Candidate for Chair

Reetuparna Das
University of Michigan, Ann Arbor, MI, USA

BIOGRAPHY

Academic Background:
Ph.D., Penn State University, 2010, CSE.

Professional Experience:
Associate Professor, University of Michigan, Ann Arbor, MI, USA, 2020 – Present;
Assistant Professor, University of Michigan, Ann Arbor, MI, USA, 2016 – 2020;
Assistant Research Scientist, University of Michigan, Ann Arbor, MI, USA, 2011 – 2015.

Professional Interest:
Computer Architecture, In Memory Computing, Domain Specific Architectures for Precision Health and ML, Interconnection Networks.

ACM Activities:
Vice-Chair, SIGMICRO, 2020 – Present;
Test of Time Award Committee, SIGMICRO, 2018 – 2021;
MICRO Steering committee, SIGMICRO, 2021 – Present;
MICRO Program committee chair, SIGMICRO, 2019.

Membership and Offices in Related Organizations:
Executive Committee, WiCArch, SIGARCH, 2018 – 2021.

Awards Received:
Outstanding Researcher Award from Intel, 2020;
Sloan Fellowship, 2019;
CRA-W Borg Early Career Award, 2018;
MICRO Hall of Fame, 2017.

STATEMENT

I consider it an honor and a privilege to be given the chance to run for SIGMICRO Chair. It has been my great pleasure to be a part of SIGMICRO, and I consider MICRO to be my home conference. Over the course of my career, I have benefitted immensely from this vibrant community and have done my best to give back by taking on various service roles. In my most recent service position as SIGMICRO's Vice-Chair and Awards Chair, I worked to bring more recognition to our community. We have now

established two new SIGMICRO awards: the Dissertation Award and the Early Career Award.

If elected, I'll do my best to keep SIGMICRO a thriving, visible, and diverse organization. My main goal will be to foster a sense of belonging and growth. I am hoping to inculcate a sense of community from a higher degree of interactions, intellectual engagements, retreats, podcasts, blogs, and outreach activities. The scope of SIGMICRO has grown as a result of increased hardware customization. I am hoping to engage experts from adjacent fields to promote cross-cutting research and grow our community. I intend to make investments in undergraduate engagement to entice talent toward microarchitecture.

Candidate for Chair

Radu Teodorescu
The Ohio State University, Columbus, OH, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Illinois at Urbana-Champaign, 2008, Computer Science.

Professional Experience:
Professor, The Ohio State University, Columbus, OH, USA, 2001 – Present;
Associate Professor, The Ohio State University, Columbus, OH, USA, 2014 – 2021;
Assistant Professor, The Ohio State University, Columbus, OH, USA, 2008 – 2014.

Professional Interest:
Computer Architecture, Security, Energy Efficiency, Reliability, Process Variation.

ACM Activities:
Steering Committee Member (ex officio), IEEE/ACM International Symposium on Microarchitecture (MICRO), 2020 – Present;
Program Committee Co-chair, IEEE MICRO Top Picks from the 2021 Architecture Conferences, 2021 – 2022;
Program Committee Chair, Architecture Track, International Parallel & Distributed Processing Symp. (IPDPS), 2021 – 2022;
General Chair, IEEE/ACM International Symposium on Microarchitecture (MICRO), 2018 – 2019.

Membership and Offices in Related Organizations:
Member, ACM, SIGMICRO, SIGARCH, 2008 – Present;
Member, IEEE, TCuARCH, 2008 – Present.

Awards Received:
Best Paper Award, IEEE Computer Architecture Letters (CAL), 2023;
CSE Department Teaching Award, The Ohio State University, 2021;
Lumley Research Award, The Ohio State University, 2014;
CAREER Award, National Science Foundation, 2013.

STATEMENT

SIGMICRO represents a community I am proud to be part of. As Chair, in addition to ensuring the continued good governance of our conferences and established initiatives, such as CARES and CASA, I will continue to look for ways to increase engagement and member outreach. I believe it is important for SIGMICRO to serve our entire community, with the greatest care and focus on engaging and helping our students. To that end, I will establish a student committee consisting of both undergraduate and graduate students, with the mission to identify and consider student-facing initiatives that serve and support their interests. We will consider ideas such as local SIGMICRO chapters, formal mentorship activities, etc.

As General Chair of MICRO in 2019, I experienced firsthand the challenges of securing industry sponsorship for our conferences. I will work with the steering committees of SIGMICRO-sponsored conferences to add continuity and institutional memory to our fundraising activities, as well as establish best practices. I will propose a permanent fundraising chair position that will help coordinate conference fundraising activities, as well as seek industry sponsorship directly for SIGMICRO, with the goal of increasing funding for conference travel grants for our students.

Candidate for Executive Committee

Saugata Ghose
University of Illinois Urbana-Champaign, Urbana, IL, USA

BIOGRAPHY

Academic Background:
Ph.D., Cornell University, 2014, Computer Engineering.

Professional Experience:
Assistant Professor, University of Illinois Urbana-Champaign, Urbana, IL, USA, 2021 – Present;
Special Faculty Systems Scientist, Carnegie Mellon University, Pittsburgh, PA, USA, 2016 – 2020;
Postdoctoral Research Associate, Carnegie Mellon University, Pittsburgh, PA, USA, 2014 – 2016.

Professional Interest:
Memory and storage systems, Data-centric computing / processing-in-memory, New interfaces between compute stack layers, Architectures for emerging platforms and domains.

ACM Activities:
Workshops Chair, MICRO: Int'l. Symp. on Microarchitecture, 2023 – Present;
Information and Publicity Director, ACM SIGMICRO, 2020 – Present;
Web Chair/Co-Chair, MICRO: Int'l. Symp. on Microarchitecture, 2019 – 2022;
Global Online Activities Co-Chair, MICRO: Int'l. Symp. on Microarchitecture, 2020 – 2021.

Membership and Offices in Related Organizations:
Advisor, Computer Architecture Student Assn., 2020 – Present;
Publications Chair, IISWC: IEEE Int'l. Symp. on Workload Characterization, 2022;
University Coordinator, Flash Memory Summit, 2018 – 2019.

Awards Received:
Finalist, Intel Hardware Security Academic Award, 2022;
MICRO Top Reviewer Award, 2021;
Best Poster Award, IBM IEEE CAS/EDS AI Compute Symposium, 2020;
Wimmer Faculty Fellowship, Carnegie Mellon University, 2019.

STATEMENT

I hope to bring my perspectives as early-stage faculty and as someone closely involved with student concerns (through CASA) to SIGMICRO"s executive committee (EC). Building upon my experience as information director (I created the new SIGMICRO website and improved social media presence), I plan to advocate for increased outreach and inclusivity as an EC member.

SIGMICRO can become a premier SIG for student involvement. One idea is a fully-virtual research fair (complementing ACM's in-person SRC), allowing students with financial limitations or from non-traditional universities/countries to participate in our community. I'd also like to establish procedures for hybrid student attendance at SIGMICRO-sponsored conferences, and potentially work with CASA to sponsor annual student engagement events.

I also hope to explore how SIGMICRO can help recent graduates and junior faculty. Potential ideas include a registry for PC/reviewer volunteers, online architecture-/compiler-specific proposal workshops led by senior community members, and mixers to connect junior researchers with larger project teams and with potential students/interns. I'll also explore increased collaboration between community SIGs/TCs, starting with a unified events calendar. I hope these proposals can allow SIGMICRO to strengthen our community's future.

Candidate for Executive Committee

Koji Inoue
Kyushu University, Fukuoka, Japan

BIOGRAPHY

Academic Background:
Ph.D., Kyushu University, 2001, Engineering.

Professional Experience:
Professor, Kyushu University, Fukuoka, Japan, 2015 – Present;
Associate Professor, Kyushu University, Fukuoka, Japan, 2004 – 2014;
Assistant Professor, Fukuoka University, Fukuoka, Japan, 2001 – 2004.

Professional Interest:
Computer System Architecture, Emerging Device Computing, Superconductor Computing, IoT Systems, Energy-Efficient Microprocessor/Memory Architecture.

ACM Activities:
ISCA Program Committee Member, SIGARCH, 2020 – 2023;
MICRO Program Committee Member, SIGMICRO, 2020 – 2022;
MICRO-54 Fundraising Committee Co-Chair, SIGMICRO, 2021;
MICRO-51 General Co-Chair, SIGMICRO, 2018.

Membership and Offices in Related Organizations:
Selection Committee Member, Micro Magazine Top Picks issue, IEEE Computer Society, 2021 – 2023;
Associate Editor, Computer Architecture Letter (CAL), IEEE Computer Society, 2020 – 2023;
Program Committee Member, HPCA, IEEE TCCA, 2020 – 2023.

Awards Received:
Design Contest Award Honorable Mention, ISLPED 2017, 2017;
Young Scientists' Prize, MEXT, 2008;
40th Anniversary Best Paper Award, IPSJ, 2000.

STATEMENT

Computers have evolved over half a century into an essential and indispensable backbone of social information infrastructure. And now, it faces a significant turning point. Although Moore's Law has contributed to continuously improving computers' performance, we also need to explore other directions to achieve sustainable evolution

of computer systems. A promising way to make a breakthrough in solving such a critical issue is to exploit emerging devices, such as non-volatile memories, superconductor devices, nanophotonic devices, etc., including quantum devices, to design novel computing platforms. In such a direction, effective, efficient cross-layer interaction becomes a key challenge, not only from hardware to software as well as traditional computer architecture research but also with other fields such as physics, and chemistry.

If elected, I will try to make and accelerate such a movement to explore a new frontier of computer (micro)architecture. From the viewpoint of geographic diversity, I would like to contribute to expanding SIGMICRO activities into various regions, especially for students. I believe worldwide interactions and communications for students are essential for our community, and I would be glad if I could contribute to this direction.

Candidate for Executive Committee

Daniel Angel Jiménez
Texas A&M University, College Station, TX, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Texas at Austin, 2002, Computer Sciences.

Professional Experience:
Associate Professor and (full) Professor, Texas A&M University, College Station, TX, USA, 2013 – Present;
Associate Professor, (full) Professor, and Chair, University of Texas at San Antonio, San Antonio, TX, USA, 2007 – 2012;
Assistant Professor and Associate Professor, Rutgers University, Piscataway, NJ, USA, 2002 – 2009.

Professional Interest:
Computer architecture, Programming languages and compilers.

ACM Activities:
Co-Chair, ACM/IEEE ISCA Steering Committee, 2023 – Present;
Program Committee Member, ACM/IEEE ISCA, 2022 – Present;
Program Committee Member, ACM ASPLOS, 2021;
Chair, ACM/IEEE MICRO Best Paper Selection Committee, 2019.

Membership and Offices in Related Organizations:
Chair, IEEE CS Technical Committee on Computer Architecture, 2023 – Present;
Executive Committee Member, IEEE CS Technical Committee on Computer Architecture, 2015 – Present;
Program Chair, IEEE HPCA, 2017.

Awards Received:
ACM/IEEE MICRO Best Paper Award, 2022;
IEEE CS B. Ramakrishna Rau Award, 2021;
IEEE Fellow, 2021;
HPCA Test of Time Award, 2019.

STATEMENT

SIGMICRO serves a very important role in the microarchitecture research community. If elected to the SIGMICRO executive committee, I will do my best to serve our community.

We should listen to researchers, including students, faculty, industry, and colleagues in adjacent disciplines. We should expand cooperation with SIGARCH, TCCA, and TCuArch on joint activities while respecting the important individual roles each group plays. We should encourage innovative reviewing models while maintaining harmony across conferences. We should expand SIGMICRO's awards to recognize excellence in our community, sponsoring new awards and/or co-sponsoring awards with other groups.

We should promote diversity, equity, and inclusion in all our activities. We should be wary of malfeasance and inappropriate behavior and have appropriate, well-thought-out safeguards and sanctions when such issues arise. We should continue and expand mentoring for students and early-career architects. I am very familiar with conference organization and reviewing, having served as HPCA general chair and program chair, Top Picks selection chair, and conflict chair for several other conferences. As current and past Chair of IEEE CS TCCA, and a long-time member of their executive committee, I know how to bring people together to address our challenges.

Candidate for Executive Committee

Andreas Moshovos
University of Toronto, ON, Canada

BIOGRAPHY

Academic Background:
Ph.D., University of Wisconsin-Madison, 1998, Computer Sciences.

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

Professional Interest:
Computer Architecture.

STATEMENT

My goal is to facilitate an open, focused discussion and process with the goal of revising our reviewing and program committee selection practices. I do not believe that I have all the answers, however, what I know for sure is that our current processes are failing all of us.

Candidate for Executive Committee

Karthik Swaminathan
IBM T. J. Watson Research Center, Yorktown Heights, NY, USA

BIOGRAPHY

Academic Background:
Ph.D., Pennsylvania State University, 2014, Computer Science and Engineering.

Professional Experience:
Research Staff Member, IBM T. J. Watson Research Center, Yorktown Heights, NY, USA, 2016 – Present;
Post-Doctoral Researcher, IBM T. J. Watson Research Center, Yorktown Heights, NY, USA, 2014 – 2016;
Doctoral Student, Pennsylvania State University, University Park, PA, USA, 2009 – 2014.

Professional Interest:
Resilient processor architectures, Power and energy-efficient architectures.

ACM Activities:
Treasurer, ACM SIGMICRO, 2020 – Present;
Member, ACM SIGMICRO, 2018 – Present.

Membership and Offices in Related Organizations:
Member, IEEE, 2015 – Present.

Awards Received:
SRC Mahboob Khan Outstanding Liaison Award, 2022;
IBM PhD Fellowship, 2012.

STATEMENT

I believe that ACM SIGMICRO's vision and its initiatives have and will continue to play a key role in defining and securing the role of processor microarchitecture research, and in encouraging interdisciplinary research across allied fields. I have served as a member of the Executive Committee and Treasurer of ACM SIGMICRO since 2020. In the past 2 years, our Executive Committee has been responsible for reducing enrollment fees for students and providing strong support to the SIGMICRO-sponsored conferences through increased student travel grants and awards.

I plan to continue working toward expanding such services offered by SIGMICRO to the research community. Working at IBM Research, my experience with open-source hardware designs such as RISC-V and IBM POWER-based processors has led me to be an advocate of community-sourced system design across both academia and industry. These initiatives have fueled key microarchitecture innovations, particularly for low-cost, yet highly efficient hardware in both general-purpose and domain-specific processors. As a member of the SIGMICRO Executive Committee, I shall continue my efforts to democratize microprocessor design and architecture research through increased industry-academic collaborations and outreach programs that enable innovations at a global scale.

Candidate for Executive Committee

Jishen Zhao
University of California, San Diego, CA, USA

BIOGRAPHY

Academic Background:
Ph.D., Pennsylvania State University, 2014, Computer Engineering.

Professional Experience:
Associate Professor, University of California, San Diego, USA, 2020 – Present;
Assistant Professor, University of California, San Diego, USA, 2017 – 2020;
Assistant Professor, University of California, Santa Cruz, USA, 2015 – 2017.

Professional Interest:
Computer architecture, Memory systems, Machine learning, Neural compiler/decompiler, Reliability.

ACM Activities:
Regular contributor, SIGARCH blog, 2022 – Present;
Committee Member, SIGMICRO Research Highlights Committee, 2022;
Program Committee Member, ISCA, 2022;
Program Committee Co-chair, MICRO, 2021.

Membership and Offices in Related Organizations:
Associate Editor, IEEE Computer Architecture Letter, 2022 – Present;
Program Co-chair, MPSoC forum, 2018;
Program Committee Member, ASPLOS, 2021.

Awards Received:
IEEE Micro Top Picks, 2021;
Best Paper Award at ACM SIGOPS Asia-Pacific Workshop on Systems, 2020;
MICRO Hall of Fame, 2019;
Best Paper Honorable Mention Award at MICRO, 2013.

STATEMENT

It is my great pleasure to run for Executive Committee (EC) member of SIGMICRO. I have been a member and active contributor to the micro-architecture research community for over ten years. My service as PC Co-chair of ACM/IEEE MICRO in 2021, as well as TPCs of various SIGMICRO-affiliated conferences has allowed me to establish professional contacts with many members of the vibrant SIGMICRO

community. I also bring a strong interdisciplinary background that, in addition to my primary research area of computer architecture, also includes machine learning and systems software.

If elected to the EC, I will work to promote SIGMICRO by:

(1) Promoting the participation of underrepresented groups in the SIGMICRO community; (2) Organizing events at major conferences to facilitate professional networking for SIGMICRO members; (3) Organizing activities to foster interdisciplinary collaboration with other SIGs; (4) Showcasing the achievements of young researchers in the SIGMICRO community at major conferences to facilitate their career development.

I will be honored and thrilled to serve on the SIGMICRO EC.