Candidate for Chair

Sudeep Pasricha
Colorado State University, Fort Collins, CO, USA

BIOGRAPHY

Academic Background:
Ph.D., University of California, Irvine, 2008, Computer Science.

Professional Experience:
Professor, Colorado State University, Fort Collins, CO, USA, 2019 – Present;
Associate Professor, Colorado State University, Fort Collins, CO, USA, 2014 – 2019;
Assistant Professor, Colorado State University, Fort Collins, CO, USA, 2008 – 2014.

Professional Interest:
Design Automation Algorithms for Electronic Chip Design, Machine Learning and AI for Computing System Design, Embedded and IoT Systems, Computer Architecture, High Performance Computing.

ACM Activities:
Vice Chair, SIGDA, 2021 – Present;
Senior Associate Editor, ACM JETC, 2019 – Present;
Associate Editor, ACM TECS, 2013 – Present;
Information Director, ACM TODAES, 2012 – 2014.

Membership and Offices in Related Organizations:
Steering Committee Member, ACM/IEEE DAC, 2023 – Present;
Associate Editor, IEEE Transactions on Computers, 2023 – Present;
Steering Committee Chair, IEEE TSUSC, 2020 – 2022.

Awards Received:
IEEE Fellow, 2023;
ACM SIGDA Distinguished Service Award, 2019;
Mid-Career Research Achievement Award, IEEE CS/TCVLSI, 2018;
Award for Excellence for a Mid-Career Researcher, IEEE CS/TCSC, 2015.

STATEMENT

SIGDA is an organization that is very dear to me because it is the voice of the design automation community of which I am a part and because of its initiatives designed to support students, which I personally have benefited from in the past. It has given me great pleasure to lead and organize various flagship SIGDA initiatives over the past

decade, such as: SIGDA CADathlon (2009-2012), SIGDA E-News (2012-2016), SIGDA University Demo (2016-2017), and the SIGDA PhD Forum (2017-2018). I have also had the honor of serving as SIGDA Vice Chair (2021-2024).

I am now seeking to serve as Chair of the ACM SIGDA Executive Committee (EC). As Chair of the SIGDA EC, I will use my position to expand student grants and support initiatives, improve recognition of academic/industry experts and the under-appreciated volunteers in the SIGDA community, and enhance publicity and web presence. I will initiate new workshops, online seminars, and social media engagements to bring SIGDA community members closer together. I also will work hard towards improving the profile of SIGDA with funding agencies, to ensure sustained growth and a vibrant community that evolves with the changing technology landscape.

Candidate for Chair

Sri Parameswaran
The University of Sydney, Sydney, Australia

BIOGRAPHY

Academic Background:
Ph.D., The University of Queensland, 1991, Computer Engineering.

Professional Experience:
Head of School, The University of Sydney, Sydney, Australia, 2023 – Present;
Professor/Associate Prof / Acting Head, The University of New South Wales, Sydney, Australia, 2001 – 2023;
Lecturer/Senior Lecturer, The University of Queensland, Brisbane, Australia, 1991 – 2001.

Professional Interest:
Design Automation, System Level Design, Low Power Systems, Hardware Security, Genomic Analysis Hardware/Software.

ACM Activities:
ESWEEK Steering Committee , SIGDA, 2023 – Present;
Chair of International Conference on Computer Aided Design, SIGDA, 2017 – 2017;
Chair of Asia-Pacific Design Automation Conference, SIGDA, 2012 – 2012.

Membership and Offices in Related Organizations:
Vice President - Publicity, IEEE Council for Electronic Design Automation, 2024 – Present;
Associate Vice President, IEEE Council for Electronic Design Automation, 2022 – 2023;
Editor in Chief - IEEE Embedded systems Letters, IEEE CEDA, 2016 – 2019.

Awards Received:
IEEE Fellow, 2024;
IEEE Computer Society TCVLSI Distinguished Leadership Award, 2021;
ACM SIGDA Distinguished Service Award, 2020;
ACM Service Award, 2013.

STATEMENT

Dear SIGDA members, I am honored to have been nominated as a candidate for Chair in the 2024 ACM SIGDA Election. My career has been dedicated to the field of design automation, with publications in all major design automation conferences and journals

for over 30 years. I have been the General Chair of both the ICCAD and the ASP-DAC conferences and the Editor in Chief of the IEEE Embedded Systems Letters.

There are three aspects that I am passionate about. First, a streamlined path from research to real-world impact through strong partnerships with industry and academia. Second, to empower the next generation, expand membership, create mentorship programs, increase industry exposure for students, and increase access to our inspiring conferences. Finally, I am keen to celebrate diversity, by actively promoting underrepresented voices, and to create an inclusive community.

I have a proven track record within the EDA community, and I am keen to lead us forward. Together let us continue to build a stronger, more collaborative, and future-focused SIGDA.

Candidate for Chair

Wanli Chang
Hunan University, Changsha, China

BIOGRAPHY

Academic Background:
Ph.D., Technical University of Munich, 2017, Computer Engineering.

Professional Experience:
Professor, Hunan University, China, 2021 – Present;
Assistant Professor, University of York, UK, 2018 – 2021.

Professional Interest:
Design automation, embedded systems, real-time systems, cyber-physical systems.

ACM Activities:
Executive Committee, SIGDA, 2021 – Present;
Secretary-Treasurer, SIGBED, 2021 – Present.

Membership and Offices in Related Organizations:
Executive Committee, DAC, 2023 – Present.

Awards Received:
RTSS Outstanding Paper Award, 2022.

STATEMENT

The design automation community now has a historical growth opportunity, riding the wave of AI. The core mission is to satisfy the increasing demand of computing power with well-designed systems and chips, while the fabrication technology is on the verge of ceasing to evolve. On the other hand, with the trend of inflation and deglobalization, the community is facing challenges in efficiently exchanging research ideas and output, impeding its development.

Hence, if elected as Chair of ACM SIGDA, I will lead the EC to focus on the following aspects: (i) Providing stronger support for students and junior researchers to attend main DA conferences; (ii) Fostering collaboration between industry and academia to create funding opportunities and solve major practical problems; (iii) Sorting out and establishing a full list of awards to recognize outstanding researchers and practitioners at all levels; (iv) Engaging senior and influential researchers in the community to better support the next generation and create more job openings. We will work with the

conferences and journals in the field to emphasize diversity, equity, and inclusiveness, which are core values of ACM, and ensure transparency in all activities.

Candidate for Executive Committee

Hussam Amrouch
Technical University of Munich, Munich, Germany

BIOGRAPHY

Academic Background:
Ph.D., Karlsruhe Instittute of Technology (KIT), 2015, Computer Science, Design for Reliability.

Professional Experience:
Head of the Chair of AI Processor Design, Technical University of Munich, Munich, Germany, 2023 – Present;
Head of the Chair of Semiconductor Test and Reliability, University of Stuttgart, Stuttgart, Germany, 2020 – 2023;
Head of Dependable Hardware Research Group, Karlsruhe Institute of Technology, Karlsruhe, Germany, 2015 – 2020.

Professional Interest:
Emerging Technology (beyond-CMOS and none-volatile memories), Beyond von Neumann Architectures incl. Neuromorphic Hardware, Machine Learing for CAD, Reliability-aware EDA from transistors to processors, HW accelerators for AI.

Membership and Offices in Related Organizations:
DATE Representative at ASP-DAC , IEEE CEDA, 2023 – Present.

STATEMENT

As a candidate for the Executive Committee of ACM SIGDA, I am committed and dedicated to propelling the organization forward as a nexus of innovation in the realm of design automation. My vision is to act and serve as a catalyst for progress, ensuring that ACM SIGDA continues to be a beacon of collaboration in the field of EDA. Toward this goal, I will work closely with other EC members to promote and foster inclusivity and champion initiatives that bring fresh perspectives to the forefront of our discussions and decision-making processes.

I pledge my full support to the conferences, workshops, and other activities under the ACM SIGDA umbrella, helping their vital role in our research community's growth. Leveraging my extensive network, I will identify, cultivate, and seek out new opportunities in design automation, with a particular emphasis on harnessing machine learning for EDA. I will give a special focus on articulation of a strategic vision that integrates emerging technologies with innovative EDA methodologies, paving the way

for the next wave of AI chips. My steadfast commitment to diversity and education will form the cornerstone of my mission throughout my journey as part of the ACM SIGDA Executive Committee.

Candidate for Executive Committee

Ganapati Bhat
Washington State University, Pullman, WA, USA

BIOGRAPHY

Academic Background:
Ph.D., Arizona State University, 2020, Computer Engineering.

Professional Experience:
Assistant Professor, Washington State University, Pullman, WA, 2020 – Present;
Research Associate, Arizona State University, Tempe, AZ, 2015 – 2020;
Software Engineer, Samsung Research India, Bangalore, India, 2012 – 2014.

Professional Interest:
Design automation, Embedded systems, Wearable devices, Energy harvesting, Heterogeneous systems.

ACM Activities:
Guest editor, ACM TODAES, 2022 – Present;
Web and Registrations Co-chair, ACM ISLPED 2024, 2023 – Present;
Track chair, ACM ESWEEK 2023, 2023 – 2023;
Software competition chair, ACM ESWEEK 2023, 2023 – 2023.

Membership and Offices in Related Organizations:
Member, IEEE, 2015 – Present;
Program committee member, ACM/IEEE Design Automation Conference, 2022 – Present;
Program committee member, ACM/IEEE ICCAD, 2021 – Present.

Awards Received:
ACM TODAES Best Paper Award, 2021;
ACM SIGDA Outstanding PhD Dissertation Award, 2020;
ACM ESWEEK 2019 Best Paper Award (CASES conference), 2019.

STATEMENT

I am pleased to be nominated for election as an Executive Committee member for ACM SIGDA. Electronic design automation (EDA) and optimization is playing a key role in the recent surge of machine learning algorithms, novel computing paradigms, sustainability, and domain specific architectures. New innovations in EDA algorithms are required to

catalyze progress in the above areas as we quickly transition into post-Moore era for computing systems.

In my capacity as a SIGDA EC member, I will strive to create an environment of innovation in EDA by recognizing high risk, high reward approaches that aim to break traditional barriers, while also supporting conventional efforts. I will also aim to highlight and promote sustainability efforts in computing systems design and operation since tackling climate change is one of the largest existential threats facing the current generation. I will make all efforts to improve diversity and participation of underrepresented groups such as women, persons of color, and persons with disabilities. I will also strive to bring EDA events either virtually or physically to regions with lower participation such as Africa and South America. Finally, it is my intention to improve participation of undergraduate students in SIGDA activities and conferences.

Candidate for Executive Committee

Siddharth Garg
New York University, New York, NY, USA

BIOGRAPHY

No biographical information and/or statement submitted.

Candidate for Executive Committee

Jingtong Hu
University of Pittsburgh, Pittsburgh, PA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Texas at Dallas, 2013, Computer Science.

Professional Experience:
Associate Professor, University of Pittsburgh, Pittsburgh, PA, 2020 – Present;
Assistant Professor, University of Pittsburgh, Pittsburgh, PA, 2017 – 2020;
Assistant Professor, Oklahoma State University, Stillwater, OK, 2013 – 2017.

Professional Interest:
Embedded Systems, EDA, Computer Architecture, Digital Health, On-Device AI.

ACM Activities:
Education Chair and Executive Committee, ACM SIGDA, 2021 – Present.

Awards Received:
Best Paper Award, ASP-DAC 2024, 2024;
Second Place, Fair and Intelligent Embedded System Challenge, 2023;
ACM TODAES Rookie Author of the Year (RAY) Award., 2023;
First Place, ACM SIGDA University Demonstration, 2021.

STATEMENT

As a professor with extensive experience in EDA and embedded systems, my commitment to advancing the field of design automation has been unwavering. My journey in EDA spans over a decade, during which I have not only contributed to important research but also mentored the next generation of innovators in this domain in various capacities. I have advised and co-advised 13 Ph.D. students, 5 of whom joined academia while the rest of them joined related companies as research engineers.

My vision for ACM SIGDA is to foster a vibrant, inclusive, and collaborative community that bridges academia and industry. During the past 3 years, I have served in SIGDA EC as education chair and have collaborated with many key industry partners such as Synopsys, Cadence, etc. By leveraging my academic background and industry connections, I aim to keep driving cutting-edge innovation in EDA frontier while educating our next generation workforce. My goal as a member of the Executive Committee is to ensure that SIGDA remains at the forefront of innovation, shaping the

future of design automation in ways that benefit both our members and the broader global community.

Candidate for Executive Committee

Yingyan (Celine) Lin
Georgia Institute of Technology, Atlanta, GA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of Illinois Urbana-Champaign, 2017, Computer Engineering.

Professional Experience:
Chair, The Ph.D. Forum, The Design Automation Conference, 2022 – Present;
One of the six leading organizer, The EECS Rising Stars Workshop, Georgia Institute of Technology, 2022 – 2023;
Co-director, The Center for Responsible Ubiquitous Computing (RUBIC), Georgia Institute of Technology, 2024 – Present.

Professional Interest:
Efficient machine learning algorithms, Machine learning accelerators, Automated tools for enabling fast development of efficient AI, Machine learning algorithm and hardware co-design
Green AI.

ACM Activities:
Chair, The PhD Forum at the Design Automation Conference, 2022 – Present;
Technical Committee Member, IEEE/ACM International Symposium on Microarchitecture (MICRO), 2021 – Present;
Technical Committee Member, The Design Automation Conference (DAC), 2020 – Present;
Co-Chair, The PhD Forum at the Design Automation Conference, 2020 – 2022.

Membership and Offices in Related Organizations:
ACM Member, ACM, 2017 – Present;
IEEE Member, IEEE, 2017 – Present;
IEEE CAS Member, IEEE, 2017 – Present.

Awards Received:
IEEE Micro Top Pick Paper, 2023.
ACM/SIGDA Outstanding New Faculty Award, 2022.
First place in the ACM/IEEE TinyML Design Contest, 2022.
First place in the ACM SIGDA University Demonstration, 2022.

STATEMENT

I am honored to apply for a position on the Executive Committee. My commitment to design automation goes hand in hand with my passion for education, mentorship, and community building.

Relevant Experience: As Chair for the PhD Forum at DAC, I've led a platform for doctoral students to showcase their work, exchange ideas, and network with peers and industry leaders. Serving as one of the six leading organizers for the 2023 EECS Rising Stars Workshop, I played a key role in empowering the next generation of women in engineering, creating an environment filled with support, inspiration, and opportunities.

Vision as Education Chair:
1. Strengthen Mentorship and Networking: I aim to enhance and expand initiatives like the PhD Forum to provide increased mentorship, career development, and networking opportunities within our community.
2. Commitment to Diversity and Inclusion: My commitment to promoting diversity and inclusion is at the heart of my vision. By developing inclusive educational programs and supporting diverse voices, we can introduce a wealth of perspectives and innovations to our field.

I am eager to bring my experience, passion, and vision to the role of Education Chair, and look forward to contributing to the Committee.

Candidate for Executive Committee

Christian Pilato
Politecnico di Milano, Milan, Italy

BIOGRAPHY

Academic Background:
Ph.D., Politecnico di Milano, 2012, Information Technology.

Professional Experience:
Associate Professor, Politecnico di Milano, Milan, Italy, 2023 – Present;
Assistant Professor, Politecnico di Milano, Milan, Italy, 2018 – 2023;
Postdoctoral Researcher, Università della Svizzera italiana, Lugano, Switzerland, 2016 – 2018.

Professional Interest:
Embedded Systems, High Performance Computing, Hardware Security, Hardware Accelerators, AI for Education

ACM Activities:
Secretary, ACM Raise, 2021 – 2023.
Track Chair, ACM ICCAD, 2023 – 2023;
Track Chair, ACM DAC, 2022 – 2022.

Membership and Offices in Related Organizations:
Associate Editor, IEEE TCAD, 2024 – Present;
General Chair, IEEE ICCD, 2024 – Present;
EC Member, IEEE DATE, 2023 – Present.

STATEMENT

It is my great pleasure to run for the EC member position for ACM SIGDA. As electronic devices are becoming essential in our lives, enhancing the productivity of designers is crucial to creating more complex and efficient systems while reducing the associated costs. I am deeply involved in many activities, conferences, and projects related to these aspects, and my goal has always been to understand how these technologies can improve the lives of individuals. ACM SIGDA has made a tremendous impact over the past years to help create new generations of designers. SIGDA must continue in this direction, developing a strategy to engage more young researchers. Finally, we must democratize access to SIGDA activities (and conferences) by considering extending them to different regions and cultures.

Candidate for Executive Committee

Keni Qiu
Capital Normal University, Beijing, China

BIOGRAPHY

Academic Background:
Ph.D., City University of Hong Kong. 2014, Computer Science.

Professional Experience:
Professor, Capital Normal University, Beijing, China, 2014 – Present;
Electronic Engineer, Center of Space Science and Applied Research, Chinese Academy of Sciences, Beijing, China, 2004 – 2010.

Professional Interest:
Edge Computing System, Hardware/Software Co-design, Processing-In-Memory, Non-volatile Memory.

ACM Activities:
co-EiC of SIGDA E-Newsletter, SIGDA, 2020 – Present;
Chair of EIC Workshop 2022, SIGDA - ESWEEK 2022, 2022 – 2022.

Membership and Offices in Related Organizations:
co-Program chair, ChinaDA, 2021 – 2021;
co-Program Chair, ChinaDA, 2018 – 2018;
co-Program Chair, International Workshop on Cross-layer Resiliency (IWCR), 2018 – 2018.

Awards Received:
The Second Place of University Demonstration at DAC 2021, 2021;
The Finalist of ISLPED 2017 Design Contest, 2017;
ICESS 2017 Best Paper Award, 2017;
ICCD 2016 Best Paper Award, 2016.

STATEMENT

I am honored to be running for a position on the SIGDA Executive Committee.

I have significant experience organizing events: (1) I have served as co-EiC for ACM SIGDA E-Newsletter since February 2020. My responsibility is to collect and disseminate information in the EDA field among all SIGDA members. I am familiar with

the organizing activities behind the EDA events. (2) I organized the Edge Intelligent Computing (EIC) workshop in 2022, collocated with ESWEEK 2022 which is sponsored by ACM SIGDA. (3) I co-organized the Design Automation Conference of China (ChinaDA) in 2018 and 2021, serving as co-program chair.

If elected, my goals will be focused on the followings: (1) Increasing SIGDA award types for all stages of career progressions for the community members from students to prestigious scholars; (2) Encouraging more EDA companies to financially sponsor SIGDA awards; (3) Increasing activities by strengthening local chapters in different countries and regions.

I will passionately work with the other SIGDA EC members to promote our field in both the academic and industrial areas.

Candidate for Executive Committee

Xun Jiao
Villanova University, PA, USA

BIOGRAPHY

Academic Background:
Ph.D., UC San Diego, 2018, Computer Engineering.

Professional Experience:
Assistant Professor, Villanova University, Villanova, PA, 2018 – Present.

Professional Interest:
Dependable Computing, Fault Tolerance, Approximate Computing.

Awards Received:
IEEE Philadelphia Section Young Engineer of the Year, 2022.

STATEMENT

I am excited to run for the Executive Committee of SIGDA. With a deep passion for design automation and a strong belief in the power of community, I am committed to fostering innovation, collaboration, and inclusivity within SIGDA. My goal is to leverage my experience and insights to drive initiatives that will benefit our members and the broader design automation community. I look forward to the opportunity to serve and contribute to the continued growth and success of SIGDA. Your support will be greatly appreciated.

Candidate for Executive Committee

Cheng Zhuo
Zhejiang University, Hangzhou, China

BIOGRAPHY

Academic Background:
Ph.D., University of Michigan, Ann Arbor, 2010, Computer Science & Engineering.

Professional Experience:
Professor, Zhejiang University, China, 2016 – Present
Senior/Staff Engineer, Intel Corp. , USA, 2011 – 2016

Professional Interest:
Low Power Design, Hardware acceleration, Computing in memory, Modeling and simulation, Medical imaging.

ACM Activities:
Associate Editor, ACM TODAES, 2020 – Present;
Chair, ACM SIGDA East China Chapter, 2021 – Present;
Co-Chair, DAC System Design Contest, 2021 – Present;
Chair/Co-Chair, ICCAD/SIGDA Student Research Contest, 2017 – 2018.

Membership and Offices in Related Organizations:
Distinguished Lecturer, IEEE CEDA , 2023 – Present;
Associate Editor, IEEE TCAD, 2018 – Present;
Fellow, IET, 2021 – Present.

Awards Received:
Best Paper Award at ASPDAC, 2024;
Best Paper Award at ASPDAC, 2023;
SIGDA Meritorious Service Award, 2022;
SIGDA Technical Leadership Award, 2012.

STATEMENT

I am honored to have the chance to run for a position in SIGDA's Executive Committee (EC). I have been actively involved in volunteer activities in ACM and IEEE for more than a decade and made significant contributions in services to the EDA community and beyond. I have organized and led many key SIGDA initiatives, including ISPD Gate Sizing Contest, ICCAD Student Research Contest, and DAC System Design Contest.

As the founding Chair of the ACM SIGDA East China Chapter, I have successfully launched workshops, contests, and recruitment drives. I am now seeking to volunteer on the SIGDA EC with the following focus:

- Enhance technical activities and increase industry engagement, drawing upon proven strategies and exploring new collaborative ventures between academia and industry.
- Elevate the profiles of EDA professionals and under-appreciated volunteers through strategic online outreach and by enriching our conferences and workshops with opportunities for recognition and networking.
- Promote diversity within EDA endeavors and SIGDA's influence, devise fresh strategies to engage talents from the Asia-Pacific region, and assist in the professional growth of emerging scholars and practitioners.