Candidate for Chair

Natalie Enright Jerger
University of Toronto, ON, Canada

BIOGRAPHY

Academic Background:
Ph.D., University of Wisconsin-Madison, 2008, Electrical Engineering.

Professional Experience:
Associate Chair, University of Toronto, ON, Canada, 2022 – Present;
Professor, University of Toronto, ECE, ON, Canada, 2017 – Present;
Associate Professor, University of Toronto, ECE, ON, Canada, 2014 – 2017.

Professional Interest:
Computer architecture, Interconnection Networks, Approximate Computing, Accelerators, Intermittent Computing.

ACM Activities:
Vice Chair, SIG Governing Board, 2022 – Present;
Vice Chair, SIGARCH, 2019 – Present;
Co-Chair, ACM Council on Diversity and Inclusions, 2019 – 2021;
Executive Committee, SIGARCH, 2015 – 2019.

Membership and Offices in Related Organizations:
Mildred Dresselhaus Medal Committee, IEEE, 2020 – 2022;
Executive Committee, IEEE CS TCCA, 2015 – 2018.

Awards Received:
Engineering Institute of Canada Fellow, 2023;
IEEE Fellow, 2021;
Canada Research Chair in Computer Architecture, 2019;
ACM Distinguished Scientist, 2018.

STATEMENT

Having served for 8 years on the SIGARCH Executive Committee, first in the role of director and now in the role of Vice Chair, I would be honoured to serve as the chair of SIGARCH. During my tenure with SIGARCH, I have helped institute new awards, including the Outstanding Dissertation Award and the ISCA best paper award. I served on a committee to propose changes to our review processes which ultimately resulted in a 3-deadline

approach with major revision decisions at ASPLOS 2023, co-chaired by Michael Swift and myself.

Our community has grown substantially in recent years both in terms of the numbers of papers published and the number of participants. I will continue to support outreach to undergraduate students and build on programs that enhance the equity, diversity, and inclusion of our community. We need to understand how to hold successful hybrid conferences to continue to support diverse geographic participation.

We need to be mindful of the mental health and wellness of our community. Publishing expectations are increasing for junior researchers, which also puts pressure on the review system. We need to focus on a more sustainable approach to publishing and supporting the careers of junior researchers.

Candidate for Vice Chair

José F. Martínez
Cornell University, Ithaca, NY, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Illinois at Urbana-Champaign, 2002, Computer Science.

Professional Experience:
Lee Teng-hui Professor, Cornell University, Ithaca, NY, USA, 2002 – Present;
Associate Dean for Diversity and Academic Affairs, Cornell University, College of Engineering, Ithaca, NY, USA, 2020 – Present;
Associate Director, Cornell University, School of Electrical & Computer Engineering, Ithaca, NY, USA, 2019 – 2020.

Professional Interest:
Computer Architecture.

ACM Activities:
Member of the Board of Directors, SIGARCH, 2019 – Present;
Steering Committee Member, MICRO, SIGMICRO, 2019 – Present;
Steering Committee Member, ISCA, SIGARCH, 2020 – Present;
General Co-chair, ISCA 2020 & 2021, SIGARCH, 2019 – 2021.

Membership and Offices in Related Organizations:
Chair, Transactions Operating Committee, IEEE Computer Society, 2017;
Editor-in-Chief, IEEE Computer Architecture Letters, IEEE Computer Society, 2013 – 2016;
Associate Editor-in-Chief, IEEE Computer Architecture Letters, IEEE Computer Society, 2011 – 2012.

Awards Received:
Fellow, IEEE, 2021;
Distinguished Lecturer, SHPE, 2015;
Best Paper Nomination, HPCA, 2015;
Best Paper Nomination, MICRO, 2006.

STATEMENT

I have had the privilege of being a member of the SIGARCH Board of Directors since 2019. These were unusually challenging times. The pandemic upended billions of lives

worldwide, and researchers had to pivot quickly to holding all kinds of online meetings, including international conferences. A graduate student's suicide shook our community to the core, forcing us to take a hard look at how best to uphold our ethical values and protect whistleblowers. Time and again, we came together admirably; at the same time, much work remains.

First, we should continue to work relentlessly to ensure that we all abide by the same rules and principles. Reporting ethics violations should be safe and effective, investigations timely and thorough, and penalties conducive to stopping any misconduct and deterring future instances. Second, as part of our effort to become a more inclusive research community, we should start a discussion on best practices for more effective and empathetic mentoring of younger researchers. Third, we should take stock of our in-pandemic experience to assess how best to serve our global membership, maximizing participation without losing the opportunity to develop personal connections.

Candidate for Vice Chair

Andreas Moshovos
University of Toronto, ON, Canada

BIOGRAPHY

Academic Background:
Ph.D., University of Wisconsin-Madison, 1999, Computer Sciences.

Professional Experience:
Professor, University of Toronto, ON, Canada, 2000 – Present;
Assistant Professor, Northwestern University, Evanston, IL, USA, 1999 – 2000.

Professional Interest:
Computer Architecture.

STATEMENT

Our reviewing and program committee selection practices have fallen behind the times, and this impacts our mental health, our careers, and is discouraging younger yet talented people from joining the field. I do not believe that I have all the answers; however, I do believe that change is needed, and it is needed now.

My goal is to facilitate a consultation process to revise our practices so that works get a fair assessment and are given sufficient tools to be revised without going through endless reviewing cycles. Further, I wish to ensure that people are given the chance to participate in the community without having to rely only on pedigree.

Candidate for Treasurer

Yasuko Eckert
Advanced Micro Devices, Bellevue, WA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Wisconsin-Madison, 2011, Computer Sciences.

Professional Experience:
Researcher, Advanced Micro Devices, Bellevue, WA, USA, 2011 – Present;
Research Assistant, University of Wisconsin-Madison, Madison, WI, USA, 2006 – 2011.

Professional Interest:
Computer architecture, System architecture, Accelerators, Die stacking technologies, Emerging architectures.

ACM Activities:
ISCA Workshops Chair, SIGARCH, 2022;
ACM Student Research Competition Grand Finals Judge, ACM, 2022;
ACM MICRO Student Research Competition Co-Chair, SIGMICRO, 2021;
ACM MICRO Student Research Competition Co-Chair, SIGMICRO, 2020.

Membership and Offices in Related Organizations:
Associate Editor, IEEE Micro, 2020 – Present;
Best Paper Award Committee, IEEE Micro, 2022;
Associate Editor, IEEE Transactions on Multi-Scale Computing Systems, 2018.

Awards Received:
IEEE Senior Member, 2018.

STATEMENT

I am honored to be nominated for SIGARCH Treasurer.

I have previously served in leadership positions to help move our community forward both technically and via Diversity, Equity, and Inclusion (DEI). I've served on Organizing Committees of top-tier computer architecture conferences four times, including the ISCA Workshops Chair in 2022. I've also served on the Technical Program Committees and External Review Committees of several architecture conferences, and I am currently an IEEE Micro Associate Editor. To contribute to DEI initiatives, I am a committee member

of CARES, and I served on the Organizing Committee of Women in Computer Architecture.

The first conference I attended was ISCA when I was a new graduate student. The many conferences I have been to since have benefited me professionally and personally, allowing me to network with other members of the community. Doing so has continually reinvigorated my passion for computer architecture. I would be honored to give back in this capacity.

If elected, I will work to further strengthen the value of SIGARCH. In my role as Treasurer, I would ensure that we have a solid financial foundation and use our resources wisely to grow and enable the community.

Candidate for Treasurer

Esha Choukse
Microsoft, Redmond, WA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Texas at Austin, 2019, Computer Architecture.

Professional Experience:
Senior Researcher, Microsoft, Redmond, WA, USA, 2021 – Present;
Hardware Architect, Microsoft, Redmond, WA, USA, 2019 – 2021;
Research Assistant, UT Austin, Austin, TX, USA, 2014 – 2019.

Professional Interest:
Cloud efficiency, Sustainability, Efficient GPU architecture, QoS in servers, Memory architecture.

ACM Activities:
MICRO Publications Chair, SIGARCH, 2023 – Present;
MICRO PC member, SIGARCH, 2020 – Present;
ISCA PC member, SIGARCH, 2021 – 2023;
HPCA PC member, SIGARCH, 2022.

Membership and Offices in Related Organizations:
ICCD special sessions co-chair, IEEE, 2021;
WiCArch Mentor, SIGARCH/WiCArch, 2021 – 2022.

STATEMENT

I hope to give back to the computer architecture research community by serving on this committee. Apart from the regular commitments as a treasurer, I have two ideas that I would like to implement.

First, to make the SIGARCH conferences more inclusive, I propose satellite hubs during the conference. As an undergraduate student in India, despite being in one of the premier institutes, I had almost zero visibility and understanding of the conferences in the field. It is quite difficult for overseas professors to fund their students' travel. Having satellite conference hubs in other geographic locations with local academic and industry representatives would provide a good and relevant networking opportunity for students in the region.

If elected, I will work on implementing this, with a pilot in India, given my experience and contacts there. Second, I propose having lightning talks from representatives from different companies at our larger conferences. For academics working on topics relevant to the industry, it is always good to be informed by the current “top of the mind” challenges in the industry. While an industry panel helps, a lightning talk session allows different representatives to talk about different challenges their company is facing.

Candidate for Board of Directors

Rajeev Balasubramonian
University of Utah, Salt Lake City, UT, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Rochester, 2003, Computer Science.

Professional Experience:
Professor, University of Utah, Salt Lake City, USA, 2003 – Present.

Professional Interest:
Memory Systems, Near Data Processing, Security, Accelerators.

ACM Activities:
Computer Architecture Today Blog Editor, SIGARCH, 2019 – 2022;
ASPLOS Steering Committee Member and co-Chair, SIGARCH, 2014 – 2016;
ASPLOS General Co-Chair, SIGARCH, 2014.

Membership and Offices in Related Organizations:
Associate Editor, Computer Architecture Letters, IEEE, 2017 – 2021;
HPCA 2019 Program Co-Chair, IEEE, 2019.

Awards Received:
IEEE Fellow, 2021;
Google Faculty Research Award, 2020;
Intel Outstanding Research Award, 2017;
NSF CAREER Award, 2006.

STATEMENT

I am grateful for ACM SIGARCH's stewardship through the last many challenging years. I am pleased with the recent arc of ACM policies, and I'm excited to bend them further. I have taken on various roles in recent years that have hopefully prepared me for the many complex issues that come before the ACM SIGARCH Board. While administrative roles are typically thankless, I am excited for the opportunity to create supportive and welcoming environments for the next generation of researchers. I am especially keen to make an impact in the area of peer review. While I like the direction taken by the ASPLOS'23 review process, I believe it will take years of refinements to arrive at a model that is both fair to authors and manageable for reviewers.

Candidate for Board of Directors

Yungang Bao
Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China

BIOGRAPHY

Academic Background:
Ph.D., Institute of Computing Technology, Chinese Academy of Sciences, 2008, Computer Engineering.

Professional Experience:
Chief Scientist, Beijing Institute of Open-Source Chip, Beijing, China, 2021-Present;
Faculty, Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China, 2008-Present;
Postdoc, Princeton University, Princeton, New Jersey, USA, 2010-2012.

Professional Interest:
Agile chip design, hardware/software co-design.

ACM Activities:
Editorial Committee Member, ACM SIGARCH blog; 2022-Present;
Chair, ACM SIGOPS ChinaSys, 2022-Present.

Membership and Offices in Related Organizations:
Vice chair of China Computer Federation (CCF) SIG Open-Source, 2022-Present;
Board of Director (BoD) and Technical Steering Committee (TSC) of RISC-V International; 2020-Present.

Awards Received:
China's National Lofty Honor for Youth under 40, 2019;
CCF-IEEE CS Young Computer Scientist Award, 2019;
CCF-Intel Young Faculty Award, 2013.

STATEMENT

The computer architecture community in China is booming over the past decade in terms of high-quality research works, top conference papers, services in organization committees etc. However, there have not been any representatives serving on the SIGARCH Executive Committee (EC). I will participate in the election on the behalf of the computer architecture community in China. If elected, I will play the role of the hub by connecting three groups of computer architects: 1) the international ACM SIGARCH community, 2) the research community in China and 3) the industry in China. My

previous experience qualifies me to play the role. For example, I founded China RISC-V Alliance (CRVA), organized several domestic technical conferences and events which gathered thousands of participants, had extensive connections with hundreds of entities including companies, venture capitals, universities and research institutes

Candidate for Board of Directors

Arkaprava Basu
Indian Institute of Science, Bengaluru, India

BIOGRAPHY

Academic Background:
Ph.D., University of Wisconsin-Madison, 2013, Computer Sciences.

Professional Experience:
Associate Professor, Indian Institute of Science, Bengaluru, India, 2022 – Present;
Assistant Professor, Indian Institute of Science, Bengaluru, India, 2018 – 2022;
Researcher/Member Technical Staff, AMD Research, Austin, TX, USA, 2014 – 2018.

Professional Interest:
Computer architecture, Operating system.

ACM Activities:
Sponsorship co-chair, ACM ASPLOS'21 conference, 2020 – 2021.

Membership and Offices in Related Organizations:
Mentor, Undergrad Architecture Mentoring (uArch) Workshop, 2022;
Mentor, Undergrad Architecture Mentoring (uArch) Workshop, 2021.

Awards Received:
Google India Research Award, 2022;
Intel Rising Star Faculty Award, 2021.

STATEMENT

I am humbled by the potential opportunity to give forward to the community if elected to the ACM SIGARCH board. A key part of my platform would be to help expand SIGARCH's reach to parts of the world where it is less visible and active today. I hope to channel my experience across both hemispheres --- nearly ten years in the US and more than five years in India --- to listen well and represent the views of SIGARCH members across continents. Learnings from the pandemic era can help SIGARCH and its major conferences reach a broader audience in its way to become more inclusive.

The second key objective of my platform would be to explore ways in which SIGARCH can expand its partnerships with other SIGS like SIGOPS, SIGPLAN, and SIGCOMM. One can imagine hosting joint workshops and events to bring members

of related SIGs closer. In the era of slowing Moore's law and ever-increasing computing needs, it is essential for SIGARCH to expand its influence beyond its own members.

Finally, I hope to channel my experience across the industry and academia to help SIGARCH create enabling platforms for fostering deeper and mutually enriching interactions between the two.

Candidate for Board of Directors

Michael Ferdman
Stony Brook University, Stony Brook, NY, USA

BIOGRAPHY

Academic Background:
Ph.D., Carnegie Mellon University, 2012, Electrical and Computer Engineering.

Professional Experience:
Associate Professor, Stony Brook University, Stony Brook, NY, USA, 2018 – Present;
Assistant Professor, Stony Brook University, Stony Brook, NY, USA, 2012 – 2018;
Research Assistant, Carnegie Mellon University, Pittsburgh, PA, USA, 2004 – 2012.

Professional Interest:
Computer Architecture, Computer Systems, Cloud Computing, Machine Learning, Cyber Security.

Awards Received:
Young Academic Inventor's Award from the NAI SBU Chapter, 2020.

STATEMENT

The computer architecture community was very welcoming to me, first when I was a graduate student and then as I began my faculty career. What I have come to realize is that this community requires committed leadership, not just to start new and exciting initiatives, but also to get stuff done.

I'd like to see SIGARCH continue to be a fair, merit-based, welcoming community, and to maintain our core guiding principles as the community and the world evolves, as our membership increases, as paper submission counts rise, and as we embrace the new realities of digital connectivity. I'm happy to offer my time to help maintain and grow our community, and to continue making it as welcoming to others as it has always been to me.

Candidate for Board of Directors

Boris Grot
University of Edinburgh, UK

BIOGRAPHY

Academic Background:
Ph.D., University of Texas at Austin, 2011, Computer Science.

Professional Experience:
Associate Professor, University of Edinburgh, Edinburgh, UK, 2018 – Present;
Assistant Professor, University of Edinburgh, Edinburgh, UK, 2014 – 2018;
Post-doctoral researcher, EPFL, Lausanne, Switzerland, 2011 – 2013.

Professional Interest:
Processor architecture and microarchitecture, Memory systems, Interconnection networks, Servers, datacenters and cloud, Performance evaluation of real-world applications and systems.

ACM Activities:
Board of Directors, SIGARCH, 2019 – Present;
Program Chair, MICRO-55, SIGMICRO, 2022;
Information Director, SIGARCH, 2014 – 2019.

Membership and Offices in Related Organizations:
General Chair, HPCA-30, IEEE TCCA, 2023.

Awards Received:
ASPLOS Distinguished Artifact Award, 2021;
IEEE Micro Top Picks in Computer Architecture: Honorable Mention, 2020;
PPoPP Best Paper Nominee, 2020;
HPCA Best Paper Award, 2019.

STATEMENT

It has been an honor and a privilege to serve on the board of directors of ACM SIGARCH over the past four years. In this position, I have focused on improving various aspects of our community's reviewing processes, including co-authoring a document codifying a set of best practices for conference reviewing, including ethics guidelines, best practices for authors and reviewers, a policy on non-refereed publications (e.g., ArXiv), etc. This document has been widely adopted by program

chairs of architecture conferences, including myself when running MICRO 2022, as well as by those outside of the computer architecture community.

As the Communications Chair of ACM SIGARCH, I co-launched the Computer Architecture Podcast series, which features pre-recorded interviews with notable computer architects. Ten episodes later, the total number of playbacks stands at over 16K.

Going forward, I plan to continue strengthening our reviewing processes by launching a conflict-tracking database (ConflictDB), already under development thanks to SIGARCH funding. I also wish to strengthen our collaboration with other computer architecture organizations (TCCA, SIGMICRO) to further unite and better the community.

Candidate for Board of Directors

Aamer Jaleel
NVIDIA, Westford, MA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Maryland, 2006, Electrical Engineering.

Professional Experience:
Principal Research Scientist, NVIDIA, Westford, MA, USA, 2015 – Present;
Principal Engineer, Intel, Hudson, MA, USA, 2004 – 2015;
Visiting Professor, University of Minnesota, Minneapolis, MN, USA, 2014 – 2015.

Professional Interest:
Computer Architecture, Memory Systems, Performance Modeling, Workload Characterization, Security.

STATEMENT

I am honored to be invited to run for the SIGARCH Board this year. My goals for running are to improve upon the state-of-the-art in the following areas:

a) Reduce Randomness in Review Process -- As Co-Program Chair for MICRO 2021, we sought to reduce the randomness in the review process through better reviewer assignments and reducing dependence on large PC-wide votes. I would like to investigate alternate strategies, such as reviewer continuity across all three architecture conferences to reduce randomness.

b) Better Review Process through Reviewer Accountability -- As Co-Program Chair for MICRO 2021, for the first time, we gave authors the opportunity to provide feedback on reviews received. This helped us understand the author's perspective on the quality of reviews received and provide reviewers feedback on the quality and tone of their written reviews. Periodic/continued surveys can help us improve review quality and the review process.

c) Establish a uniform Test-of-Time Award Selection process -- ISCA, HPCA, MICRO, and ASPLOS all have different criterion for Test-of-Time selection. It would be great to have a uniform selection process that enables multiple seminal papers to be eligible rather than just one per year (like in ISCA).

Candidate for Board of Directors

Martha Kim
Columbia University, New York, NY, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Washington, 2008, Computer Science and Engineering.

Professional Experience:
Chair, Computer Engineering, Columbia University, New York, NY, USA, 2019 – Present;
Associate Professor, with tenure, Columbia University, New York, NY, USA 2017 – Present;
Visiting Research Scientist, Google, New York, NY, USA, 2018 – 2019.

Professional Interest:
Computer Architecture, Low Power Computing, Compiler Design, Domain Specific Computing, Synthetic Biology.

ACM Activities:
Member, Board of Directors, SIGARCH, 2019 – Present;
Member/Chair, SIGARCH/TCCA Outstanding Dissertation Award Committee, 2021 – Present;
Member/Chair, Doctoral Dissertation Award Committee, 2016 – 2018.

Membership and Offices in Related Organizations:
Member/Chair, ISPASS Steering Committee, 2019 – Present;
Member/Chair, IEEE TCCA Young Computer Architect Award, 2018 – 2020;
Member, IEEE TCCA Executive Committee, 2017 – 2018.

Awards Received:
CRA-W Borg Early Career Award, 2020.

STATEMENT

I am honored to stand for re-election to the ACM SIGARCH Board of Directors. I have been active in the computer architecture community for fifteen years and am a lifetime member of the ACM. I have been grateful to participate in the leadership of the community and wish to continue that engagement.

During my three years on the SIGARCH Board, I have been focused on matters of conference health, tracking conference “vital signs” like attendance and financials. I have also helped the effort to gather and document conference best practices and resources, formalizing Guidelines for SIGARCH Conferences, and two resource packets for conference General Chairs and PC

Chairs. Lastly, I have developed and maintained the Architecture PC Database, which aggregates publicly available program committee information for ISCA, MICRO, ASPLOS, HPCA, and IEEE Micro TopPicks dating back to 2014. All these resources are made available to make the operations of our conferences more transparent, efficient, and inclusive.

In my second term, I would like to continue these quantitative efforts by analyzing conference attendance patterns over time. This would help us better understand who we are as a community, and to reason about conference organizational questions, particularly around timing and location.

Candidate for Board of Directors

Adrian Sampson
Cornell University, Ithaca, NY, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Washington, 201, Computer Science & Engineering.

Professional Experience:
Assistant/Associate Professor, Cornell University, Ithaca, NY, USA, 2016 – Present;
Visiting Researcher, Google, Seattle, WA, USA, 2022 – Present;
Visiting Researcher, Microsoft, Redmond, WA, USA, 2015 – 2016.

Professional Interest:
Computer architecture, Programming languages, Compilers, Approximate computing, Accelerator design.

ACM Activities:
SIGARCH Social Media Editor, SIGARCH, 2017 – Present;
SIGPLAN Information Director, SIGPLAN, 2021 – Present.

Awards Received:
Google Research Scholar Program award, 2022;
IEEE TCCA Young Computer Architect Award, 2021;
NSF CAREER award, 2019.

STATEMENT

I look forward to serving the computer architecture research community as a member of SIGARCH's board of directors.

If elected, my main focus would be on making the architecture community safer, more accessible, more inclusive, and more diverse. SIGARCH leads a range of fantastic initiatives along these lines -- notably, WICARCH, the launch of CARES, and its support for CASA -- and we can also do more. We have an opportunity to build on this foundation to make the architecture community a supportive environment for its current members and an attractive place for new ones.

I believe in open access. I will work toward universal, affordable, no-strings-attached open-access publishing by advocating for new models within ACM as a whole.

Ethics and trust in peer review have also obviously been problems for the SIGARCH community over the past several years. I would support policies and programs that preserve the integrity of our publications.

Finally, I support efforts to rethink the traditional conference publishing model. While many decisions are in the hands of conference steering committees, SIGARCH should advocate for experimentation with schedules and reviewing models, in the vein of ASPLOS's new multiple-deadline system.