ever received by a CCS edition. The 2014 CCS edition will be held in Phoenix (AZ). Gail-Joon Ahn will serve as general chair, and Moti Yung and Ninghui Li will serve as program co-chairs. The 2015 CCS edition will be held in Denver (CO); Indrajit Ray will serve as general chair and Ninghui Li and Christopher Kruegel will serve as program chairs.

From its inception, CCS has established itself as among the very best research conferences in security. This reputation continues to grow and is reflected in the high quality and prestige of the program. In 2012, the CCS acceptance rate was 19%. Undoubtedly, CCS remains one of the most competitive conferences in the area. As in previous years, the program of CCS includes several co-located workshops. We expect that the CCS submission rate and attendance to remain high in future years.

Starting in 2001, SIGSAC launched a second major annual conference called the ACM Symposium on Access Control Models and Technologies (SACMAT). The first three meetings were held in Chantilly, Virginia; Monterey, California; and Como, Italy. From 2002, SACMAT meetings have been co-located with the IEEE International Workshop on Policies for Distributed Systems and Networks. The 2006 SACMAT was held in Lake Tahoe, California, in 2007 in Nice – Sophia Antipolis, France, in 2008 in Estes Park, Colorado, in 2009 in Stresa, Italy, in 2010 in Pittsburgh, Pennsylvania, in 2011 in Innsbruck, Austria. The 2012 edition of the symposium was held in Newark, New Jersey USA, on June 20-22 and attracted 73 submissions of which 19 were accepted for presentation at the conference (a 26% acceptance rate). SACMAT 2012 also included, for the first time in the SACMAT series, a demo session, featuring several interesting demos. The 2013 edition of SACMAT was held in Amsterdam, The Netherlands, and attracted 53 submissions of which 19 were accepted (a 31% acceptance rate); this edition also included a demo session, with many interesting demos.

In 2012, SIGSAC held the seventh instance of its third major conference, namely ACM Symposium on Information, Computer and Communications Security (AsiaCCS), in Seoul, Korea, on May 02-04, 2012. The first AsiaCCS was held in Taipei, Taiwan, on March 21-23, 2006, the second was held in Singapore on March 22-24, 2007, the third in Tokyo, Japan, on March 18-20, 2008, the fourth in Sydney, Australia, on March 10-12, 2009, the fifth in Beijing, China, on April 13-16, 2010, the sixth in Hong Kong, on March 22-24, 2011. The 2012 edition of the conference received 159 submissions and accepted 35 regular papers and 14 short papers yielding an acceptance rate of 30% and 22% for full papers. The increased number of submissions suggests that there is a sustained interest in the information security area outside North America. The 2013 edition of ASIACCS was held in Hangzhou, China, in May 2013. The conference received 216 submissions, a major increase with respect to the previous year, of which 62 were accepted (a 29% acceptance rate).

The Wireless Network Security Conference (WISEC) was started in Alexandria, Virginia, on March 31-April 2, 2008. This conference merged two successful ACM workshops, namely WiSec (held in conjunction with Mobicom) and SASN (held in conjunction with CCS) in the US, and a successful European workshop (ESAS) held in conjunction with ESORICS in Europe. In 2009, WISEC was held in Zurich, Switzerland. In 2010 the conference was held in Hoboken, New Jersey, on March 22-24, 2010. In 2012 the conference was held in Hamburg, Germany, on June 14-17, 2011. In 2012 the conference was held in Tucson, Arizona, USA on April 16-18. Starting from 2012 the conference has been renamed Conference on Security and Privacy in Wireless and Mobile Networks (WiSec). In 2013 the conference was held in Budapest, Hungary, on April 17-19, 2012. It received 70 submissions out of which 23 were accepted (a 37% acceptance rate).

SIGSAC launched its fifth major conference in February 2011. This new conference focuses on data and applications security and privacy. It has been motivated by the fact that with rapid global penetration of the Internet and smart phones and the resulting productivity and social gains, the world is becoming increasingly dependent on its cyber infrastructure. Criminals, spies and predators of all kinds have learnt to exploit this landscape much quicker than defenders have advanced in their technologies. Security and Privacy has become an essential concern of applications and systems throughout their lifecycle. Security concerns have rapidly moved up the software stack as the Internet and web have matured. The security, privacy, functionality, cost and usability tradeoffs necessary in any practical system can only be effectively achieved at the data and application layers. This new conference provides a dedicated venue for high-quality research in this arena, and seeks to foster a community with this focus in cyber security. The inaugural edition of the new annual ACM Conference on Data and Applications Security and Privacy (CODASPY 2011) was held February 21-23, 2011 in Hilton Palacio Del Rio, San Antonio, Texas. Professor Ravi Sandhu from the University of Texas at San Antonio served as general chair and Professor Elisa Bertino from Purdue University served as program chair. The conference received 69 submissions. Of these, 21 were selected for presentation, with an acceptance rate of 30%. The conference also included three keynote talks, three industry and application invited presentations, and a panel on “Research Agenda for Data and Application Security”. The second edition of CODASPY has also been held in San Antonio, Texas, in February 2012. This edition received 113 submissions, which is a significant increase with respect to the previous year’s count of 69. The program committee selected 21 regular research papers and 10 short papers. The program was complemented by a keynote address and a panel focusing on grand challenges in data and application security. The 2013 edition of CODASPY was also held in San Antonio, Texas, in February 28-20, 2013 and has been expanded to include posters. The 2013 edition received 107 submissions and accepted 24 (an acceptance rate of 22%). The poster session was well attended and participants enjoyed the technical discussions during the poster session. The 2014 edition of the conference will still be held in San Antonio and as for 2013 will have a poster session. It is expected that the conference will move to another location in 2015,

1. **SIGSAC PUBLICATION INITIATIVES**

*ACM Transactions on Information and Systems Security* (TISSEC) remains our major journal venue for research publications. We do not expect to sponsor another journal for the foreseeable future.

1. **SIGSAC SPECIAL PROJECTS**

The establishment of the SIGSAC Doctoral Dissertation Award for Outstanding PhD Thesis in Computer and Information Security has been completed; this project started in 2010. This annual award by SIGSAC will recognize excellent research by doctoral candidates in the field of computer and information security. The SIGSAC Doctoral Dissertation Award winner and up to two runners-up will be recognized at the ACM CCS conference. The award winner will receive a plaque, a $1,500 honorarium and a complimentary registration to the current year’s ACM CCS Conference. The runners-up each will receive a plaque. The award will be assigned starting from 2014.

1. **AWARDS**

The two SIGSAC awards started in 2005. The 2005 Outstanding Innovation Award was given to Dr. Whitfield Diffie of SUN Microsystems, and the Outstanding Contribution Award was given to Dr. Peter G. Neumann of SRI International. In 2006, the Outstanding Innovation Award was given to Dr. Michael Schroeder of Microsoft Research and the Outstanding Contribution Award was given to Dr. Eugene Spafford of Purdue University. The 2007 Outstanding Innovation Award was given to Dr. Martin Abadi of the University of California, Santa Cruz (and Microsoft Research) and the Outstanding Contribution Award was given to Professor Sushil Jajodia of George Mason University. The 2008 Outstanding Innovation Award was given to Professor Dorothy Denning of Naval Postgraduate School and the Outstanding Contribution Award was given to Professor Ravi Sandhu of the University of Texas at San Antonio. The 2009 Outstanding Innovation Award was given to Dr. Jonathan Millen of The MITRE Corporation, and the Outstanding Contribution Award was given to Dr. Carl Landwehr of the University of Maryland. The 2010 Outstanding Innovation Award was given to Dr. Jan Camenisch of IBM Research, Zurich, and the Outstanding Contribution Award was given to Professor Bhavani Thuraisingham of The University of Texas at Dallas. The 2011 Outstanding Innovation Award was given to Professor Virgil Gligor of Carnegie Mellon and the Outstanding Contribution Award was given to Professor Ravishankar Iyer of The University of Illinois at Urbana-Champaign. The 2012 Outstanding Innovation Award was given to Professor Ravi Sandhu of University of Texas at San Antonio and the Outstanding Contribution Award was given to Dr. Robert Herklotz of the Airforce Office for Scientific Research.

1. **ACM DIGITAL LIBRARY**

The ACM Digital Library has become an important source of revenue for all SIGs. With the addition of several workshop proceedings, SIGSAC received a healthy share of the total revenue. SIGSAC will seek new ways to add to the library’s content (such as collecting speakers’ slides and videos of conference invited talks, tutorials, and paper presentations) to strengthen and broaden its appeal to all subscribers.

1. **ELECTIONS AND EXECUTIVE COMMITTEE**

Following the elections held in 2013, the following officers started their terms on July 1, 2013:

Professor Trent Jaeger of Pennsylvania State University (Chair),

Professor Ninghui Li of PurdueUniversity (Vice-Chair), and

Professor Barbara Carminati of University of Insubria, Italy (Treasurer).

According to the bylaws of SIGSAC, the executive committee starting from July 2013 consists of the elected officers and the previous SIGSAC Chair, Professor Elisa Bertino. The chair of the executive committee is Professor Trent Jaeger.

1. **POLICIES**

SIGSAC has put in place a new policy concerning simultaneous submissions of manuscripts to conferences, symposia, and workshops sponsored by SIGSAC. Under this new policy (posted at the SIGSAC web site: <http://www.sigsac.org/submissions.html>), the authors of manuscripts violating the simultaneous submission policy will be banned for two years from submitting manuscripts to any conference, symposium and workshop sponsored by SIGSAC.

1. **SUMMARY**

SIGSAC is in excellent shape both in terms of successful technical activities and financially. We expect that, in the coming years, SIGSAC will continue to sustain and build on existing activities.

**SIGSAM**

**July 2012 – June 2013**

**Submitted by: Jeremy Johnson, Past Chair**

**SIGSAM Communications in Computer Algebra**

The Communications in Computer Algebra has been published since 1965 (previously SICSAM Bulletin and SIGSAM Bulletin). The CCA is published quarterly; however, only two double-issues are printed and mailed per year, with the four electronic issues appearing through the digital library and the SIGSAM website. The change to two rather than four printings was made to prevent delays and save money and is consistent with the wishes of many of our members.

Manuel Kauers (Austria) and Ilias S. Kotsireas (Canada) served as co-editors, with an editorial board consisting of Jean-Guillaume Dumas (France), Massimo Caboara (Italy), Laureano Gonzalez-Vega (Spain), Michael Wester (USA), Lihong Zhi (China), Eugene Zima (Canada). Four issues were published in the period covered by this report (issues 181-184) with two printed copies. The CCA continued with a mix of refereed papers, conference and workshop poster and software demo abstracts (including ISSAC and ECCAD), dissertation abstracts and announcements of interest to the computer algebra community. Starting with issue 185, Ilias Kotsireas will step down as co-editor and Manuel Kauers will continue as editor.

**Conference and Event Sponsorship**

**ISSAC.** The International Symposium for Symbolic and Algebraic Computation (ISSAC) for 2013 (38th annual conference) was held June 26-29, 2013 at Northeastern University, in Boston, MA USA. ISSAC 2013 was fully sponsored by ACM SIGSAM. The proceedings were published by ACM Press and conference discounts were available to ACM and SIGSAM members. This year’s registration fee was kept to a minimum and was only $330 ($300 for ACM/SIGSAM members) and $160 ($150 for ACM/SIGSAM members) for students. The reduced fee was due to University donations for hosting the conference and additional donations from MapleSoft, Microsoft Research and Wolfram. Additional reductions were in making the printed proceedings optional at additional cost and a lower, 10%, sponsorship fee. The reduced sponsorship fee was offered by SIGSAM based on its healthy financial position and funds saved from previous ISSAC conferences devoted to ISSAC. The level of this *contingency fund* is currently USD 9,248. The reduced conference registration and conference fee from ACM was proposed last year and was well received by the SIGSAM/ISSAC community.

ISSAC 2014 will be held July 21-24 in Kobe Japan. The local organizers and the ISSAC steering committee will seek to hold the conference in cooperation with ACM SIGSAM and the proceedings will be published by ACM and made available for the digital library. Based on a vote at the ISSAC business meeting at this year’s ISSAC, ISSAC 2015 will be held in Bath England.

**ECCAD.** The East Coast Computer Algebra Day (ECCAD’13) was held on April 27, 2013, at the US Naval Academy in Annapolis, MD USA. The workshop was sponsored by the Office of Naval Research, Maplesoft and the Naval Academy in cooperation with SIGSAM. Poster abstracts from ECCAD’12 were published in the CCA issue 184.

**Awards**

SIGSAM sponsors prizes in computer algebra and nominates our best researchers for top-level awards and prizes.

**ISSAC Awards.** SIGSAM sponsors the ISSAC Distinguished Paper and Distinguished Student Author prizes. This is from an endowment with a value of USD 53,497 as of June 30, 2013.

* The ISSAC 2011 Distinguished Paper award was given to Jingguo Bi, Qi Cheng, and J. Maurice Rojas for their paper “Sub-Linear Root Detection, and New Hardness Results, for Sparse Polynomials Over Finite Fields”.
* The ISSAC 2011 Distinguished Student Author Award was given to Pierre Lairez for Creative Telescoping for Rational Functions Using the Griffiths-Dwork Method (with Alin Bostan and Bruno Salvy) and to Qingdong Guo for Computing Rational Solutions of Linear Matrix Inequalities (with Mohab Safey El Din and Lihong Zhi).

Additional awards, not sponsored by SIGSAM were given for the best poster and software demo (abstracts of these and all posters and software demos will be published in a future CCA issue).

* The Best Poster award was given to Jeremy Johnson and Lingchuan Meng for their poster “Towards Parallel General-Size Library Generation for Polynomial Multiplication” and to James Wan for his poster “Hypergeometric generating functions and series for 1/pi.”
* The Best Software Demo award was given to Fredrick Johansson for “Arb: a C Library for Ball Arithmetic”.

**Jenks Memorial Prize**. SIGSAM also sponsors and administers the ACM SIGSAM Richard Dimick Jenks Memorial Prize for Excellence in Software Engineering applied to Computer Algebra. The prize is given in alternating years and was awarded this year at ISSAC 2013 to William Stein for the Sage Project. This award is granted from an endowment with a value of USD 29,599 as of June 30, 2013

**Transactions on Mathematical Software**

SIGSAM has a seat on the editorial board of the ACM Transactions on Mathematical Software (TOMS). This position was previously held by Michael Monagan from Simon Fraser University (Canada) and is now held by Clement Pernet from the Université Joseph Fourier in Grenoble France.

**Viability Review**

SIGSAM underwent a viability review at the March 14, 2013 SGB meeting. Following a presentation by SIGSAM chair Jeremy Johnson, the SGB voted to approve the continuation of SIGSAM “The SGB EC congratulates SIGSAM on their continuing importance to the community, but has concerns about submissions and attendance at the ISSAC conference and finds SIGSAM viable to continue its status for the next 3 years.” The next review will occur in 3 years.

**SIGSAM Elections**

Elections were held to choose new ACM/SIGSAM officers. Mark Giesbrecht, former chair of SIGSAM, served as chair of the nominating committee obtaining an excellent slate of officers: 1) Chair: Ilias Kotsireas and Daniel Lichtblau, 2) Vice Chair: Jean-Guillaume Dumas and Wen-Shin Lee, 3) Secretary: Jacques Carette and Ziming Li and 4) Treasurer: Elena Smirnov and Agnes Szanto. The new officers are Ilias Kotsireas (Professor, Wilfrid Laurier University, Waterloo, Ontario Canada), Jean-Guillaume Dumas (Professor, Université} Joseph Fourier, Grenoble France), Ziming Li (Professor, AMSS, Academia Sinica, Beijing, China) and Agnes Szanto (Professor, NCSU Raleigh USA).

**SIGSAM Membership**

As of June 30, 2013, SIGSAM had 248 members, which increased from 233 members the previous year. While membership has increased, it remains the primary concern for SIGSAM. The following chart shows the decline in SIGSAM membership over the last 21 years. (*omitted)*

The SIGSAM officers have started to investigate this trend along with a review of member benefits, and will determine a plan going forward to raise membership.

**SIGSAM Advisory Board**

The Advisory Board advises the Chair on matters of interest to SIGSAM. It consists of the officers, the Past Chair, the newsletter Editor(s) and up to ten Members at Large elected by ballot by the members of SIGSAM at the Annual General Meeting. The advisory board has not been active in the last four years and the SIGSAM officers will look at how best to use the advisory board and a plan to reactivate the board.

**SIGSAM Finances**

The attached financial report was prepared by Agnes Szanto (SIGSAM Treasurer), which is summarized below.

**Summary**

We inherited a financially robust SIGSAM, with an opening balance of over $60,000, well above what is minimally required, due mainly to the success of the ISSAC’11 conference: during the 2011-12 fiscal year SIGSAM added more than $9000 to the budget. This year SIGSAM will not have significant surplus or deficit, since ISSAC’12 was organized in-cooperation with ACM. We hope that the success of ISSAC’13 in Boston will add a surplus for our budget next year.

**SIGSIM Annual Report**

**July 2012-June 2013**

**Submitted by: Paul Fishwick, Chair**

1. **Awards**

*SIGSIM Distinguished Contributions Award*, presented to Robert G. Sargent, Professor Emeritus, Syracuse University. Award presented at the SIGSIM meeting in the 2012 Winter Simulation Conference in December 2012. The awardee receives an honorarium of $1,500 and a plaque.

*Ph.D. Colloquium Award* (in SIGSIM-PADS conference). First Prize: Xiaosong Li “GPU Accelerated Three-stage Execution Model for Event Parallel Simulation”. Runner-Up: Dylan Pfeifer, “A Method for the Distributed Simulation of Cyber-Physical Systems.”

*Best Paper Award at SIGSIM-PADS 13*: Stein Kristiansen, Thomas Plagemann, and Vera Goebel, “Modeling Communication Software for Accurate Simulation of Distributed Systems.”

*Keynote Speaker at SIGSIM-PADS 13*: Pierre L’Ecuyer, “Challenges in Stochastic Modeling of Complex Service Systems for Simulation and Optimization” and *Invited Speaker*: Aran Hegarty, “Challenges in Cyber M&S – a Navy Cyber Warfare Development Group Perspective.”

1. **Research**

The new conference (SIGSIM-PADS) introduces content that is based on computational methods, models, algorithms, and platforms. Research was presented at SIGSIM-PADS 2013 in the following areas: automatic model generation, heterogeneous parallel simulation, modeling and simulation theory, multicore architectures for simulation, activity modeling, agent-based simulation, distributed simulation, hardware-in-the-loop simulation, applications, and a *grand challenges in modeling* panel. Preparations and planning for SIGSIM-PADS 14 are already underway. This conference will be held in Denver, CO.

The Winter Simulation Conference (WSC 13) always covers a wide array of modeling and simulation research. WSC is co-sponsored by SIGSIM.

Other conferences that disseminate cutting-edge research are joined with SIGSIM via InCoop agreements: SimuTools: International ICST Conference on Simulation Tools and Techniques, SpringSim: Spring Simulation Multiconference, SW: Simulation Workshop, WRPG: Workshop on Research Prototyping, and Simultech: International Conference on Simulation and Modeling Methodologies, Technologies and Applications.

1. **Service**

We held the first conference on SIGSIM-PADS (Principles of Advanced Discrete Simulation) in Montreal in May 2013. SIGSIM-PADS is now the flagship conference for SIGSIM and was instantiated by leveraging a previously existing conference (PADS) that has a 26 year reputation for quality. The goal of SIGSIM-PADS is to become the premiere conference on the *computational aspects of simulation*. The # of papers submitted: 75, # accepted 29 full papers, 11 work in progress papers, and 3 invited papers.

We developed a re-architected web presence for SIGSIM, located at [www.sigsim.org](http://www.sigsim.org).

A new editorial structure was put in place for MSKR: Osman Balci is Editor of the web presence, with two associate editors, Navonil Mustafee and Saikou Diallo. This structure was deemed essential as increasingly, members visit web sites and media for their information and knowledge. A new associate editor is planned for a future social media activity.

We developed a set of modeling and simulation related videos using an automated video mining script, which was subsequently placed in GitHub for access by other SIGs if desired. Over 1000 videos are now viewable through our revamped Modeling and Simulation Knowledge Repository (MSKR).

Members receive a copy of the proceedings for the SIGSIM conference in CD form.

1. **Participation**

We instrumented a PhD colloquium, modeled on the colloquium held as part of the annual Winter Simulation Conference. SIGSIM-PADS had 14 student participants.

We created new travel awards for students to attract them to simulation conferences such as WSC 12 in Berlin, Germany, and SIGSIM-PADS 13 in Montreal, Canada.

SIGSIM increased participation through a partnership with the Society for Modeling & Simulation International (SCSI). PADS 2013 was co-sponsored by SCSI. The requirements were: 1) SCS would receive a signed letter to indicate a “technical” cosponsorship without financial or legal liability from SCS, 2) SCS members would be entitled to the reduced conference registration rate, similar to the rate for the members of SIGSIM, and 3) SCS would receive an end-of-conference report. This connection of an ACM SIG to SCSI was a way to broaden our reach across societies, and by doing so, to increase our collective visibility.

1. **Future**

Develop new custom videos on modeling and simulation for the web site. Ten offers are to be made to established modeling and simulation professionals, and $1,000 to each individual toward development costs, or as honoraria.

Develop a strategy and plan for using social networking in SIGSIM. Presently, the methods used are ad hoc and not uniformly applied. An associate editor is being identified for this function.

Continue to offer the SIGSIM-PADS conference on an annual basis. Maintain the quality of the submissions, strengthen the conference, and grow the size.

Investigate publishing video journal submissions. This might be done in concert with the ACM Transactions on Modeling and Simulation (ACM TOMACS), or separately. The idea is to publish a fairly short paper with a well-done video used to illustrate modeling and simulation research.

Investigate student chapters, possibly by coordinating with SCSI. This is currently being discussed with the ideas being explored in meetings that started July 2013.

**SIGSOFT FY Annual Report  
July 2012-June 2013  
Submitted by: Will Tracz, Chair**

ACM’s Special Interest Group on Software Engineering (SIGSOFT) had another excellent year, both technically and financially in 2012-13. This report provides a summary of key SIGSOFT activities over the past year.

**AWARDS THAT WERE GIVEN OUT**

SIGSOFT has a large awards program that recognizes the many achievements of the software engineering community.

Our prestigious service, research and education awards were presented again this year at the International Conference on Software Engineering (ICSE) 2013 in San Francisco, CA. The recipients are as follows:

* The **ACM SIGSOFT Distinguished Service Award** was presented to Wilhelm Schäfer of the University of Paderborn, Germany for outstanding contributions to software engineering through service to SIGSOFT, software-engineering conferences, research foundations, and the general software-engineering community.
* The **ACM SIGSOFT Outstanding Research** **Award** was presented posthumously to David Notkin from the University of Washington for contributions to research in software evolution: understanding, managing, and reducing the difficulties and cost of change in software systems.
* The **ACM SIGSOFT Influential Educator Award** was presented to Tony Wasserman of the Carnegie Mellon University Silicon Valley for early contributions to software engineering curriculum development and extensive academic and professional education in software engineering methods, tools, and management.

At ICSE 2013 we also recognized new ACM Senior Members, ACM Distinguished Members and ACM Fellows for 2012 from the SIGSOFT community.

* The new **ACM Senior Members** are Douglas Baldwin (SUNY Geneseo), Duncan Brown (Zedis Limited), Sutap Chatterjee (Verizon), Georgios Eleftherakis (Capital Markets), Jeff Gray (University of Alabama), Mark Grechanik (University of Illinois at Chicago), and Alessandro Orso (Georgia Institute of Technology).
* **Distinguished Members:** Peter F. Sweeney and Peri Tarr (both from IBM Yorktown) were recognized as new ACM Distinguished Scientists.
* The **ACM Fellows** for 2012 were Gregor Kiczales of the University of British Columbia for contributions to aspect-oriented programming language design and implementation and Walter Tichy of the University of Karlsruhe, Germany for contributions to software engineering and revision control systems.

The **SIGSOFT Impact Paper Award** recognizes a paper published in a SIGSOFT conference at least 10 years earlier that has had exceptional impact on research or practice. The 2012 SIGSOFT Impact Paper Award committee, led by Peri Tarr, selected the paper: “*Dynamically Discovering Likely Program Invariants to Support Program Evolution*” by Michael Ernst, Jake Cockrell, Bill Griswold, and David Notkin, published in the proceedings of ICSE'99.

This is the final year for the SIGSOFT **Retrospective Impact Paper Awards** that recognize papers from the first 23 years of SIGSOFT's history of conference sponsorship. Lee Osterweil chaired the selection committee, which selected the following five papers:

* Walter F. Tichy, “*Design, Implementation, and Evaluation of a Revision Control System*”, ICSE '82: Proceedings of the 6th International Conference on Software Engineering. 1982
* Debra J. Richardson, Stephanie Leif Aha, T. Owen O'Malley, “*Specification-based Test Oracles for Reactive Systems*”, ICSE '92: Proceedings of the 14th International Conference on Software Engineering, 1992
* P. Borras, D. Clement, Th. Despeyroux, J. Incerpi, G. Kahn, B. Lang, V. Pascual, “*Centaur: the System*”, PSDE 3: Proceedings of the 3rd ACM SIGSOFT/SIGPLAN Symposium on Practical Software Development Environments, 1989
* J. Magee and J. Kramer, “*Dynamic Structure in Software Architectures*”, FSE 4 Proceedings of the 4th ACM SIGSOFT Symposium on Foundations of Software Engineering, 1996
* A.M. Zaremski and J. Wing, “*Specification Matching of Software Components*”, FSE 3: Proceedings of the 3rd ACM SIGSOFT Symposium on Foundations of Software Engineering, 1995

Many of our sponsored meetings this year also presented ACM SIGSOFT Distinguished Paper Awards to the authors of a select number of their accepted papers.

This year we launched a new SIGSOFT Award, **the ACM SIGSOFT Outstanding Doctoral Dissertation Award**, for outstanding PhD dissertations in the field of software engineering. The effort in creating the award was led by Tao Xie, who with Adam Porter co-chaired the award selection committee. The first award was presented at FSE 2012 in November to Mark Gabel of the University of Texas at Dallas for his research on automating the process of writing and maintaining high-quality computer software. Gabel’s research reverse-engineered the specifications from software programs to ease the process of finding software bugs and verifying correctness through automation. Gabel completed his Ph.D. at the University of California, Davis, advised by Professor Zhendong Su.

Finally, this year the **SIGBED/SIGSOFT Frank Anger Memorial Award** was awarded by SIGBED to Indranil Saha of UCLA for contributions to research focused on bridging the gap between control and computer science. The award supports travel and attendance by a student member of SIGSOFT to a conference. Saha chose to attend ICSE 2013 where he was recognized at the awards ceremony and he was introduced to SIGSOFT leaders at a special breakfast.

**SIGNIFICANT PAPERS ON NEW AREAS THAT WERE PUBLISHED IN PROCEEDINGS**

The problems and topics addressed in the papers presented at SIGSOFT meetings remain varied and timely. Software engineering researchers are increasing their application of techniques borrowed from other areas of computer science, particularly statistical analysis, data mining and machine learning techniques. One particularly innovative area involved industry studies from our 2012 Foundations in Software Engineering (FSE) Conference: These papers received distinguished paper awards:

1. “*Seeking the Ground Truth: A Retroactive Study on the Evolution and Migration of Software Libraries*” by Bradley Cossette & Robert Walker, University of Calgary
2. *“Scalable Test Data Generation from Multidimensional Models*”: by Emina Torlak, University of California Berkeley
3. “*Assessing the Value of Branches with What-if Analysis*” by Christian Bird & Thomas Zimmermann, Microsoft Research

**SIGNIFICANT PROGRAMS THAT PROVIDED A SPRINGBOARD FOR FURTHER TECHNICAL EFFORTS**

SIGSOFT has two software engineering education programs – one targeted toward students and the seconded focused on educators.

Students receive discounted membership rates and registration fees at all SIGSOFT-sponsored conferences and workshops. In addition, our two flagship conferences: the International Conference on Software Engineering (ICSE), which is co-sponsored with IEEE Technical Council on Software Engineering, and the ACM Symposium on the Foundations of Software Engineering (FSE) offer a Doctoral Symposium where students are mentored by experienced Software Engineering professors. Also, SIGSOFT provides travel support to SIGSOFT sponsored or co-sponsored conferences or workshops for graduate and undergraduate students who are SIGSOFT members through the Conference Aid Program for Students (CAPS) - <http://www.sigsoft.org/CAPS/>. Attendance at conferences and workshops to present papers and to interact with researchers and practitioners in software engineering is an important component of students' education and professional development. Moreover, students’ presence at conferences and workshops enriches and broadens conference and workshop activities. Conferences and workshops are also a good way to introduce students to the services of SIGSOFT. In FY 2012 over $57K of grants were given to over 70 students.

SIGSOFT and the National Science Foundation (NSF) held the 3rd Software Engineering Educators Symposium (SEES) at FSE-2012. It consisted of two half-day tutorials covering approaches for teaching programming and software engineering to undergraduates. Some of the approaches were experimental while others have shown some success in recruitment and retention of women and minority students. Symposium participants were provided access to instructional materials, received practical tips on how to successfully apply the approaches, and learned about tools that support hands-on instruction and active learning. In addition, funding was available to help defray costs to attend SEES and FSE. Funding for travel awards was provided by a grant from the National Science Foundation and by ACM SIGSOFT. The purpose of the grant was to increase participation in computing by building relationships with computer science faculty at schools with populations of students that are members of underrepresented groups. We therefore encouraged applications from faculty who teach at institutions whose student population is majority African American, Hispanic, Native American and women.

**INNOVATIVE PROGRAMS WHICH PROVIDE SERVICE TO SOME PART OF THE TECHNICAL COMMUNITY**

Through the efforts of our History Liaison, Tao Xie, SIGSOFT continues to provide valuable resources to the community documenting the history of our field and the people involved in that history.

We also continued our outreach to the community through our increasing presence in social media outlets, and we have an entry in Wikipedia as well. This year 3 undergraduate students developed a software tool to generate the wiki page from a database using 2 directories (a knowledge and a community directory) to facilitate re-use of data. In addition, this year we established a LinkedIn group as well as promoted the use of Twitter at all conferences.

This year, for the ACM SIGSOFT Distinguished Dissertation Award, we introduced an Award Nomination Submission web site to streamline the submission process and facilitate evaluation. The use of the website proved very beneficial and it will be expanded to handle all 2013 SIGSOFT award submissions.

**BRIEF SUMMARY OF KEY ISSUES FACING THE SIGSOFT MEMBERSHIP**

As in previous years, conference finance remains the key challenge for SIGSOFT, particularly for the volunteers who organize its sponsored meetings, and ultimately for its membership who pay the registration fees for those meetings. Operating and venue costs for conferences continue to soar, and meeting organizers are finding ever more creative ways to keep costs and registration fees down while still providing a rich and rewarding experience for attendees, with the high quality programs, benefits, amenities and activities they have come to expect. Finally, our newsletter (Software Engineering Notes) continues to be the launch pad for first time authors seeking to get early research results published. Since a majority of these authors require additional guidance on presentation and grammar, the challenge of providing helpful reviews in a timely manner (as with any publication) is significant.

**SIGSPATIAL FY Annual Report  
July 2012-June 2013  
Submitted by: Walid G. Aref, Chair**

**1. SIGSPATIAL CONFERENCES AND WORKSHOPS**

SIGSPATIAL's mission is to address issues related to the acquisition, management, and processing of spatially-related information with a focus on algorithmic, geometric, visual, and systems considerations. The scope includes, but is not limited to, geographic information systems (GIS). These issues have become increasingly important in terms of public awareness with the growing interest and use of online mapping systems such as Microsoft Virtual Earth and Google Maps and GoogleEarth as well as the integration of GPS into applications and devices such as, but not limited to, the iPhone and Android. Presently, SIGSPATIAL is fulfilling this mission by sponsoring high quality research conferences and workshops. As indicated by its mission, SIGSPATIAL's domain is much more than just geographic information systems and with this in mind it tries to differentiate its conferences and workshop from others by focusing on the computer science aspects of the field rather than on the available commercial products. In addition, a major concern and focus of the SIGSPATIAL leadership is keeping its flagship conference, the ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS), affordable so that it can continue to be of good value to its attendees and be competitive price-wise with related conferences which are priced at considerably lower levels than most ACM SIG conferences. SIGSPATIAL has been able to achieve this goal by being very active in soliciting sponsor contributions as well as being vigilant at minimizing SIGSPATIAL's financial exposure in terms of contractual obligations when planning the conference by building reserves that can be used in years when the financial climate is not so healthy.

2012 was the fifth year of SIGSPATIAL and its main activity was its flagship conference (ACM SIGSPATIAL GIS) that was held in Redondo Beach, California, (November 6-9 2012). ACM SIGSPATIAL GIS 2012 was the twentieth event of an annual series of symposia and workshops with the mission to bring together researchers, developers, users, and practitioners carrying out research and development in novel systems based on geo-spatial data and knowledge. The conference fosters interdisciplinary discussions and research in all aspects of

spatial systems including but not limited to Geographic Information Systems and Science (GIS) and provides a forum for original research contributions covering all conceptual, design, and implementation aspects of GIS and ranging from applications, user interface considerations, and visualization to storage management, indexing, and algorithmic issues.

This was the fifth time that the conference was held under the auspices of the new ACM Special Interest Group on Spatial Information (SIGSPATIAL). The conference program attracted a record number of 330 attendees (including around 123 student attendees), which is close to 100% increase in the number of attendees when SIGSPATIAL started. For the first time, the conference attracted attendees from all continents including Africa, which had no presence in the conference in previous years. The technical program lasted for two and half days, and based on the feedback of the participants, we can conclude that the conference was very successful in terms of new ideas presented and level of interaction provided.

The call for papers led to 234 paper submissions over four tracks: research, industry, PhD showcases, and demos. The research paper track attracted 206 research paper submissions, of which 35 were accepted as

full papers, 44 were accepted as poster papers, and two were accepted as demo papers. The industry track attracted 12 submissions, of which four were accepted as a full paper and two as poster papers. The Ph.D. Showcase track received five submissions, of which three were accepted, while the demonstrations track received 11 submissions, of which seven were accepted. The submissions were reviewed by a program committee of 126 members. Each paper was reviewed by at least three reviewers, and in most cases four. These numbers indicate the continued health, interest, and growth of the research field of spatial information systems, and the need to bring its researchers, students, and industrial practitioners together.

The conference program featured two outstanding invited speakers:

1. Brian McClendon, Google, Vice President of Geo-Products, for a talk titled "The Path from Paper to Product: How Spatial Research Reaches Users"

2. Samuel Madden, Massachusetts Institute of Technology (MIT), for a talk titled "Going Big on Spatial Data".

The conference was run in a single track with one of the highlights being a fast forward poster session in the first afternoon where each poster author was given 2 minutes to present the highlights of their work to the audience. This was followed by a poster and Demo reception in the evening where the conference participants had an opportunity to interact with the poster authors. Poster paper authors were encouraged to do a good job by having two awards: one for best fast forward presentation and one for the actual poster. Demo paper authors were awarded a best demo award for a running prototype that the authors demonstrated. The poster and demo components of the conference proved to be very popular with both the conference audience and the poster and demo authors.

The conference also included a business meeting for SIGSPATIAL which was open to all SIGSPATIAL members as well as to all conference attendees. The meeting included a discussion of budgetary issues,

plans for next year's conference, a discussion of some initiatives such as ensuring that the ACM Digital Library has copies of all past issues of the conference proceedings, and soliciting feedback from members.

The conference was preceded by a workshop day with the following ten workshops:

1. SIGSPATIAL 2012: The First ACM SIGSPATIAL International Workshop on Analytics for Big Geospatial Data

General Chairs: Varun Chandola, Ranga Raju Vatsavai, Chetan Gupta 2. GEOCROWD 2012: The First ACM SIGSPATIAL International Workshop on Crowdsourced and Volunteered Geographic Information

General Chairs: Mike Goodchild, Dieter Pfoser, Dan Sui3. IWGS 2012: The Third ACM SIGSPATIAL International Workshop on GeoStreaming

General Chairs: Mohamed Ali, Farnoush Banaei‐Kashani, Erik Hoel4. IWCTS 2012: The Fifth ACM SIGSPATIAL International Workshop on Computational Transportation Science

General Chairs: Stephan Winter, Matthias Mueller‐Hannemann5. MobiGIS 2012: The First ACM SIGSPATIAL International Workshop on Mobile Geographic Information Systems

General Chairs: Shashi Shekhar, Chi‐Yin Chow6. HealthGIS 2012: The First ACM SIGSPATIAL International Workshop on the Use of GIS in Public Health

General Chairs: Peter Bak, Daniel W. Goldberg, James L. Horey, Yaron Kanza7. QUeST 2012: The Third ACM SIGSPATIAL International Workshop on Querying and Mining Uncertain Spatio‐Temporal Data

General Chairs: Matthias Renz, Peer Kroger8. LBSN 2012: The Fifth ACM SIGSPATIAL International Workshop on Location‐Based Social Networks

General Chair: Mohamed Mokbel9. ISA 2012: The Fourth ACM SIGSPATIAL International Workshop on Indoor Spatial Awareness

General Chairs: Christophe Claramunt, Ki‐Joune Li10.SWE2012 2012: The First ACM SIGSPATIAL International Workshop on Sensor Web Enablement 2012

General Chairs: Yong Liu, Steve Liang, Yan Xu

This year's conference was generously co-sponsored by NSF, ESRI, Google, Microsoft, Nokia, and NVIDEA,

whose participation and generosity demonstrated what can be accomplished by a successful partnership between academia and industry. Some of the sponsors held a recruiting table for potential students during one day of the conference.

The SIGSPATIAL leadership is currently planning for the 2013 ACM SIGSPATIAL GIS Conference that will be held in Orlando Florida on November 5-8, 2013 with as many as 12 workshops on November 5. It has already secured a commitment from Microsoft NVIDIA to be a sponsor for the spatial data competition that the SIGSPATIAL conference is initiating this year. Oracle is a new co-sponsor for the 2013 conference. SIGSPATIAL has also applied for support from the National Science Foundation (NSF) in the amount of $30K and plans to use these funds to offer 25-30 student travel grants. Of these funds, we plan to allocate $20K for the general student participation in the conference and $10K for the students that participate in the spatial data competition that is to be initiated this year.

SIGSPATIAL also participated in the 2012 International Conference on Connected Vehicles and Expo (ICCVE '12) that was held in Beijing China in December 12-16, 2012 on an in-cooperation basis. SIGSPATIAL has also participated in an in-cooperation basis in the 2012 ACM Conference on Ubiquitous Computing (Ubicomp '12) that was held in Pittsburgh, PA in September 5-8, 2012, and has been approved to continue this in-cooperation

status in the 2013 ACM Conference on Ubiquitous Computing (Ubicomp '13) that will be held in Zurich, in September 8-12, 2013.

**2. SIGSPATIAL PUBLICATION INITIATIVES**

The ACM Publications Board has approved SIGSPATIAL's request to start the ACM Transactions on Spatial Algorithms and Systems (ACM TSAS) with Hanan Samet as the Editor-in-Chief. The Editorial Board has been formed from top researchers in the field from worldwide. The first Call for Papers is expected to be out by November 2013 just before the conference starts.

**3. AWARDS**

In 2012, SIGSPATIAL continued to offer a best paper award, but chose not to make any best student paper awards as virtually all papers had some student authors. The ad hoc 2012 ACM SIGSPATIAL GIS Best Paper Award Committee consisting of the program committee chairs and several additional members that participated selected the following paper for the best paper award:

HLDB: Location-Based Services in Databases

Ittai Abraham (Microsoft Research SVC, USA), Daniel Delling (Microsoft Research SVC, USA), Amos Fiat (School of CS, Tel Aviv Univ., Israel), Andrew Goldberg (Microsoft Research SVC, USA), Renato Werneck (Microsoft Research SVC, USA).

Distinguished Service Award

The SIGSPATIAL Distinguished Service Award recognizes individuals whom the Executive Committee felt made significant contributions to the success of the SIG. This year, there were no nominations for a Distinguished Service Award and hence none was offered this year.

Awards were also made at the conference by ad hoc committees for the best demo presentation, the best poster paper presentation, and the best fast forward poster paper presentation.

Best Demo Paper Presentation:

Advanced Space-Time Predictive Analysis With STAR-BME

Hwa-Lung Yu (National Taiwan University, Taiwan), Shang-Jen Ku (National Taiwan University, Taiwan),

Alexander Kolovos (SpaceTimeWorks LLC, USA).

Best Demo Presentation Runner-up:

Handling user-defined private contexts for location privacy in LBS

Maria Luisa Damiani (University of Milan, Italy), Marco Galbiati (University of Milan, Italy).

Best Poster Paper Presentation:

Crowdsourcing computing resources for shortest-path computation

Alexandros Efentakis (Research Center "ATHENA", Greece), Dimitris Theodorakis (National Technical

University of Athens, Greece), Dieter Pfoser (Research Center "ATHENA", Greece).

Best Poster Presentation Runner-up:

When a City Tells a Story: Urban Topic Analysis

Felix Kling (National University of Ireland Maynooth, Ireland), Alexei Pozdnoukhov (National University

of Ireland Maynooth, Ireland).

Best Fast Forward Poster Paper Presentation:

Algorithms for Range-Skyline Queries

Saladi Rahul (University of Minnesota, USA), Ravi Janardan (University of Minnesota, USA).

Best Fast Forward Poster Paper Presentation Runner-up:

Enforcing k Nearest Neighbor Query Integrity on Road Networks

Ling Hu (Google, USA), Yinan Jing (Fudan University, China), Wei-Shinn Ku (Auburn University, USA),

Cyrus Shahabi (University of Southern California, USA).

**4.** **ACM DIGITAL LIBRARY**

SIGSPATIAL plans to expand its presence in the ACM Digital Library by soliciting workshop proposals both in its role as a sponsor and on an in cooperation status. This can be seen by the increased number of workshops that it sponsored in 2012. In 2013, SIGSPATIAL was proactive in soliciting workshop proposals and designated its Treasurer, Mohamed Mokbel, as the Workshops Chair. He successfully created a uniform framework for them with an expected program of 12 concurrent workshops.

**5. SIGSPATIAL CHAPTERS**

Fiscal year 2012 saw the growth of three of SIGSPATIAL Chapters: SIGSPATIAL Australia, SIGSPATIAL China, and SIGSPATIAL Taiwan, with SIGSPATIAL China reaching over 30 members. A SIGSPATIAL Korea chapter is currently under formation. These chapters are representative of the amount in interest in SIGSPATIAL from members in these regions and are reflected by their participation in the flagship

conference as authors and attendees.

**6. PLANS FOR THE 2014 FISCAL YEAR**

SIGSPATIAL is working hard to fulfill its mission of sponsoring high quality research conferences and workshops. It will continue to be more proactive in soliciting workshops in emerging areas, e.g., we had in 2012

very successful workshops in GIS Crowd Sourcing, GIS Health, and BIGSpatial. We will continue to seek out more sponsors and try to devise activities that will increase its attractiveness to the potential sponsors. Last year, we introduced the company recruiting event which was very successful. We will continue to enrich the sponsors program to make it attractive to industrial partners. We strive to continue to maintain, as well as build on, the momentum of its first five years of existence.

**7. ELECTIONS and OFFICERS**

SIGSPATIAL will hold its second elections for officers in Spring 2014. Dr. Hanan Samet has been appointed as the nominations committee chair. SIGSPATIAL held its first elections for officers in Spring and Summer 2011.

The elected officers for the three year term running from July 1, 2011 through June 30, 2014 were:

Chair: Walid G. Aref, Purdue University

Vice-Chair: Chang-Tien Lu, Virginia Tech University

Secretary: Divy Agrawal, University of California at Santa Barbara

Treasurer: Mohamed Mokbel, University of Minnesota

According to the SIGSPATIAL bylaws, the past SIGSPATIAL chair is also a member of the EC.

Past Chair: Hanan Samet, University of Maryland

The SIGSPATIAL EC has the following appointed officers:

Newsletter Editor: Andrew Danner, Swarthmore College

Conference Finances Coordinator: Yan Huang, University of North Texas

Conference Venue Coordinator: Shawn Newsam, University of California at Merced

Webmaster, Marco Adelfio: University of Maryland

who are also members of the SIGSPATIAL Executive Committee.

**SIGUCCS FY Annual Report  
July 2012-June 2013  
Submitted by: Kelly Wainright, Chair**

During the past year, SIGUCCS (Special Interest Group for University and College Computing Services) continued its service to the community of professionals who provide computer support at institutions of higher education while also undergoing two significant transitions. For the second year, we held a SIGUCCS annual conference which consisted of the Management Symposium and the Service and Support conference being held consecutively. We continue to evaluate ways to make this a more effective approach.

The Executive Committee members for 2012-2013 (Chair, Kelly Wainwright; Vice Chair/ Conference Liaison, Parrish Nnambi; Secretary, Karen McRitchie; Treasurer, Melissa Bauer; Information Director, Mat Felthousen; and Past Chair Bob Haring-Smith) continued their three-year term of office. Beth Rugg (Professional Development Coordinator), Trevor Murphy (coordinator of the Communication Awards program), and Nancy Bauer (chair of the Marketing Committee) also have continued in their roles. Other volunteers, too numerous to name here, individually contribute their energy and ideas to the organization through their service on conference and program committees, on the Awards Committee, on the Membership and Marketing Committees, and as judges for the Communication Awards. Many of these individuals are listed in appropriate pages on the SIGUCCS web site (<http://www.siguccs.org>).

***Awards and Grants***

The SIGUCCS Awards Programs have been in place for more than a decade. The Penny Crane Award for Distinguished Service recognizes an individual’s significant and/or multiple contributions to SIGUCCS and the profession over an extended period of time. The Hall of Fame awards recognize selected individuals who have contributed their time and energies to benefit SIGUCCS. For descriptions of the awards programs, please go to: <http://www.siguccs.org/awards/>.

Since there were no suitable nominations in 2012, we decided to make no awards last year.

**Conference attendance grants** – The SIGUCCS Grant Program provides partial support for individuals in institutions of higher education to participate in the annual SIGUCCS Conference. This support is funded by SIGUCCS and consists of a full registration to the grantee's choice of either the Management Symposium or the Service and Support Conference; registration for one half-day workshop or executive seminar associated with the chosen portion of the conference; and three nights’ accommodation at the conference hotel. In selecting grant recipients, we favor applicants from institutions that have not been represented at recent SIGUCCS conferences. This approach is intended to make the conferences more widely known and build future attendance.

The program completed its fifth year in 2012.The three awardees of this grant for the SIGUCCS 2012 Annual Conference were:

Cody Down, Pacific Northwest University of Health Sciences

Chris Olance, Colorado State University - Pueblo

Jackie Thames, University of North Texas

On January 1, 2013, Tim Foley became Chair of the SIGUCCS Awards Selection Committee and Rob Paterson became Past Chair, following the rotation of the committee’s membership as described at <http://www.siguccs.org/awards/awards_committee.html>. Two new members, Jeanne Kellogg and Mike Yohe, replaced Jim Bostick and Terry Lockard, who completed their service to the committee at the end of 2012.

**2012 Communications Awards** - As we have done for many years, we held the Communications Awards competition in conjunction with our Conference. A description of these awards and the 2012 winners can be found at: <http://www.siguccs.org/Conference/2012/awards.html>. Judging for this competition was led by Trevor Murphy, the current Communications Awards Chair. The Communications Awards Committee is formed each year from the previous year’s top award winners in each category.

As can be seen from the listing, there need not be an award made in a category, even if there are submissions. Each year the categories in the competition are reviewed to ensure that they appropriately represent the range of communications currently used in higher education.

***Conferences***

The second SIGUCCS Annual Conference comprised of the Management Symposium and the Service and Support Conference was held October 14-19, 2012 in Memphis, Tennessee, with the theme of “IT: All Shook Up.” The conferences occurred consecutively, giving attendees the opportunity to register for either or both parts of the conference. The keynote speakers were Sue Workman of Indiana University for the Management Symposium, Jim Sevier of Convergence Readiness for the joint plenary that bridged the two conferences, and Brian Janz of The University of Memphis for the Service and Support Conference. An Executive Seminar on “Implementing an Institutional Change Initiative ....Fast.... While Doing Our Day Jobs On A Budget” was held along with one full-day workshop before the Service and Support Conference and one half-day workshop afterwards. For the complete program, see <http://www.siguccs.org/Conference/2012/program.html>.

Planning is currently underway for the next annual conference, our third combined conference, which will happen November 3-8, 2013 at the Holiday Inn Mart Plaza in Chicago, Illinois. The conference committee has chosen a theme of “50 Years of Reaching New Heights” as both a celebration of SIGUCCS’ 50th Anniversary, and an examination of the lessons that the past provides for the future.

Starting in Memphis, the conference committee offered the conference program using a mobile app called EventBoard. This allowed attendees to view the program, choose their sessions, and submit session evaluations all using their mobile devices.

***Webinars***

SIGUCCS continued our offering of professional development webinars under the new leadership of Professional Development Coordinator Beth Rugg. We have offered webinars that will help participants better understand the SIGUCCS organization, and on topics discussing current issues. This year we have held sixteen different webinars. Recordings of past webinars are available on the SIGUCCS web site at <http://www.siguccs.org/resources/webinar.html>.

We continue to use GoToMeeting’s webinar service, which is also used for board meetings and provides a versatile medium for SIGUCCS services and operations. In addition to webinars and board meetings it is used extensively for committee meetings, pre-conference orientation sessions for first-time attendees at the SIGUCCS Conference, and other on-line volunteer gatherings.

***Special Projects***

The SIGUCCS Executive Committee and groups of SIGUCCS volunteers have worked on several special projects during the past year.

**SIGUCCS Newsletter:** SIGUCCS is again offering a quarterly newsletter to our members. A number of years ago, SIGUCCS was a Conference and Newsletter SIG. We reconstituted the practice of a member newsletter as a vehicle for communicating with our membership between conferences, especially since conferences now happen further apart. The newsletter is distributed electronically as a PDF file. Our initial issues have received very positive feedback from the members.

**SIGUCCS 50:** SIGUCCS was founded in 1963 and held its first conference in 1973, so 2013 is both the 50th anniversary of SIGUCCS and the 40th anniversary of that first conference. A group led by former SIGUCCS Chairs Leila Lyons and Jack Esbin have been working with the SIGUCCS 2013 conference committee to include a celebration of this milestone during the conference.

It is important to the “SIGUCCS 50” group that the anniversary celebration not be simply an exercise in nostalgia for older members of the SIGUCCS community, but also have clear value for all who rely on SIGUCCS services. Certainly, many of the biggest challenges we face are perennial problems of management, communication, and staff development. Recognizing how the problems persist even as the technology changes may be an important outcome of the SIGUCCS 50 events. Planning for the 50th anniversary recognition is ongoing.

**SIGUCCS Mentoring**: As a way to expand our professional development opportunities for our membership, SIGUCCS has established a mentoring program. This program allows members of the SIGUCCS community to both be mentored and to mentor their colleagues.

In our initial call for participation, we had 23 people complete the application for the program, with 12 interested in being mentored, 14 interested in serving as mentors, and 3 people interested in both roles. A mentoring advisory team matched mentors with mentees based on applications to the program. These applications collected information about current roles, desired roles and goals for the mentoring relationship. The plan is to have this mentoring relationship lasting for a year, culminating at the annual conference. Throughout the program, peer support is offered to both the mentors and mentees through regular online hangouts.

***Issues***

The economic downturn and its effect on college and university finances continues to be the most important issue that we face. Since, like most SIGs, SIGUCCS depends on its conferences for most of its income, attendance problems at the conferences translate into financial problems for the SIG. While our attendance numbers for the past two years have evened out, they remain significantly lower than attendance prior to 2009. For this reason, the Executive committee is constantly exploring ways that we can both cut expenses while increasing conference attendance and SIG membership. After a devastating shortfall of $42,000 for our 2009 conference, we have constantly made improvements and continue to work closely with conference committees to achieve a balanced conference budget.

We are continuing to evaluate and amend the model of offering our two conferences consecutively. This change was made both for programmatic as well as budgetary considerations. Approaching our third year of this model, we are finally reaching a point where we have the necessary information to assess the effectiveness of this model. While conference evaluations support that the combined conference allows access to participants who were previously forced to choose between the two conferences, anecdotally we hear that being out of the office for a week-long conference is difficult. This may prompt us to integrate the conference more tightly, shortening the actual time frame. In the budget realm, the combining of the conferences has allowed the SIG to better capitalize on the hotel contract. We are able to have only one food & beverage minimum and hotel block for both conferences. We are also able to decrease volunteer travel costs for pre-conference site visits by having one Conference Chair and one Treasurer for both conferences.

Reduced conference registration also depresses membership in the SIG because the registration discount for members encourages many to join SIGUCCS or to renew their memberships. While there are other reasons to join the SIG, the financial savings loom large. The continuation of webinars and the offering of a member newsletter as well as the other non-conference member benefits mentioned above will, we hope, provide additional motivation for individuals to maintain their SIG memberships.

**SIGWEB FY Annual Report  
July 2012-June 2013  
Submitted by: Simon Harper, Chair**

The last year has been an exciting one for SIGWEB. From the sponsorship of six Web Conferences, to that of Cooperating Conferences; from the increase in student travel sponsorship (to $30,000pa), to our increasing volunteer effort; the SIG has been at work at all levels of our domain. We have forged links with multiple (≈20) conferences and workshops across our field, focusing on new contribution awards and broadening participation of the SIG, while still maintaining our low membership dues. In short, it has been an active and productive year. We have increased membership numbers (to 561). But, we have an increasing fund balance (to $703,000), and are still increasing the amount we have to spend on each member, from $618 last year to $800 this year; with member benefits of: Reduced rates at SIGWEB sponsored, co-sponsored, and co-operating events; Free access to ACM DL content of events sponsored by SIGWEB; Reduced subscription rates to New Review of Hypermedia and Multimedia; Free subscription to the SIGWEB members email list, with calls, advance and final event programs; and news of interest to the community posted regularly; we still have an excellent membership offering. In short SIGWEB has successfully expanded its range of conference sponsorships, is working hard on membership and volunteer development and benefits, and is financially healthy with a solid leadership.

SIGWEB represents a unique interdisciplinary research community centred on the technical and human issues that arise from systems of linked information. This idea of explicitly linking pieces of information gave birth to a rich well of research trying to augment the human intellect, a vision articulated by the legendary computing pioneer Douglas Engelbart nearly half a century ago. Engelbart, Ted Nelson, and other early researchers realised this vision through hypermedia systems, which are still of interest to the SIGWEB community today, including the World Wide Web, the largest hypermedia system ever built.

Modern researchers have found a host of other realisations of this vision, ranging from digital libraries to knowledge management systems. SIGWEB includes more than just computer researchers and professionals, though. From cognitive psychologists to ethnographers to anthropologists to hypertext writers, SIGWEB embraces those researchers and practitioners that address how people use computers, so that better tools for augmenting the human intellect can be built. SIGWEB also balances the findings of the research world with the experiences of the practical world, in which our ideas and theories are tested daily. SIGWEB (originally SIGLINK) was founded 22 years ago to provide a home for the hypertext community and the ACM Hypertext conference. Over the years, SIGWEB has changed its name and has begun to sponsor a wide range of conferences encompassing hypertext, Web science, document engineering, digital libraries, knowledge management and Web search.

**1. OFFICERS, EXECUTIVE COMMITTEE, & VOLUNTEERISM**

The Elected Officers are:

Simon Harper (Chair & Hypertext)

Dick Bulterman (Vice-Chair & CIKM)

Maria de Graça C. Pimentel (Secretary/Treasurer & DocEng)

The Appointed Executive Committee are:

Ethan Munson (Past Chair & WebSci)

Yeliz Yesilada (Information Director)

Jessica Rubart (Newsletter Editor)

Bebo White (WebSci & SIG History)

David Hicks (JCDL)

Charles Nicholas (CIKM)

In progress (WSDM)

Peter Brusilovsky (at-Large)

Claus Atzenbeck (at-Large)

Additional Members:

Hamman W. Samuel (Webmaster)

Caroline Jay (Broadening Participation / Full Inclusion)

Andrew Brown (Senior and Junior SIGWEB Awards)

Volunteer development has historically been a challenge for SIGWEB. We have new volunteers handling regular columns in the newsletter, and increasing numbers of people working around the publicity/social media area. We are always on the lookout for newsletter contributors and we are still looking for a Membership Co-ordinator to chase lapsed memberships and promote the SIG into getting more.

**2. RECENT INITIATIVES**

The SIG has put into place some recent initiatives over the last year or so: the Web Science Conference transfers to SIGWEB end of the year; Hypertext, DocEng, JCDL, CIKM, WSDM, and Web Science Student awards raised to $5000 each pa; and Working Group Awards enacted up to $5,000 over 3 years (please apply). We also have created two new positions: Broadening Participation / Full Inclusion handled by Dr Caroline Jay; and Senior and Junior SIGWEB Awards handled by Dr Andrew Brown. Finally, open access. Any SIGWEB conference can request Open Access for 1 full year, we will also be offering a license to publish without copyright transfer; and we will be offering Gold and Hybrid open access pay options.

**3. FY 2013 TECHNICAL MEETINGS AND AWARDS**

The technical meetings sponsored by SIGWEB were:

ACM Symposium on Document Engineering (DocEng) 2012.

ACM Conference on Information and Knowledge Management 2012

ACM International Conference on Web Search and Data Mining (WSDM 2013)

ACM/IEEE Joint Conference on Digital Libraries (JCDL 2013)

ACM Conference on Hypertext and Hypermedia (HT 2013)

ACM International Web Science Conference (WebSci 2013)

Table I: Conference Attendance

Conference 2012/13 Attendance SIGWEB %

Hypertext 75 100%

DocEng 64 100%

Web Science 200 100%

JCDL 280 34%

CIKM 705 50%

WSDM 349 25%

The awards presented by SIGWEB in FY 2013 were: The Douglas C. Engelbart Best Paper Award for 2013 (HT 2013). David Millard, Charlie Hargood, Michael Jewell, Mark Weal. Canyons, Deltas and Plains: Towards a Unified Sculptural Model of Location-Based Hypertext. The Theodor Holm Nelson Newcomer Award for 2013 (HT 2013). Dominic Rout, Daniel Preotiuc-Pietro, Kalina Bontcheva, Trevor Cohn. Wheres @wally? A Classification Approach to Geolocating Users Based on their Social Ties. The Vannevar Bush Award for 2012 (JCDL 2012). Hongbo Deng, Jiawei Han, Michael R. Lyu, and Irwin King. Modeling and Exploiting Heterogeneous Bibliographic Networks for Expertise Ranking. The DocEng Best Paper Award for 2012 (DocEng 2012). Graeme Gange, Kim Marriott and Peter Stuckey. Optimal Guillotine Layout.

**4. PARTNERSHIPS**

SIGWEB shares sponsorship of three conferences: JCDL is co-sponsored with SIGIR and the IEEE TCDL; CIKM is co-sponsored with SIGIR; and WSDM is co-sponsored with SIGIR, SIGKDD, and SIGMOD. Also, while the WebSci conference series is entirely sponsored by SIGWEB, it is governed by a Memorandum of Understanding with the Web Science Trust and its steering committee includes a representative from the International Communications Association.

**5. FINANCES**

SIGWEB’s finances are stable and strong (some figures are projected as this report was prepared before the end of the ACM financial year). The SIG’s fund balance stands at over $703,000. This is a $120,000 increase from the preceding year, and we now have funds which are substantially higher than several years ago. The fund balance is more than adequate to support SIGWEB’s planned activities under ACM’s formula. Indeed, SIGWEB’s conferences have generally been making profits and in some cases have made large profits. However, in the past year some very small losses were made. SIGWEB runs a surplus on its basic operational expenses, largely due to Digital Library income. In the last four years, the SIG has initiated a system of student travel awards, paid out of the operational budget (or the fund balance, depending on your viewpoint) and this substantial new expense has reduced the operational surplus.

**6. MEMBERS**

In June 2013, SIGWEB had 561 members (392 professional, 52 student, and 117 affiliate - some figures are projected as this report was prepared before the end of the ACM financial year). This is a slight increase on June 2012. Previous membership totals were: June 2013:. 561 June 2012:. 520 June 2011:. 555 June 2010:. 666 June 2009:. 699 June 2008:. 644 June 2007:. 534 . Clearly, membership has fallen back to the levels of June 2007. The reasons are not clear. The current best guess is that the SIG has not been as efficient in processing the free memberships given to attendees of 100%-sponsored events as we were in 2008 and 2009.

It is worth mentioning SIGWEB’s system of free memberships for conference attendees, because it is a topic of some controversy in ACM SIG circles. Clearly, giving away memberships can increase membership totals. However, the additional members are less ‘sticky’ because they haven’t decided to join on their own. As a result, membership totals can be more variable. SIGWEB chooses to offer free memberships because it appears to us to be a meaningful benefit to our community. Much of SIGWEB’s active conference attendance comes from Europe. European academics, in general, are not allowed to pay for society memberships from university funds, even when doing so would reduce the total cost of attending a conference.

One argument is that attending a SIGWEB conference MEANS that attendees are de-facto SIGWEB Members – so let’s acknowledge this with a membership; the contrary argument is that we lose direct funding. If no one paid we would lose $15,000 pa. We are still discussing the ideas of: No conference memberships; memberships free to conference attendees; Additional conference class’ (ACM Member Early-Bird + ACM Membership) but this could be dangerous as we may then not get any Non-ACM Members (which make the conference more money); or Attendees, paying Non-Member fees, get the membership included after they have paid.

So, the SIGWEB Exec Comm believes that the SIG can support its natural members by giving them memberships automatically when they attend conferences that only SIGWEB sponsors, but there is still some discussion to be had around how this is accomplished. This said we can see that member retention is on the increase with 1 year at 34.83%, 2+ years at 82.59%, the total being 65.90%.

Table II: Member Retention

1st Year 2+ Years Total

2013 34.83% 82.59% 65.90%

2012 33.70% 78.21% 62.33%

2011 24.90 % 77.51% 56.04%

2010 32.30 % 80.69% 56.78%

2009 42.00 % 79.14% 62.19%

**7. COMMUNITY**

In June 2011, SIGWEB signed a Memorandum of Understanding with the Web Science Trust establishing SIGWEB sponsorship of the International Web Science Conference. The agreement sets up a trial period through 2013. The SIGWEB Exec Comm is very pleased with this expansion of SIGWEBs conference offerings. The WebSci conference is very much in SIGWEBs tradition of interdisciplinary events, since it brings together computer scientists with social scientists and other scholars interested in the Webs impact on society and human life.

In addition, SIGWEB sponsors or co-sponsors the ACM Hypertext Conference (HT), ACM Symposium on Document Engineering (DocEng), ACM/IEEE Joint Conference on Digital Libraries (JCDL), ACM Conference on Information and Knowledge Management (CIKM), and ACM International Conference on Web Search and Data Mining (WSDM). We also hold in-cooperation and sponsorship agreements and provide other support for several related conferences, symposia, and workshops (including a five year agreement with the Web4All conference). Finally we sponsor or co-sponsor the Douglas C. Engelbart Best Paper Award, Theodore H. Nelson Newcomer Award, Vannevar Bush Best Paper Award, and the SIGWEB DocEng Best Paper Award

By supporting the community, SIGWEB feels it is performing a vital role in encouraging up and coming research areas and agendas which may well be beneficial to both SIGWEB and the wider community in the future. Indeed, we also have a program to confer small grants to new conference and workshop initiatives - the first being the Social Network Working Group.

These community benefits are really the key to SIGWEB, and your membership not only guarantees you get into our conferences at the cheapest rate available, but is an altruistic philanthropic gesture which supports all SIGWEB members in achieving their professional and training goals.

**8. CONCLUSION**

SIGWEB has a cross disciplinary (inter disciplinary) stable of conferences. We see a slightly increased membership. We see a high funds increase. However, we also see the beginnings of an expected bounce back in membership this year. This means that SIGWEB has successfully expanded its range of conference sponsorships. SIGWEB is also working hard on membership and volunteer development. SIGWEB is financially healthy and has solid leadership. Looking ahead we wish to: strengthen the organisation; monitor the first year that Web Science will be part of SIGWEB; enact more member services, but sustainable ones; create new volunteer opportunities; and keep good relationships with other SIGs and the ACM especially SIGDOC and SIGIR.

**ACKNOWLEDGMENTS**

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