ANNUAL REPORT
of the ACM Europe Council

For the Period: July 1, 2020 - June 30, 2021

Submitted by Panagiota Fatourou

1. BASIC INFORMATION

1.1 Members of the Board

Executive:
Chair: *Panagiota Fatourou*, University of Crete and ICS FORTH, Greece
Vice Chair: *Tom Crick*, Swansea University, UK
Secretary and Treasurer: *Valerie Issarny*, INRIA, France
Past Chair: *Chris Hankin*, Imperial College London, UK

Members:
Anastasia Ailamaki, EPFL, Switzerland
Oliver Grau, Intel Coorporation, Germany
Yannis Ioannidis, University of Athens, Greece
Harald Storrle, QAware, Germany
Julie Williamson, University of Glasgow, UK

Invited Observers:
Wendy Hall, University of Southampton, UK (Informatics4All)
George Eleftherakis, University of Sheffield International Faculty, Greece (CECL)
Ruth Lenon, Letterkenny Institute of Technology, Ireland (ACM-W Europe)
Enrico Nardelli, Università di Roma "Tor Vergata", Italy (Informatics Europe representative)
Björn Levin, RISE-SICS, Sweden (ERCIM representative)

1.2 Standing Committees

Informatics4All: *Wendy Hall*, University of Southampton, UK
ACM Europe Technology Policy Committee: *Oliver Grau*, Intel Coorporation, Germany
Committee of European Chapter Leaders (CECL): *George Eleftherakis*, University of Sheffield International Faculty, Greece
ACM-Women Europe: *Ruth Lenon*, Letterkenny Institute of Technology, Ireland

1.3 Ad Hoc Committees

ACM European Fellows Workgroup: *Anastasia Ailamaki*, EPFL, Switzerland (October 2019- now)
ACM Europe Research Visibility Working Group: Panagiota Fatourou, University of Crete and FORTH, Greece (April 2021 - now)

2. SUMMARY

The ACM Europe Council focuses on a wide range of ACM activities and on encouraging greater participation of Europeans in all dimensions of ACM. It aims to promote dialogue and the exchange of ideas on technology and computing policy issues between the European Commission and other governmental bodies and funding agencies in Europe, and the informatics and computing communities. It also aims to foster education in the computer science field in Europe, to award and disseminate the achievements of European computer professionals, to support gender equality in the European computing landscape, and to promote access to the computer-related scientific frontiers.

The main activities of the ACM Europe Council include:

- Engage with the European Commission of the EU and other national and international funding agencies, as well as with the European Parliament and other policy bodies in relevant activities and initiatives.
- Collaborate with other computing and scientific organizations in Europe to offer new programs and activities (in particular Informatics Europe, ERCIM, CEPIS, IFIP).
- Increase nominations of ACM European members for the ACM member grades and for the ACM Awards.
- Work with ACM SIGs and the HQs to increase the visibility of ACM in Europe and strengthen the presence of Europe in ACM.
- Support ACM Summer Schools in Europe.
- Increase the number of ACM chapters and level of chapter activity in Europe.
- Support gender equality in the European computing landscape.

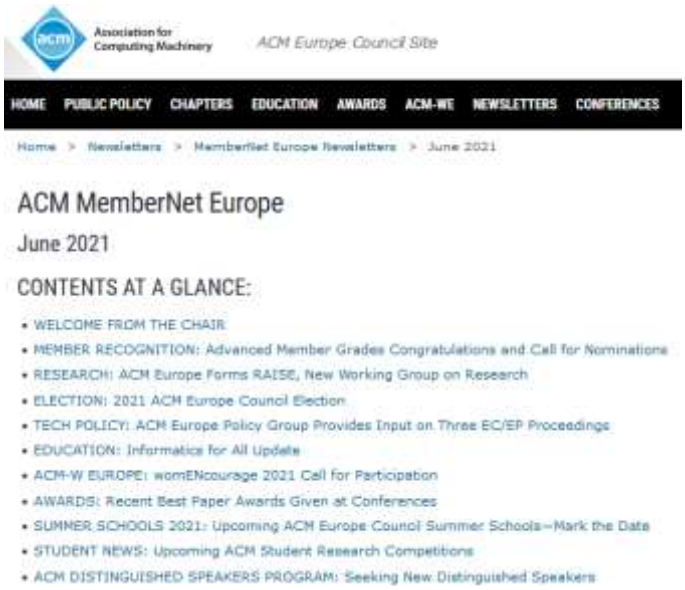
The ACM Europe Council is anticipated to have two face-to-face meetings per annum. In 2020/2021, due to the covid19 pandemic, both meetings took place online on September 15, 2020 and on March 11, 2021.

One of the goals of the ACM Europe Council is to make ACM more visible to European researches. In this context, the Council established in October 2019, the ACM Fellows working group which aims at increasing the number of successful nominations from Europe for the ACM Fellows and the ACM Distinguished Member grades. The progress of the working group is reported in the Appendix.

Moreover, the ACM Europe Council established, in April 2021, the ACM Europe Research Visibility working group (ACM Europe RAISE) with the mission of achieving greater visibility of the European research and ensure a higher degree of recognition for the achievements of European Researchers within the scope of ACM. This way the working group aspires to enhance the visibility of ACM among the European researchers. More information about ACM Europe RAISE, its goals, and its progress thus far, is provided in the Appendix.

One of the plans of the Council for 2020/2021 (as reported in the ACM Europe Annual Report from previous FY) was to achieve stronger contribution towards enhancing the list of ACM Distinguished Speakers by coming up with a list of well-known European professionals that have also been acknowledged as excellent speakers. The Council came up with 11 names of potential European candidates for ACM Distinguished Speakers, who have been invited to join the ACM DSP. Eight of them have accepted this invitation. After communication with the chair of the ACM Distinguished Speakers

Committee, the Council also provided the names of two European researchers for the ACM DSP Evaluation Committee to cover the scientific areas of 1) Computational Theory, Algorithms and Mathematics, and 2) Hardware, Power and Energy.



In 2020/2021, the ACM Europe Council has strengthened its communication mechanisms with the ACM members in Europe in the following ways:

- It was sending out emails to the ACM members in Europe to inform European researchers about upcoming deadlines for ACM Awards and Honors (through the member grades programme), and to encourage them to have a stronger participation to these ACM programmes.
- It revived the ACM Europe Newsletters, thus better informing ACM members in Europe about the Council's activities.

These activities had significant impact. As an example, in 2020, the ACM Europe Council submitted letters to inform the ACM members in Europe about their eligibility to become ACM Senior members and encourage them to nominate themselves. The impact of doing so is shown in the statistics provided in the table below. As another example, through a series of articles that appeared in ACM MemberNet Europe, ACM Europe TPC recruited a large number of new members to its Working Groups.

Moreover, the Council has contributed in increasing the number of European researchers who are nominated for ACM member grades and Awards. Specifically, members of the ACM Europe Council contributed in the preparation of three nominations of European researchers for the ACM Awards, with one of them being successful. Moreover, members of Inf4All contributed to the preparation of an additional nomination for the ACM Karl V. Karlstrom Outstanding Educator Award, and the nomination was successful.

	Total	Total Europe	Accepted Europe
2020	274	168	115
2019	158	23	14
2018	189	31	29
2017	203	32	25
2016	249	54	32
2015	236	32	31

Number of nominations for the Senior Members Grade

Another priority of the Council is to strengthen the visibility of ACM to the younger generation in Europe. To this end, the Council has agreed to sponsor two series of annual summer schools, the ACM Europe Summer School on Data Science that is organized by Yannis Ioannidis and takes place in Athens, and the ACM Europe Summer School on HPC Architectures for AI and Dedicated Applications which is organized by Fabrizio Gagliardi and takes place in Barcelona. Due to the covid19 pandemic, the summer schools did not take place in FY 2020/2021 (summer/fall of 2020). However, the summer schools are planned to continue in the future. The 2nd edition of the ACM Europe Summer School on HPC Architectures for AI and Dedicated Applications took place recently (September 2021) and it was

very successful. Moreover, Yannis Ioannidis, who has contributed significantly to this Council activity, has come up with a strategy for organizing summer schools in the context of the ACM Europe Council which is provided in the Appendix. ACM Europe RAISE will build upon this strategy to further enhance activity in this direction.

In addition to the activities described above, major activity has been carried out by the Council's Standing Committees and its working groups as described in the Appendix.

3. PLANS

For the next year, the Council envisions stronger collaboration with the ACM SIGs to better fulfil its priorities (e.g., to increase the number of ACM events in Europe and other similar activities). The Council also plans to further enhance its communication and networking mechanisms, as well as to strengthen links with the industry.

The appendix provides additional information on the forward planning of the Council's Standing Committees and working groups which carry out the major ACM Europe Council activities.

4. COMMENTS

None.

APPENDIX

Europe TPC (Report by Chris Hankin, Chair)

In fiscal year 2019/2020, the committee moved under the responsibility of the ACM Technology Policy Council (which was chaired by Lorraine Kisselburgh) from the previous status as an ACM Europe Council sub-committee.

The ACM Europe Technology Policy Committee promotes dialogue and the exchange of ideas on technology and computing policy issues with the European Commission and other governmental bodies in Europe, and the informatics and computing communities. The Committee engages in policy issues related to the importance of technology in boosting jobs, economic growth, competition, investment, research and development, education, inclusive social development, and innovation.

The Committee promotes sound public policy and public understanding of a broad range of issues at the intersection of technology and policy. Its policy statements reflect the expertise of ACM Europe Council professional members from the public and private sectors experienced in informatics, computer science, and other computing-related subjects.

As the internet is global, the Committee works with other ACM entities on publications, projects, and policies related to emergent cross-border issues, such as e-privacy, cybersecurity, cloud computing, big data, the Internet of Things, and internet governance.

Status of the Committee - Members

The Committee is comprised of the following members and ex officio:

- Chris Hankin (Chair), Paola Inverardi (Vice Chair), Oliver Grau (Past Chair), Fabrizio Gagliardi, Manuel Hermenegildo, Bran Knowles (Chair, Climate Change WG), Alejandro Saucedo (Chair, AI WG), Gerhard Schimpf (Chair, Autonomous Systems WG), Tom Crick, Wendy Hall, Andrew McGettrick, Enrico Nardelli, Gurkan Solmaz, Julie Williamson
- Ex officio: Gabriele Kotsis (ACM President), Panagiota Fatourou (ACM Europe Council Chair), Lorraine Kisselburgh (TPC Chair), Michel Beaudouin-Lafon (Vice Chair TPC), Jim Hendler (Chair USTPC), Vicki Hanson (ACM CEO), Pat Ryan (ACM COO), Adam Eisgrau (ACM Director of Global Policy)

Hankin, Inverardi, Grau, Gagliardi and Hermenegildo form the ACM Europe TPC Executive and met virtually about once per month. The full committee met virtually about once every four months. Post-COVID we intend to revert to two physical meetings of the full committee which will be co-located with the ACM Europe Council meetings.

ACM Europe TPC Statement on Digital Green Certificates

ACM's Europe Technology Policy Committee submitted a statement to the European Parliament's LIBE Committee on the use of proposed Digital Green Certificates to permit point-of-use access to personal health and other data of certificate holders between and among European Union Member States. Among Europe TPC's recommendations were to work with the World Health Organization to develop an international directory; and to protect EU citizens from "data inference," or the risk that a verifier could infer secondary health data from an individual's vaccination status alone.

Work of the committee

The committee worked on four areas that were agreed by the Europe TPC in 2019: (1) Security & privacy of smart cities; (2) IT in the light of climate change; (3) AI; and (4) Autonomous Systems. We have a standing Working Group for each area chaired by the committee members identified above (Hankin chairs the Smart Cities WG). We have prepared two draft Tech Briefs as outputs from WG1 and WG2; WG4 is developing a white paper on autonomous driving. In addition to these activities, we have been very active in responding to EU consultations. Through a series of articles in ACM MemberNet Europe, we have recruited 10 new members to Working Groups of the Europe TPC.

The strategic planning and work of the Committee was assisted from March 2021 until June 2021 by a part-time policy consultant hired as a pilot project to help promote our policy outputs and maintain a network of contacts with key policy makers. This experiment was considered highly successful and, with the assistance of ACM Development Fund backing, is planned to continue for the entirety of FY 2022.

Dissemination of statements and white papers

The Committee publicly commented on the following matters and proceedings:

- Statement on the Development and Deployment of Digital Green Certificates (April 19, 2021)
- Comments to European Commission in Digital Services Act Consultation (March 31, 2021)
- Comments on the UK National Data Strategy, ACM Europe Technology Policy Committee (December 2, 2020)

At the request of the European Parliament, the Committee also produced a white paper on Gender Bias in Automated Decision Making Systems (December 10, 2020).

ACM Europe TPC Comments on Digital Services Act

ACM's Europe Technology Policy Committee sent comments on the Digital Services Act to the European Commission ahead of a final determination regarding its adoption. It underscored two key points: 1) the success of the DSA will depend upon the ability of platforms and other regulated entities to successfully deploy automated content moderation systems; and 2) functioning of the DSA's proposed regulatory regime will depend upon non-governmental technical experts for the effective audit of platforms' and others' compliance with the Act.

Liaisons with other initiatives

The Committee closely collaborates with 'Informatics for All' ("I4All"), many of whose leaders also are active members of Europe TPC.

The Committee continues to subscribe to the Science|Business network and Committee members have attended a number of their virtual policy events. Vice Chair Inverardi spoke at their annual conference and the Chair participated in a panel discussion on AI and Liability (both in February 2021).

Through our policy consultant, the ACM Europe TPC also has made contact with the EU Parliament Science and Technology Options Assessment (STOA) Committee and virtually attended a number of their sessions.

Plans

The ACM Europe TPC has had a busy year and plans to continue this momentum. As noted above, the ACM Development Fund have approved a budget to allow ACM Europe TPC to continue in FY 2022 to employ the part-time consultant contracted with for a portion of this fiscal year. In the longer term, the Committee may seek to convert this into a part-time policy professional .

The Tech Briefs on Climate Change and Smart Cities will be finalized and published in FY 2022. The Committee also expects to finalize a white paper on autonomous vehicles and associated issues.

Diversity, Equity and Inclusion

The Committee has recently met with the Chair and Vice Chair of ACM Women in Europe (ACM-WE) with the aim of supporting their policy work and also increasing the involvement of women in the Europe TPC. The members of the Europe TPC Committee are from the UK, Germany, Italy, Spain, and Switzerland with one of the ex officio members from France. It is the Chair's hope and intention in FY 2022 to recruit additional members from Scandinavia and Central Europe to one or more of the Committee's Working Groups.

Informatics for All (Report by Andrew McGettrick)

The Informatics for All (Inf4All) coalition was created to advocate for the inclusion of Informatics as a foundational discipline in schools across Europe. Informatics for All aims at getting academia, industry, government and society together to influence education policy in Europe towards the full recognition and establishment of Informatics as a foundational discipline in schools. The coalition involves ACM Europe, CEPIS (the Council of European Professional Informatics Societies) [https://cepis.org/] and Informatics Europe [https://www.informatics-europe.org/].

After consideration it was agreed that IFIP (more particularly its Technical Committee 3 on Education, chaired by Don Passey) would be invited to join as observers. IFIP accepted enthusiastically and over the year, they have played a very active and positive role in the work of Inf4All.

The Coalition is managed by a Steering Group, with Wendy Hall as the chair and with the following members: Judith Gal-Ezer and Andrew McGettrick from ACM Europe, Gerald Futschek and Austeja Trinkunaite from CEPIS, Michael Caspersen and Enrico Nardelli (President of Informatics Europe) from Informatics Europe and now Don Passey (chair of IFIP TC 3) and Mary Webb representing IFIP TC3. This group also benefits from the support of Bobby Schnabel who acts as an Advisor.

Activity

Major activity of the Steering Committee for the reporting period is discussed below.

Ongoing Liaison with EU

informatics for all

Educating People for the Digital Age

The problem

The current world is no longer an environment populated – beyond living entities and inanimate objects – just by physical man-made objects and systems. In current society, aptly called the "digital" society, there is a huge variety and number of "digital systems", devoid of any physical substance, which affect our physical world. Just think of the entire communication and media sphere, where physical letters and messages are now completely dematerialized in the form of e-mails, posts, and tweets (and the digital systems managing them), or of the social network sphere, where digital systems more and more substitute for what once was direct meetings and encounters.

This realm of "digital systems" is driven by scientific laws, as those in the realm of physical machines, **which makes up the science called *Informatics***. It is a rigorous scholarly discipline, with its own distinctive and rich set of concepts, theories, principles and methods (see the Appendix for details), also known as Computer Science or Computing in USA and elsewhere. Its scientific relevance is backed up by about 2 million peer-reviewed articles (out of an estimated overall total of 70 million) published in academic journals throughout the world since its birth around 60 years ago.

A key part of the mission of Informatics for All is to support and work with the EU in promoting and strengthening Informatics education throughout Europe. A close relationship and an ongoing dialogue have been established with key members of the EU administration, in particular Georgi Dimitrov from EC DG Education and Culture. Early discussions seemed to infer that education in Informatics might feature prominently in the revised EU Digital Education Action Plan that ultimately appeared around September 2020. Probably as a result of Covid and the widespread move to online learning, the Plan had a very heavy emphasis on digital skills. There were two main strands: 'fostering the development of a high-performing digital education ecosystem' and 'enhancing digital skills and competencies for the digital transformation'. However, Inf4All was encouraged to refine its ideas and keep the EU informed of developments. The Informatics for All coalition participated to the consultation phase on the renovation of the Digital Education Action Plan which ran until September 4th, 2020, by submitting a position paper.

At a meeting that had taken place at the end of March 2019 in Rome, around the time of the ACM Europe Council meeting, it was agreed to formulate the Rome declaration. See https://www.informaticsforall.org/declaration This site sought to attract the attention of others who might sign up as supporters of the declaration. By May 2021, the latest date for which figures are available, around 269 signatories had been obtained. The declaration has been translated into French,

German, Greek, Hebrew, Italian, Polish, Romanian, Russian and Spanish. At that site, the *Informatics for All* logo is displayed.

CEPIS Curriculum Group

Discussion about the way forward for Informatics for All led to suggestions about developing an Informatics Curriculum Framework. Detailed curricula were the responsibility of individual education authorities throughout Europe; but a framework document would address curricular matters at a higher level of detail. CEPIS drew attention to the fact that they already had a group that had started to address such a framework. CEPIS then agreed that the development of an Informatics Curriculum Framework should be joint between the CEPIS Computing in Schools Special Interest Network (SIN) and Informatics for All. It was agreed that the liaison would lead to a stronger team effort and ultimately to better dissemination of the work on completion. That work would take account of the 2016 K-12 Computer Science Framework (k12cs.org) which has been produced jointly by ACM, code.org, CSTA and others.

Informatics Curriculum Framework

Education is a devolved matter within Europe; all countries / educational regions have responsibility for their own curricula demonstrating great diversity across Europe. To support the advancement of informatics education in Europe, a group of eight persons has been set up to produce an Informatics Curriculum Framework; there are two representatives from each of the four member organisations. This Framework should be viewed as being at a higher level than any curriculum document but it should offer guidance and challenge to those designing curricula.

The team of eight:

- Michael Caspersen (chair, and from Informatics Europe)
- Branislav Rovan, Ira Diethelm (both representing CEPIS)
- Don Passey, Mary Webb (representing IFIP TC3)
- Enrico Nardelli (Informatics Europe)
- Judith Gal-Ezer, Andrew McGettrick (ACM Europe)

An *interim* report, entitled 'Informatics Curriculum Framework for School' and dated June 2021, has now been produced. Following support from the Steering Committee, this has been circulated to interested parties for review with responses being requested by 15th September 2021; this review group includes member bodies associated with Informatics Europe, IFIP TC3 and CEPIS as well as attendees at earlier workshops and relevant groups within ACM.

Teacher Education

The education of teachers within Europe is an important topic for *Informatics for All* to address and of particular importance in terms of the implementation of the ideas in the report. Thinking on how to approach this is progressing cautiously. Both Jake Baskin from CSTA (the Computer Science Teachers Association) and Julia Adamson from the BCS have already provided very valuable input. Consideration is being given to holding a further Workshop where teacher education would form the main agenda item. The current thought of a virtual event has considerable attractions in terms of both cost and reach. One matter relating to this, and causing some reflection, is the standing that Informatics has generally within the broader curriculum.

Liaison with Pisa

Informatics for All had been invited to participate (through Enrico Nardelli) in early discussions about the OECD Pisa Science assessment. In particular what would be the basis of that and would informatics be included in this. Due to Covid, there have been no significant recent developments.

ITICSE 2021

Although not deeply involved in this conference, members of the Steering Committee (Michael Caspersen who was accompanied by Michael Kolling) did participate in overseeing the organizing of the event. ACM Europe / *Informatics for All* did support a best paper award by contributing 1000 euros. The event took place virtually and was hosted by Paderborn in Germany between June 26 and July1. The event had around 380 registrants (and around 350 participants).

CECL (Report by George Eleftherakis, chair)

Membership

George Eleftherakis (Chair)
Bozena Mannová (Vice-Chair), Gavin Doherty, Taras Panchenko, Josephina Antoniou.

The Committee of European Chapter Leaders (CECL) assists chapters in Europe, acting as a link between them and ACM, and contributes in increasing visibility of ACM among young people in Europe. It is composed of volunteers and aims to:

- Promote expansion and sustainability of ACM chapters in Europe.
- Facilitate and help improve existing chapter operation.
- Communicate and share information between chapters.
- Increase the visibility of chapters and of ACM itself.
- Promote and reward best practices.
- Mentor less-experienced members.
- Expand the Distinguished Speakers Program (DSP) in Europe and make it more easily accessible.
- Increase the European participation in the ACM International Collegiate Programming Contest (ICPC).
- Increase visibility of ACM among young people in Europe aiming to attract/sustain younger people and overall members to ACM.

At the moment, there are 96 ACM Professional and Student Chapters across Europe (Figure 1). Each of these chapters has a series of technical events that will provide both interesting technical content and career networking opportunities.

Activity

Following its strategy, CECL continued mentoring efforts to ACM chapters in Europe. Moreover, it performs a qualitative study on the substantial amount of knowledge regarding the chapters' needs and the best practices that gathered though the three workshops for chapters leaders organized by CECL in the past, and the experience gained through mentoring, in order to identify the needs of ACM Europe members, aiming to disseminate this knowledge but also carefully design new approaches to work with members in Europe. Due to the covid19 pandemic, the plans of CECL regarding the organization of physical events have been postponed for the future.

Figure 1: ACM Chapters in Europe

CECL supported events organized by the ACM chapters in Europe, as well as womENcourage 2020. Its main activity in 2020/2021 though was to actively support ACM events and

ACM recognition through the initiative of ACM Europe Council best paper awards, taking over the management of this initiative, well establishing this sub-committee and the process followed. More details on the best paper awards that have been granted in 2020/2021 are provided below.

Best Paper Awards at Conferences

The ACM Europe Council Best Paper Awards recognize authors of outstanding technical contributions to ACM conferences taking place in Europe. The award acknowledges groundbreaking research in each conference's respective field for its importance and contribution to the area, to highlight theoretical and practical innovations that are likely to shape the future of computing both in Europe and worldwide.

Each of the winners receives a plaque. In addition, there is a 1000 Euro honorarium to be split among the winners. Moreover, the recipient's paper will be provided online through the ACM Europe Council Awards page. The award is presented during the award ceremony at the conference by an ACM Europe Council member attending the conference, or by a party designated by the Council.

During the reporting period, the ACM Europe Council granted the seven awards listed below:

1. 2020 *ACM* Interactive Surfaces and Spaces Conference (*ACM ISS*), virtual event, November 2020. The ACM Europe Council Best Paper Award was awarded to Daniel Mendes, Sofia Reis, João Guerreiro and Hugo Nicolau for theie paper, Collaborative Tabletops for Blind People: The Effect of Auditory Design on Workspace Awareness.

2. 17th ACM SIGGRAPH European Conference on Visual Media Production (CVMP 2020), virtual event, 7-8 December 2020. The ACM Europe Council Best Paper Award was awarded to Wolfgang Paier, Anna Hilsmann and Peter Eisert (Fraunhofer Heinrich Hertz Institute) for their paper Neural Face Models for Example-Based Visual Speech Synthesis.

3. 16th EuroSys Conference 2021, virtual event, April 2021. The ACM Europe Council Best Paper Award was awarded to Nikos Vasilakis (MIT, USA), Konstantinos Kallas (University of Pennsylvania, USA), Konstantinos Mamouras (Rice University, United States of America), Achilleas Benetopoulos (unaffiliated), Lazar Cvetković (University of Belgrade, Serbia) for their paper Pash: Light-touch Data-Parallel Shell Processing.

4. 26th annual conference on *Innovation and Technology in Computer Science Education* (ITiCSE 2021), Paderborn, Germany, June-July 2021. The ACM Europe Council Best Paper Award was awarded to Emily Winter, Lisa Thomas and Lynne Blair for their paper `It's a bit weird, but it's ok'? How female Computer Science students navigate being a minority**.**

5. 13th ACM Conference on Web Science (WebSci 2021), virtual event, June 2021. The ACM Europe Council Best Paper Award was awarded to Megan Squire for the paper Monetizing Propaganda: How Far-right Extremists Earn Money by Video Streaming.
6. *43rd International Conference on Software Engineering (ICSE)*, Virtual (originally in Madrid, Spain), virtual event, May *2021.* The ACM Europe Council Best Paper Award was awarded to Zelin Zhao, Yanyan Jiang, Chang Xu, Tianxiao Gu and Xiaoxing Ma for their paper "Synthesizing Object State Transformers for Dynamic Software Updates".
7. 13th ACM SIGCHI Symposium on Engineering Interactive Computing Systems (EICS 2021), virtual event, June 2021. The ACM Europe Council Best Paper Award was awarded to Jakob Karolus, Francisco Kiss, Caroline Eckerth, Nicolas Viot, Felix Bachmann, Albrecht Schmidt, Paweł W. Woźniak for their paper EMBody: A Data-Centric Toolkit for EMG-Based Interface Prototyping and Experimentation.

ACM-Women Europe (Report by Ruth Lenon, chair)

ACM-WE (ACM Women in Computing Europe) Committee that was set up to fulfill the ACM-W mission in Europe is in its 9th year. Its mission is a transformed European professional and scholarly landscape where women are supported and inspired to pursue their dreams and ambitions to find fulfillment in the computing field.

Membership

Executive Committee

- Ruth G. Lennon, Letterkenny Institute of Technology, Ireland (Chair)
- Natasa Milic-Frayling, University of Nottingham, UK (Past Chair)
- Chiara Petrioli, Italy (Vice Chair for Strategy)
- Rukiye Altin, Turkey (Vice Chair for Operations & Treasurer)
- Cigdem Cengul, UK (Communications Chair)
- Maria Ribera Sancho, Spain (ACM-W Chapters Chair)

Ex-Officio

- Jodi Tims, ACM-W Chair, OH, USA
- Panagiota Fatourou, ACM Europe Chair, FORTH, Greece
- Reyyan Ayfer, Bilkent University, Turkey (ACM-W Regional Chair)
- Pat Ryan, ACM Headquarters, New York, USA

Activity

Celebrations of Women in Computing in Europe

The main activity of ACM-WE is womENcourage™ ACM Celebration of Women in Computing. The 6th womENcourage™ was hosted virtually by ADA University, Baku, Azerbaijan. The theme of the event was “The equation has two sides”. (https://womencourage.acm.org/2020). The 7th womENcourage™ will be hosted in virtual format by Czechitaz Prague, Czech Republic (https://womencourage.acm.org/2020). The theme of the event was “Bridging Communities to Foster Innovation”.

The following table summarizes the past and current womENcourage™ in numbers.

There were 7 major supporters for the 2020 event, including: PASHA Bank, Azercell, Amazon, IBM, LYIT, Informatics Europe and ACM-W. The strong level of supporters this year ensured that a very successful event was held with a surplus on the budget at the end of the event.

womENcourage™ 2020 was a first in many ways. In recognition of diversity, ACM-W Europe were extremely proud to have its first male ally chair of womENcourage™. Thanks must be given to Araz Yusubov, Azerbaijan for chairing the event and the successful fundraising. Araz, his team and the Steering Committee ensured that the event was a great success as the first virtual womENcourage™. Posters, tutorials and the social event all carried on despite the difficult circumstances. The number of attendees was impacted and will be again in 2021 but that is not unexpected. ACM-W Europe would

also like to thank the Tourism board in Azerbaijan for their work in supporting the event through various initiatives that proved popular with the attendees.

womENcourage™ in Numbers

	2018 Registration fee charged	2019 Registration fee charged	2020 Registration fee charged	2021 Registration fee charged
Attendance	**120**	**350** (409 reg.)	**213**	
Scholarships Awarded	**20** (of 75)	**108** (of 149)	20	
Posters	**38 accepted** (of 44)	**81 accepted** (of 127)	**32 accepted** (of 35)	
Supporters	**9**	**14**	**7**(€24,630)	
Countries	23	35	38 (registered), 17 (posters), 12 (scholarships)	

ACM-W Europe womENcourage™ Steering Committee

The work of steering and overseeing the event has been carried out by a working group of the ACM-W Europe. The ACM-W Europe womENcourage™ Steering Committee is Chaired by Bev Bachmayer who has been involved in the Celebration from its inception. The Steering Committee members for 2020/21 were: Beverly Bachmayer, Nuria Castles, Adriana Wilde, Monica Nugent, Ruth Lennon and Rukiye Atlan. Change over of committee members and member roles is underway throughout August and September to coincide with the next womENcourage™ event. We are proud to say that our new members include greater regional diversity and include two men.

The refined Application to Host processes, to include earlier expression of interest requests, for hosting future womENcourage™ events has been successful. To this end the steering committee are not only overseeing the 2021 in Prague and 2022 events they are also in the process of the CFP for 2023 & 2024 events. This will aid the sustainability of womENcourage™ and will ensure that appropriate planning and communications can occur aiding the success of each individual event.

ACM-W Europe womENcourage™ Trade Mark

The ACM-W Europe has placed a strong focus on increasing brand awareness in 2020 to 2021. As part of this process it was decided to seek copyright for the word womENcourage in the format as shown. The application to register WOMENCOURAGE was filed on February 11th 2021 and assigned U.S. Serial No. 90525078. The application covers both the USA and Europe. We can expect a registration certificate in about October which is roughly nine months from the process start. We eagerly await the outcome of the process. Thank you to Pat Ryan for her work on obtaining lawyers and initiating the process for us.

ACM-W Chapters in Europe

Despite the hard work by Maria Ribera-Sanchos, the ACM-W Europe Chapters Chair, and Virginia Grande, ACM-W Europe Celebrations, we have found that chapters are failing to communicate or to run events. This is not unexpected. It is anticipated that this trend will continue throughout next year. We are communicating directly with George Eleftherakis, Chair of the CECL Europe in this matter.

ACM-W Celebrations in Europe

Virginia Grande, Chair of the ACM-W Celebrations in Europe has been working with her team to keep in communication with the various chapters. There have been no celebrations this year due to the pandemic.

European Volunteer Network

Lipika Deka (Chair), Carolina Fuentes and Mercedes Torres have organized a Coffee and Chat series. The aim of this series of events is to support the mental health and well-being of our members. The Coffee and a Chat series, hosted by the EVN members, enabled the ACM-W Europe members to chat informally about their concerns or positive aspects on how to deal with the pressure brought on by COVID. Additionally, Lipika and Ruth ran an awareness session to promote the EVN network and the ACM-W Europe. The session was recorded and the video is hosted on the ACM-W Europe website.

Communications

Cigdem Sengul continues to provide exceptional work with her team providing a sustainable structure for communications with our members and the members at large. The working group members include Cigdem Sengul (Chair), Alexandra Dediu and Bedour Alshaigy, ACM-WE reached out to ACM Members in Europe via:

- Blog

  Available through the website https://acmweurope.acm.org/blog; Running a Reflections on womENcourage blog series, as well as invited posts, e.g., posts from womENcourage 2020 match the theme of the month

- ACM-W Europe Website (https://acmweurope.acm.org)

  Alexandra Dediu and Cigdem Sengul continue to update the website

- ACM-W Europe monthly newsletter (http://europe.acm.org/acm-w-europe-newsletter-archives.html)

  Cigdem Sengul continued with the yearly planner with structured topics for the monthly newsletter. The new section called 'Diversity Heroes' highlighting diversity and minorities within the ACM-W Europe has been continued this year.

- Social Media

  Social media is currently coordinated by Bedour Alshaigy (coordinator). Social media outlets include:

  Twitter (https://twitter.com/ACMWomENcourage) with 1,172 followers

  Facebook (https://www.facebook.com/womencourage/?fref=ts) with 1,197 followers LinkedIn (https://www.linkedin.com/groups/5138577)

  The company page can be found here: https://www.linkedin.com/company/acm-w-europe/

  Both Twitter and Facebook show a slight increase in followers from last year.

- Wikipedia

  The Wikipedia Working Group, chaired by Marjana Prifti Skenduli continues to work on promoting women in computing in Europe. Marjana is joined by Ruth, Elif AK and Begum Genc.

Other Sections of the ACM

The ACM-W Europe has worked this year to establish better integration with other sections of the ACM. In particular, Reyyan Ayfer has organized a meeting of the ACM-W Region Chairs to ensure that our work supports each other. This includes shared communication lines. It is expected that the structure established for regional chairs will be expanded to celebration chairs.

Future Plans

The ACM-W Europe will not only continue to work towards the goals but will also increase the impact of its activities through the extension of the working groups to include further volunteers.

- Continue to increase diversity in our working group when expanding the volunteer members
- Work on increasing the visibility of women in computing through our blog, video series, wikipedia
- Work more closely with our chapters to ensure continuity from year to year.
- Promote the ACM-W Europe through an increased focus on our branding.

ACM Europe Fellows WorkGroup (Report by Anastasia Ailamaki, chair)

Membership
Anastasia Ailamaki, EPFL, CH *(chair)*
Xavier Leroy, Collège de France, FR
Hagit Attiya, Technion-Israel Institute of Technology, IL
Luca Benini, ETHZ, CH
Elena Ferrari, University of Insubria, IT,
Georg Gottlob, University of Oxford, UK
Pablo Rodriguez Rodriguez, Telefonica Research and Alpha, ES
Per Stenström, Chalmers University of Technology, SE
Reinhard Wilhelm, Saarland University, DE

The ACM Europe Fellows WorkGroup is a newly established working group of the Council. Its mission is to ensure the elevation of excellent European ACM members to the ACM Fellow and to Distinguished Member grades. The candidates will be awarded for their outstanding achievements in computer-related science and technology.

The workgroup is comprised of 9 well-established European Researchers, all ACM Fellows, that have been carefully selected to guarantee, as a group, wide scientific and geographical coverage. In particular, the Workgroup's members are located in eight different countries in Europe and their expertise covers a wide spectrum of scientific areas: Hardware Aware Data Management, Real-Time Intelligent Data Systems, Database theory, Finite model theory, Distributed and Concurrent Computing, Computer Architectures, Embedded Systems, Security, Privacy and Trust in IoT, Blockchain, Security and Privacy for BigData, Networking, High-performance Computer Architecture, Timing Analysis for Real-Time Systems, Compiler Construction.

The main tasks of the workgroup can be summarized as follows:

- To identify eligible potential candidates.
- To maintain an updated list of potential candidate/nominator pairs.
- To establish contact with proposed nominators of approved candidates in a timely manner.
- To overall manage the nomination process.

Activity

In the Fall 2019 Serge Abiteboul stepped down as a member of the workgroup and Xavier Leroy accepted to be a new member. The second-year focus of the Workgroup has been to increase the number of renowned European Researchers nominated for the ACM Fellow grade. The Workgroup holds regular meetings for brainstorming. The workgroup had two successful nominations from 2020, while their progress until the end of the current reporting period includes four new confirmed candidate/nominator pairs for the September 2021 ACM Fellows call and ten more potential candidates which will either be nominated in the next round or need to first fulfill ACM membership requirements.

Future Planning

Once the appropriate procedures for increasing the number of nominations for the ACM Fellows grade will have been established and stabilized, the focus of the Workgroup will be put on increasing the

number of nominations of European researchers for the ACM Distinguished Member grade. A concern has been raised about some people considering the Distinguished Member grade as a consolation prize instead of the Fellow grade, but the workgroup is working to change this impression. Another concern is that there is virtually no feedback as to the reasons for rejected fellow applications, which would be invaluable feedback to the workgroup. Last but not least, ACM India council was inspired by the efforts of the ACM Europe Fellows workgroup and is starting a similar group. The ACM Europe workgroup has shared all the documentation developed and sources found as to help get the India group started.

A longer-term and more ambitious goal is to change the culture toward encouraging people worldwide to think about nominations.

ACM Europe Research Visibility Working Group (Report by Panagiota Fatourou, chair)

Members (in alphabetic order)

1. **Rosa M. Badia**, Barcelona Supercomputing Center, Spain
2. **Michel Beaudouin-Lafon**, Université Paris-Saclay, France
3. **Liliana Dobrica**, University Politechnica of Bucharest, Romania
4. **Panagiota Fatourou**, FORTH and University of Crete, Greece (Chair)
5. **Valerie Issarny**, Inria, France
6. **Georgia Koutrika**, Athena Research Center, Greece
7. **Christian Pilato**, Politecnico di Milano, Italy (Secretary)
8. **Alejandro Saucedo**, The Institute for Ethical AI, UK
9. **Marc Shapiro**, Sorbonne-Université and Inria, France
10. **Per Stenstrom**, Chalmers University of Technology, Sweden
11. **Sabine Susstrünk**, Ecole Polytechnique Fédérale de Lausanne, Switzerland

The ACM Europe Research Visibility working group (ACM Europe RAISE) has been established on April 2021 as a working group of the Council. The workgroup is comprised of 11 well-known European Researchers. This group of researchers has been carefully selected to guarantee wide scientific and geographical coverage. The members of the group are located in eight different European countries: Switzerland, Sweden, France, Spain, Italy, Greece, Romania. Their research expertise covers the following scientific fields: Image Processing and Visual Representation, Software Engineering, Biomedical Engineering, Theory and Practice of Distributed Computing, High Performance Computing, Data Engineering, Embedded Systems, Information Technology, and Artificial Intelligence. The group is comprised of 6 women and 5 men, thus achieving good gender balance.

Mission

Achieve greater visibility of the European research and ensure a higher degree of recognition for the achievements of European Researchers within the scope of ACM Europe.

Goals

1. Increase visibility of European research excellence.
2. Promote Europe-centric events.
3. Work with the ACM Management and collaborate with the SIGs to make Europe more visible to ACM and ACM more visible to Europe.
4. Increase awareness about existing opportunities for recognition of the work of European researchers through the ACM programmes and activities and promote the participation of European researchers in such activities.
5. Create new opportunities for recognition of the work of European researchers.

In all the above goals, inclusiveness (in terms of gender, ethnicity, color or race, etc.) is a dimension of high priority.

Objectives

1. Come up with a strategic document which will propose specific directions to work on in order to achieve each of the goals.
2. Produce the appropriate material for the implementation of the proposed actions.
3. Implement new activity (or monitor its implementation).
4. Evaluate the outcomes of the WG and its activities, and revise the strategic document appropriately.

Management Structure

Chair: Panagiota Fatourou
Secretary: Christian Pilato
Liaison with the ACM Europe Fellows WorkGroup: Per Stenstrom

There is a work package devoted to achieving each one of the goals. Each work package has a leader and at least four team members, as described in the following table:

WG Member	WP1 (Goal 1)	WP2 (Goal 2)	WP3 (Goal 3)	WP4 (Goal 4)	Goal 5
Rosa M Badia	X [Leader]				X
Michel Beaudouin-Lafon	X		X [Leader]		
Liliana Dobrica				X	X [Leader]
Panagiota Fatourou	X	X	X	X	X
Valerie Issarny	X		X		
Georgia Koutrika		X [Leader]			X
Christian Pilato		X		X [Leader]	
Alejandro Saucedo				X	X
Marc Shapiro		X	X		
Per Stenstrom	X		X		
Sabine Susstrunk	X	X			

Goal 1: Increase visibility of European research excellence
Goal 2: Promote Europe-centric events
Goal 3: Collaboration with the ACM Management and the SIGs
Goal 4: Increase awareness about opportunities for recognition of the work of European researchers
Goal 5: Create new opportunities for recognition of the work of European researchers

Activity

The members of the working group have a monthly meeting of one and a half hours. Although the working group is active only for a few months, it has worked full-speed to achieve its objectives.

The working group is currently organizing a webinar for European researchers, which will take place on October 1, 2021. The program of the webinar appears in the table below.

Webinar Programme (times in CET)

Session 1: Talk to the ACM Council Chair and the ACM Europe Council Chair	
16:00 - 16:10	Short presentations of the ACM Council and the ACM Europe Council activity
16:10 - 16:20	Ask me anything session
Session 2: ACM Awards and Member Grades	
16:20 – 16:30	Short presentation of ACM Awards and Member Grades
16:30 – 17:00	Panel "**Getting Recognized by ACM Awards and Honors**" Panel Members: • **Jim Larus**, Chair of ACM Fellows Committee • **Roy Levin**, Chair of ACM Awards Committee • **John R. White**, Chair of ACM Awards Committee • **Nuria Oliver**, Member of ACM Fellows Committee • G**eraldine Fitzpatrick**, member of ACM Distinguished Member Committee
17:00 – 17:25	Questions and discussion with the audience
17:25 – 17:30	Closing

ACM Europe RAISE has already created five work teams and has assigned management roles. Through a series of meetings, we have discussed different axes that need to be addressed to achieve our goals. The WG is currently working on preparing the strategic document.

Future planning

ACM Europe RAISE will continue to work towards achieving its goals. We envision to have the strategic document ready by March 2021. The document will include a comprehensive activity plan which will drive our future activity.

In the meantime, we plan to organize an additional event, most probably for the younger generation, by the end of the fiscal year. We have also been discussing ideas for starting new initiatives in the context of Goal 5, and we envision to start such an initiative by the end of the FY 2021/2022. Also, we plan to support and contribute towards strengthening the activity of the Council on enhancing its communication and networking mechanisms. Finally, we would like to enhance the activity that has started in the Council regarding the Summer Schools (using as a starting point the strategy proposed by Yannis Ioannidis which is provided in the next section).

ACM Europe RAISE is currently in the process of attempting to increase its size by recruiting a group of external collaborators who would be willing to contribute as volunteers, to the tasks of each work package. Two of the newly-elected Council members are willing to contribute to the activities of the working group.

ACM Europe Summer Schools - Thoughts for a Comprehensive Strategy

by Yannis Ioannidis

This writeup represents the thoughts of the author on how to come up with a comprehensive strategy for Summer Schools, organized by ACM Europe, based on his experience with organizing several of Summer Schools on the topic of Data Science the last years.

Summer Schools are a separate instrument for serving the computing community, achieving different goals from those of typical conferences and their various tracks and workshops. They last longer (one or two weeks) than the other traditional meetings, they focus on educating, and in particular, educating young researchers, they can be on a general or specialized topic, and they involve a small number of students (50-100). Usually, all students stay together in the same place, the venue of the School lectures, and ideally this is the case for all the instructors as well. This co-existence of everyone during lectures as well as social activities facilitates learning, leads to the formation of groups that may continue to interact way beyond the duration of the School, and brings upcoming researchers and other computing professionals closer to ACM.

Within ACM in general, currently SIGCHI organizes Summer Schools in a systematic way, while other Schools are organized by other ACM nodes more or less on an ad hoc and/or circumstantial basis. ACM Europe could follow suite, design a regular Summer School program with a well-chosen portfolio, and implement it in a staged fashion in the years to come.

Some suggestions by the author on how to come up with such a program are as follows:

Content: Some topics may be chosen top down, by the Council choosing a topic it thinks is important (and finding a person to run it) or choosing a person who works in a broad area (who would then find the particular topic within his/her area for a School). After the program has matured a bit, some topics may be chosen bottom-up as well: The Council may have a yearly open call for Schools and then choose the best among (short) proposals that would be submitted. A topic that has been successfully repeated a few times may lead to the establishment of a Summer School Series that will take on a life of its own, always under the ACM Europe umbrella. Even established Series should be evaluated each year, based on the educational and financial results of its last edition and the plans for the next one.

As seeds for this program, one should consider Summer Schools on “Data Science” that have occurred these past two years, chaired by the author, and on “HPC Architectures for AI and Dedicated Applications”, chaired by Farbizio Gagliardi (see Annual Report of the Council for FY 2019/2020 for more details). They were both very successful based on student evaluation scores and other indicators. Successful Summer Schools can become Series and continue yearly, with decreasing (and soon reaching zero) sponsorship from ACM.

Finances: With multiple Summer Schools taking place within a single year in the future, investment in each one should be decided comprehensively by the Council based on certain criteria. New Schools should be helped more to get off the ground, while those running longer should become increasingly more sustainable through their student fees and other sponsorships (from SIGs, academic/research institutions, and industry). Any surplus that a School may have should be maintained and earmarked for funding follow-up editions, in the case of a School Series, or returned to the ACM Europe accounts, in the case of an individual School. Overly successful established Summer School Series should be giving part of their surplus to ACM Europe.

Series Invariants: Unlike conferences, a Summer School Series may keep invariant one or more of its parameters: topic (which should be typically the case), main organizers, location, duration, etc. Examining existing Summer Schools series, one sees a great variety of approaches used: Some Summer Schools are always on the same topic, held in the same venue, and organized by the same people, while others are every year on a different topic, held in a different location, and organized by different people.

ACM Europe should be flexible in this regard, let each Series be built on the most appropriate invariants and grow accordingly, evaluating each time the success of each Series' model and intervening when adjustment may be necessary.