

Candidate for Chair

James H. Anderson
University of North Carolina at Chapel Hill, NC, USA

BIOGRAPHY

Academic Background:

Ph.D., University of Texas at Austin, 1990, Computer Sciences.

Professional Experience:

Kenan Distinguished Professor, University of North Carolina at Chapel Hill, NC, USA, 2013 – Present;
Professor, University of North Carolina at Chapel Hill, NC, USA, 2002 – 2013;
Associate Professor, University of North Carolina at Chapel Hill, NC, USA, 1997 – 2001.

Professional Interest:

Real-Time Systems; Distributed and Concurrent Algorithms; Multicore Computing; Operating Systems.

ACM Activities:

Board of Directors, SIGBED, 2016 – Present;
Steering Committee, CPS Week, 2017 – Present;
Program Chair, ACM PODC, 2000;
General Chair, ACM PODC, 1993 – 1995.

Membership and Offices in Related Organizations:

Chair, IEEE Technical Committee on Real-Time Systems, 2016 – 2017;
Program Chair, IEEE RTAS, 2015;
Program Chair, IEEE RTSS, 2004.

Awards Received:

TCRTS Outstanding Technical Achievement and Leadership Award, 2018;
ACM Fellow, 2013;
IEEE Fellow, 2012;
Alfred P. Sloan Fellow, 1996.

STATEMENT

I am honored to be nominated as SIGBED Chair. I recently finished a stint as Chair of the IEEE Technical Committee on Real-Time Systems (TCRTS), a community with significant SIGBED overlap. As SIGBED Chair, I will build upon that experience by focusing on three issues:

1. SIGBED has a diversity problem. As TCRTS Chair, I created the first-ever TCRTS Diversity Committee to begin dealing with this issue. I will create a similar SIGBED committee and invest significant SIGBED funding in diversity initiatives.

2. SIGBED needs a greater sense of community. "Community" means having a voice. When I was TCRTS chair, we conducted an extensive community survey to gauge feelings on a range of issues. I propose conducting a similar SIGBED survey to guide future planning decisions. I also propose adding content to the SIGBED website that provides transparency regarding decision-making processes.
3. SIGBED members would benefit from new career-growth initiatives. I will create a SIGBED committee tasked with proposing such initiatives. Mentoring activities for Ph.D. students, proposal-writing workshops for new faculty, and a more proactive nomination process for major distinctions (IEEE or ACM Fellow or even the Turing Award) are some ideas worth considering.

Candidate for Chair

Christopher David Gill
Washington University, St Louis, MO, USA

BIOGRAPHY

Academic Background:

DSc., Washington University in St. Louis, 2002, Computer Science.

Professional Experience:

Professor, Washington University, St Louis, MO, USA, 2012 – Present;
Associate Professor, Washington University, St Louis, MO, USA, 2007 – 2011;
Assistant Professor, Washington University, St Louis, MO, USA, 2001 – 2007.

Professional Interest:

Cyber-Physical Systems; Real-Time and Embedded Systems; Adaptive Parallel Real-Time Concurrency Platforms; Real-Time Virtualization; Real-Time Distributed Systems.

ACM Activities:

ICCPS General Co-Chair, SIGBED, 2017 – 2018;
ICCPS Technical Program Co-Chair, SIGBED, 2016;
Vice-Chair, SIGBED, 2013 – 2015;
CPS Week Finance Chair, SIGBED, 2011 – 2012.

Membership and Offices in Related Organizations:

RTSS General Chair, IEEE TCRTS, 2014 – 2015;
RTSS Technical Program Chair, IEEE TCRTS, 2013 – 2014;
Treasurer, IEEE TCRTS, 2009 – 2012.

Awards Received:

IEEE Computer Society's Golden Core, 2013;
IEEE Computer Society Meritorious Service Award, 2012.

STATEMENT

Thanks to the ongoing work of ACM SIGBED, an understanding of our technical community's priorities, constraints, and interests has been developed in recent years, and if elected to serve as SIGBED Chair. I will strive to continue that process. Specific plans include conducting a survey of preferences, interests, and concerns regarding the conferences the members of our strong and thriving research community attend regularly, and to identify opportunities for improving how our conferences are supported and managed. If elected to serve as SIGBED Chair, I will also endeavor to follow-through on activities suggested by that survey, to improve our conferences and the other services we provide to our community.

If elected, my priorities will be to:

- (1) maintain and enhance the quality of SIGBED sponsored conferences,
- (2) promote the growth and diversity of research conducted by (and results produced by) our community,
- (3) develop and pursue new initiatives to increase participation by students and other groups under-represented in our conferences and other events,
- (4) coordinate with the leadership committees of other closely related conferences and organizations, and
- (5) strengthen relationships with industry to sustain the relevance of our community's research.

Candidate for Chair

Xenofon Koutsoukos
Vanderbilt University, Nashville, TN, USA

BIOGRAPHY

Academic Background:

Ph.D., University of Notre Dame, 2000, Electrical Engineering.

Professional Experience:

Professor, Vanderbilt University, Nashville, TN, USA, 2014 – Present;
Assistant/Associate Professor, Vanderbilt University, Nashville, TN, USA, 2002 – 2014;
Research Staff, Xerox PARC, Palo Alto, CA, USA, 2000 – 2002.

Professional Interest:

Cyber-physical systems; Security and resilience; Formal verification; Control design;
Distributed sensing.

ACM Activities:

Board of Directors Member, SIGBED, 2015 – Present;
Secretary-Treasurer, SIGBED, 2013 – 2015;
General and Program Co-chair, ACM/IEEE ICCPS, 2015 – 2016;
General Chair, ACM/IEEE IPSN, 2011.

Membership and Offices in Related Organizations:

CPS Track Program Chair, RTSS, IEEE, 2014;
Associate Editor, Automatica, IFAC, 2017 – Present.

Awards Received:

IEEE Fellow, 2018;
Honorable Mention for Best Paper Award, HSCC, 2012;
Aeronautics Research Mission Directorate (ARMD) AA Award, NASA, 2011;
Best Paper Award, SenSys, 2007.

STATEMENT

During the last decade, I have been privileged to serve the SIGBED community and the ACM in several roles that include SIGBED Board of Directors Member, Secretary-Treasurer, General and Program Co-chair of ICCPS, Associate Editor of the ACM Transactions on Sensor Networks, General Chair of IPSN, and TPC Member of (co)-sponsored conferences such as IPSN, ICCPS, HSCC, SenSys, and EMSOFT. Because of my participation in these activities, I have developed an appreciation of SIGBED's wide-ranging impact especially in

the face of disruptive technological and research advances affecting embedded computing systems as well as changes in publishing models and conference organization. It is my strong belief that SIGBED must continue to have a central role in embedded computing systems, enabling interfacing with other technical communities (such as, artificial intelligence and cybersecurity), expanding outreach to new members and activities, and strengthening effective inclusion and diversity practices. If elected, I would like to provide support for all SIGBED activities that include sponsorship and planning of publications, conferences, workshops, and awards, and working effectively with ACM. Also, I look forward to working with the community on new initiatives, in particular, in the areas of education and broadening participation.

Candidate for Vice-Chair

Georgios Fainekos
Arizona State University, Tempe, AZ, USA

BIOGRAPHY

Academic Background:

Ph.D., University of Pennsylvania, 2008, Computer and Information Science.

Professional Experience:

Associate Professor, Arizona State University, Tempe, AZ, USA, 2015 – Present;
Assistant Professor, Arizona State University, Tempe, AZ, USA, 2009 – 2015;
Postdoctoral Researcher, NEC Labs America, Princeton, NJ, USA, 2008 – 2009.

Professional Interest:

Cyber-Physical Systems; Intelligent transportation systems; Testing and Verification;
Formal requirements; Model Based Development.

ACM Activities:

Associate Editor, ACM SIGBED Review, 2012 – 2016;
Program Co-Chair, HSCC, 2016;
Publication Chair, ICCPS, 2015;
Registration Chair, CPSWeek, 2013.

Membership and Offices in Related Organizations:

Steering Committee member, Workshop on Monitoring and Testing of Cyber-Physical Systems,
2018 – Present;
IEEE Control Systems Society Representative in IEEE SC, 2015 – 2018.

Awards Received:

NSF CAREER Award, 2014;
Best Researcher Junior Faculty Award, 2013;
Frank Anger Memorial ACM SIGBED/SIGSOFT Student Award, 2008.

STATEMENT

Over the past decade, I have been an avid contributor to and supporter of the SIGBED community in various roles, e.g., associate editor of ACM SIGBED review, program chair of HSCC, registration chair of CPSWeek, and PC member for HSCC, ICCPS, and EMSOFT. As a Vice-Chair for SIGBED, I will support the Chair in any capacity needed. In addition, my personal agenda will be to support the growth of the SIGBED community and promote industry engagement. In particular, I will work to motivate and support competitions co-located with CPSWeek and/or ESWeek, which typically motivate the engagement of students and, eventually, grows the community. In addition, I will work toward promoting the engagement of industry with SIGBED sponsored events and with the SIGBED community at large. It is extremely

important for the industry – and even local governmental agencies – to be aware of the innovations that take place within the SIGBED community especially within the context of smart cities, manufacturing, and transportation.

I am confident that I have the motivation and necessary background to work on these initiatives. I look forward to working with the Chair and with you to support your own initiatives and needs.

Candidate for Vice-Chair

Ian M. Mitchell
University of British Columbia, Vancouver, Canada

BIOGRAPHY

Academic Background:

Ph.D., Stanford, 2002, Scientific Computing & Computational Mathematics.

Professional Experience:

Professor, Department of Computer Science, University of British Columbia, Vancouver, Canada, 2003 – Present;
Associate Head (Undergraduate), Department of Computer Science, University of British Columbia, Vancouver, Canada, 2015 – 2018.

Professional Interest:

Continuous state reachability; Control and planning in cyber-physical and robotic systems; Wheeled mobility assistive technology; Numerical methods; Reproducible research.

ACM Activities:

Program Committee, HSCC Conference, 2017 – 2019;
Repeatability Evaluation Chair, HSCC Conference, 2014 – 2016;
Technical Program Committee co-chair, ICCPS Conference, 2015;
Program Committee Co-chair, HSCC Conference, 2012.

Membership and Offices in Related Organizations:

Discrete Event & Hybrid Systems Technical Committee Member, IFAC, 2008 – 2011;
Program Committee, ADHS Conference, 2012 – 2018.

STATEMENT

I am standing for vice-chair of SIGBED to support the continued growth and strength of our community. In particular, conferences are a cornerstone: As venues to publish our newest results, as forums where researchers can meet to spawn new ideas, and as places where new members can join the community can be welcomed and learn the important social aspects of the trade. Beyond supporting the chair, I aim to help the organizing committees of SIGBED aligned conferences share and adopt practices which raise the profile of their members (such as test-of-time and paper awards) and enable more rapid sharing and advancement of new technologies (such as repeatability and artifact review processes).

I have been involved with SIGBED through the HSCC conference for more than 20 years, including serving as PC co-chair for two CPSWeek conferences (HSCC in 2012 and ICCPS in 2015). I created the repeatability evaluation process for HSCC and served as chair of the

repeatability evaluation committee in 2014 and 2016. Most recently I have served as associate head of my department, where I led a progressive series of reforms to support my head and allow us to cope with a dramatic enrollment surge.

Candidate for Vice-Chair

Wang Yi
Uppsala University, Uppsala, Sweden

BIOGRAPHY

Academic Background:

Ph.D., Chalmers University of Technology, 1991, Computer Science.

Professional Experience:

Chair Professor, Uppsala University, Uppsala, Sweden, 2000 – Present.

Professional Interest:

Embedded Systems; Real-Time Systems; Formal Verification.

ACM Activities:

Member, SIGBED Board of Directors, 2016 – Present;
Award Committee Chair, SIGBED Caspi Dissertation Award, 2016 – Present;
Steering Committee Member, Embedded Systems Week, 2013 – Present;
Associate Editor, ACM Transactions on Embedded Computing Systems (TEC), 2006 – Present.

Membership and Offices in Related Organizations:

Steering Committee Member, EMSOFT, 2006 – Present;
Steering Committee Member, FORMATS, 2003 – Present;
Associate Editor, IEEE Journal: Test and Design, 2016 – Present.

Awards Received:

CAV Award, 2013;
RTSS Best Paper Award, 2017;
ECRTS Best Paper Award, 2017;
RTSS Best Paper Award, 2015.

STATEMENT

Embedded Systems is a field represented by several research communities including Real Time Systems, Embedded Systems and Formal Techniques. These communities have their own conferences, core members, as well as central topics of interests overlapping with each other. I have been active in all of these communities with scientific contributions of relevance to embedded systems. My primary goal is to bring these communities closer and help people to collaborate on common interests. With joint forces, SIGBED can be a much stronger community.

Candidate for Secretary-Treasurer

Liliana Cucu-Grosjean
Inria, Paris, France

BIOGRAPHY

Academic Background:

Habilitation Thesis, University of Paris-Sorbonne, 2014, Contributions to real-time systems.

Professional Experience:

Head of Kopernic Team, Inria, Paris, France, 2018 – Present;
Tenured Confirmed Researcher, Inria, Paris, France, 2013 – Present;
Junior Researcher, Inria, Nancy, France, 2008 – 2013.

Professional Interest:

Real-time systems; Processor design; Statistical methods for embedded systems;
Multicore processor; Cyber-physical systems design.

Membership and Offices in Related Organizations:

TCRTS Diversity Sub-Committee Chair, IEEE, 2016 – Present;
Co-chair of Diversity Committee, Inria, 2015 – Present.

STATEMENT

I believe that diversity and transparency are key for producing excellent research results and for ensuring a healthy community dynamic. As a result, I initiated several actions in favor of diversity within IEEE TCRTS and Inria. I invest my time and effort to help new members find their place within our community; I regularly request and obtain financial support for researchers with family constraints and I participate in initiatives for unbiased scientific evolution. I also believe that the executive committee needs the support of each one of us and should stay open to any proposition in favor of making our community a better place to do research.

Candidate for Secretary-Treasurer

Hyoseung Kim
University of California, Riverside, CA, USA

BIOGRAPHY

Academic Background:

Ph.D., Carnegie Mellon University, 2016, Electrical and Computer Engineering.

Professional Experience:

Assistant Professor, University of California, Riverside, CA, USA, 2016 – Present;
Research Engineer, LIG Nex1, Gyeonggi-do, South Korea, 2007 – 2011.

Professional Interest:

Cyber-physical systems; Embedded real-time systems; Sensor networks;
Operating systems; Automotive systems.

ACM Activities:

Board of Directors/Executive Committee, ACM SIGBED, 2017 – Present;
Program Committee Member, ACM EMSOFT, 2017.

Membership and Offices in Related Organizations:

Member, IEEE TCRTS, 2016 – Present;
Program Committee Member, IEEE RTAS, 2018 – 2019;
Program Committee Member, IEEE RTCSA, 2017 – 2018.

Awards Received:

IEEE RTCSA Best Paper Award, 2017;
IEEE RTAS Best Paper Award, 2014;
Fulbright Scholarship Award (2011-2013).

STATEMENT

It is my great honor to be nominated for the position of Secretary-Treasurer of SIGBED. I have been serving as a member of the Board of Directors and the Executive Committee of SIGBED since 2017.

This position requires two different roles with a shared objective. My particular focus in this position is to increase the student member population of SIGBED. Student members are the prospective driving forces to strengthen our community and achieve sustainability.

With the Secretary role, I will strive to promote student-driven competitions, demonstrations, and workshops at SIGBED-sponsored conferences. We need more of these activities to intrigue students to connect with each other, expand their ideas to various practical fields, and most importantly, have them want to join SIGBED. I will also work with other SIGBED officers and members to develop a diversity-inclusive culture in our community of students and researchers.

With the Treasurer role, I will push forward to increase the budget allocation for student-oriented activities while ensuring a solid financial foundation, and seek fundraising and sponsorship opportunities from industrial partners.

Candidate for Secretary-Treasurer

Linh Thi Xuan Phan
University of Pennsylvania, Philadelphia, PA, USA

BIOGRAPHY

Academic Background:

Ph.D., National University of Singapore, 2009, Computer Science.

Professional Experience:

Assistant Professor, University of Pennsylvania, Philadelphia, PA, USA, 2016 – Present;
Assistant Research Professor, University of Pennsylvania, Philadelphia, PA, USA, 2012 – 2016;
Postdoctoral Researcher, University of Pennsylvania, Philadelphia, PA, USA, 2010 – 2012.

Professional Interest:

Real-time, embedded, cyber-physical systems; Internet of Things; Distributed systems;
Networking; Formal methods.

ACM Activities:

Member of ACM Future of Computing Academy, 2017 – Present;
Member, ACM, 2017 – Present.

Membership and Offices in Related Organizations:

Executive Committee, IEEE Technical Committee on Real-Time Systems, 2016 – Present;
Diversity Subcommittee, IEEE Technical Committee on Real-Time Systems, 2016 – Present.

Awards Received:

CAREER Award, National Science Foundation, 2018;
Outstanding Paper Awards (IEEE RTAS'18, RTSS'13, ACM EMSOFT'10), 2018;
Dean's Graduate Research Excellence Award (NUS, Singapore), 2009;
Singapore Scholarship (Singapore Ministry of Foreign Affairs), 2003.

STATEMENT

Embedded computing is in the middle of an exciting transformation: self-driving cars and the Internet of Things are already here, embedded devices are increasingly connected at a global scale, and devices are acquiring new capabilities using artificial intelligence and cloud computing. This transformation brings new opportunities for our community, but also new challenges: for instance, it is becoming more and more difficult to guarantee safety, security, and privacy.

As the leading voice for embedded computing, SIGBED is uniquely positioned to address these challenges by bringing together researchers and practitioners from both "traditionally embedded" areas (such as real-time systems, formal methods and control systems) and other domains

(such as ML/AI, data science, distributed systems, and security/privacy). I believe SIGBED should actively engage with these communities, reach out and attract new members from diverse backgrounds, and foster interdisciplinary research. As SIGBED Secretary-Treasurer, I would develop initiatives towards this goal.

I would also like to further strengthen SIGBED's outreach and diversity initiatives, e.g., by building extended peer networks and by establishing mentorship programs. I have served on IEEE's Technical Committee on Real-Time Systems, and I am a member of the ACM Future of Computing Academy.