Candidate for Chair

Michael Gschwind
IBM Systems, Yorktown Heights, NY, USA

**BIOGRAPHY**

**Academic Background:**
Ph.D., Technische Universität Wien, 1996, Computer Engineering.

**Professional Experience:**
Chief Engineer, Machine Learning and Deep Learning, IBM Systems, Yorktown Heights, NY, 2015 – Present;

**Professional Interest:**
Artificial Intelligence, Machine Learning and Deep Learning; Accelerator Architectures; System Architecture; Programming Models and Application Interfaces; Next-generation workloads and application domains.

**ACM Activities:**
SIGMICRO Executive Committee, ACM SIGMICRO, 2008 – Present;
Technical Program Chair, ACM/IEEE/IFIP Parallel Architectures and Compilation Techniques, 2010;
General Chair, ACM International Conference on Supercomputing (ICS), 2009;
Steering Committee Member, PACT, ICS, Computing Frontiers, 2008 – Present.

**Membership and Offices in Related Organizations:**
IEEE Fellows Committee, 2008 – Present.

**Awards:**
Fellow, IEEE, 2008.

**STATEMENT**

It is my great pleasure to run for Chair of ACM SIGMICRO. As the application domains for computer systems expand from traditional application domains to a broad range of emerging applications (from embedded systems to the Internet of Things; from traditional systems to systems embracing AI techniques, the new workloads and operating environments are calling for microarchitecture innovation.
The history of the computer industry has always been one of microarchitecture: inventing and building new processors to power the next generation of systems. From Babbage’s difference engine to modern multi-core microprocessors, the history of computing machinery has been the evolution of the structure of computing machinery and its interaction with the applications of its day. I believe SIGMICRO is in a unique position to enable its members to continue making the critical contributions that will continue this foundational contribution to computing.

If elected, my goals will be to:

- promote collaboration between academic and industry partners, and across disciplines;
- increase student participation;
- ensure inclusiveness across geographical, ethnic and gender boundaries to engage –and maintain– the best and brightest in our discipline to build the foundations for tomorrow’s systems and economic growth.
Candidate for Chair

Mattan Erez
The University of Texas at Austin, Austin, TX, USA

**BIOGRAPHY**

**Academic Background:**
Ph.D., Stanford University, 2007, Electrical Engineering.

**Professional Experience:**
Associate Professor, The University of Texas at Austin, TX, 2012 – 2017;
Assistant Professor, The University of Texas at Austin, TX, 2007 – 2012.

**Professional Interest:**
Microarchitecture; Architecture; HPC; Memory Systems; Resilience.

**ACM Activities:**

**STATEMENT**

I'm honored to be nominated for Chair of SIGMICRO. I have enjoyed being a part of the architecture and microarchitecture community for almost 20 years (starting as an undergraduate student) and am looking forward to the opportunity of giving back in a formal position.

I have done my share of conference organization and am looking forward to a new role. I will try to keep my head down, do good, and most importantly do the right thing. I'll do the same as Chair of SIGMICRO.

I assure you that I will do my best to maintain the high standards of SIGMICRO and continue to push on improving conference quality even further. I believe our review process is generally robust and of high quality, yet, improvements are always possible. I would like to make more resources available to Program Chairs to assist them in selecting the best committees, soliciting the best reviews, and promoting the best paper discussions.
Candidate for Chair

Vijay Janapa Reddi
University of Texas at Austin, TX, USA

BIOGRAPHY

Academic Background:
Ph.D., Harvard University, 2010, Computer Science.

Professional Experience:
Assistant Professor (promoted to Associate), The University of Texas at Austin, TX, 2011 – Present.

Professional Interest:
Mobile Computer Architecture; Runtime Systems; Web Technologies; Hardware/Software Co-design.

Membership and Offices in Related Organizations:
Steering Committee, ACM/IEEE Code Generation and Optimization, 2013 – Present;
General Chair, ACM/IEEE Code Generation and Optimization, 2017;

Awards:
National Academy of Engineering Gilbreth Lectureship Honor, 2016;
IEEE TCCA Young Computer Architect Award, 2016;
ACM SIGPLAN Most Influential PLDI Paper Award, 2015;
Intel Early Career Honor Award, 2013.

STATEMENT

ACM SIGMICRO is unique. It is home to premier events that closely tie together computer (micro)architecture, compilers, and runtime technologies. Therefore, SIGMICRO requires strong leadership committed to bridging hardware and software communities together.

I am deeply committed to increasing collaboration between the hardware and software communities. Over the past three years alone, I have served in leadership roles to bring together IEEE sponsored HPCA, IEEE/ACM co-sponsored CGO, and ACM sponsored PPoPP. The three conferences yearly usher close to 700 attendees annually from all around the world with the intent of facilitating the cross-pollination of ideas.

The road ahead is ripe with opportunities. If elected SIGMICRO Chair, I will create a new "architecture systems" community to house more hardware and software communities together to increase our field's technical breadth and depth. I will develop relations between the US and other
international computer architecture "hubs" (in Europe, Asia, etc.) to foster multi-national collaborations in an increasingly connected world to enrich the sources of our talent pool. I will sponsor new awards that recognize our students, and launch a new mentor-mentee program that will enable students to have direct access to experts within our large community.
Candidate for Member-at-Large

David Brooks
Harvard University, Cambridge, MA, USA

**BIOGRAPHY**

**Academic Background:**

**Professional Experience:**
Professor of Computer Science, Harvard University, Cambridge, MA, 2002 – Present;
Research Staff Member, IBM TJ Watson Research Center, Yorktown Heights, NY, 2001 – 2002.

**Professional Interest:**
Computer Architecture; Energy-Efficient Computing; Mobile and Embedded Systems; Machine Learning.

**ACM Activities:**
Vice-Chair, SIGMICRO, 2011 – Present.

**Awards:**
IEEE Fellow, 2016;
ISCA Test of Time Award, 2015;
ACM Maurice Wilkes Award, 2012;
NSF CAREER Award, 2005.

**STATEMENT**

SIGMICRO plays an important role in the academic and industrial research community. I have enjoyed participating as Vice Chair of the executive committee over the past six years, and would like to serve as a Member-at-Large to provide some continuity to support the next Chair.
Candidate for Member-at-Large

Natalie Enright Jerger
University of Toronto, Ontario, Canada

BIOGRAPHY

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

Professional Experience:
Associate Professor, University of Toronto, ON, Canada, 2014 – Present;
Assistant Professor, University of Toronto, ON, Canada, 2009 – 2014;

Professional Interest:
Computer Architecture; Interconnection Networks; Approximate Computing; Microarchitecture.

ACM Activities:
SIGARCH Executive Committee, 2015 – Present;
Associate Editor, TACO, 2013 – Present;
ACM Senior Member, 2014 – Present.

Membership and Offices in Related Organizations:
Associate Editor, Transactions on Computers, IEEE, 2014 – Present;
Associate Editor, Computer Architecture Letters, IEEE, 2014 – Present;
HPCA Program Chair, IEEE TCCA, 2014.

Awards:
Alfred P. Sloan Fellow, 2015;
Borg Early Career Award, 2015;
Ontario Professional Engineering Young Engineer Medal, 2014;
Ministry of Research and Innovation Early Researcher Award, 2012.

STATEMENT

I am honored to be considered to represent the SIGMICRO community as a member-at-large. The SIGMICRO community is a strong and vibrant one. Moving forward, we need to ensure that SIGMICRO sponsored conferences operate under well-thought out and codified best practices ranging from the program selection through the overall organization. Recently, there have been innovative proposals to improve the review process; this work should continue in a structured and data-driven manner. Exploring SIGMICRO’s participation in ACM initiatives such as Proceedings of the ACM also needs to be considered. Ensuring that our conferences are diverse and inclusive
environments is a top priority for me. Finally, I will work with SIGMICRO to find new ways to add value to our members, many of who also participate in additional SIGs. An example is the creation of awards that recognize excellent and distinct contributions by the SIGMICRO community.
Candidate for Member-at-Large

Lieven Eeckhout
Ghent University, Ghent, Belgium

BIOGRAPHY

Academic Background:
Ph.D., Ghent University, 2002, Computer Architecture.

Professional Experience:
Professor, Ghent University, Ghent, Belgium, 2006 – 2017;

Professional Interest:
Computer Architecture; Performance Modeling and Evaluation; Workload Characterization;
Resource Management and Scheduling; Microarchitecture.

ACM Activities:
Associate Editor, ACM Transactions on Architecture and Code Optimization, SIGMICRO,
SIGARCH, SIGPLAN, 2011 – 2017;
Program Committee Member, MICRO Symposium, SIGMICRO, 2012 – 2015;
Program Co-Chair, CGO Symposium, SIGMICRO, 2013;
Program Committee Member, CGO Symposium, SIGMICRO, 2010 – 2013.

Membership and Offices in Related Organizations:
Editor in Chief, IEEE Micro magazine, 2015 – 2018;
Program Chair, HPCA 2015, IEEE, 2015;
Program Chair, ISPASS 2009, IEEE, 2009.

Awards:
Best Paper Award ISPASS 2013;
IEEE Micro Top Pick, 2010;
IEEE Micro Top Pick, 2007;
Laureate of Royal Flemish Academy of Belgium for Science, 2010.

STATEMENT

Our community is growing in size and scope — we are seeing an increasing number of paper
submissions to our conferences, and the range of topics is growing from traditional computer
architecture and microarchitecture to data centers, mobile, IoT, etc. This poses a number of
challenges in terms of how we organize our conferences, the review process, and publication
models.
I’m seeking a member-at-large position within ACM SIGMICRO. I believe I have the energy and perspective to serve our community well. I have been involved in the organization of many of our community’s top conferences and journals, and I believe I have a good understanding of our community’s needs.

I believe the best way to serve our community is to closely collaborate with ACM SIGARCH as well as IEEE TCCA, as several of our top conferences are co-sponsored by ACM and IEEE. In addition, it is important for our community to support students and young faculty — this can be done through travel grants, as well as by having awards specifically targeted towards young researchers. Finally, we need to further increase our outreach to researchers across the globe, including Asia, India and South-America.
Candidate for Member-at-Large

Russ Joseph
Northwestern University, Evanston, IL, USA

BIOGRAPHY

Academic Background:

Professional Experience:
Associate Professor, Northwestern University, Evanston, IL, 2004 – 2016.

Professional Interest:
Computer Architecture.

ACM Activities:

STATEMENT

I welcome the opportunity to continue on the SIGMICRO Executive Committee. While the change in leadership creates an opportunity to move the SIG in new directions, there is some risk of lost momentum and institutional knowledge. If elected, I look forward to serving our community and providing some much needed continuity. I will work with the rest of the incoming executive committee to sustain our efforts in growing our membership and increasing our international presence.

I believe that the future of the MICRO community depends on having active and engaged student members who attend and participate in our conferences. Towards that end I will support efforts to keep the cost of student attendance low via generous travel grants and mentoring workshops co-located with MICRO to encourage representation from underrepresented groups.
Candidate for Member-at-Large

Milos Prvulovic
Georgia Institute of Technology, Atlanta, GA, USA

No biographical information or position statement was submitted.
Jason Mars  
University of Michigan, Ann Arbor, MI, USA

**BIOGRAPHY**

**Academic Background:**  
Ph.D., University of Virginia, 2012, Computer Science.

**Professional Experience:**  
Assistant Professor, University of Michigan, Ann Arbor, MI, 2013 – Present;  
Assistant Professor, UCSD, San Diego, CA, 2012 – 2013.

**Professional Interest:**  
Computer Architecture; Systems; Compilers.

**ACM Activities:**  
SIGMICRO Executive Committee (Web Editor), 2014 – Present.

**Awards:**  
Google Research Award, 2014.

**STATEMENT**

I'm delighted to be considered for the title of Member-at-Large of SIGMICRO. I care deeply about our community and will continue to contribute and foster an environment of inclusiveness and intellectual excellence.