Candidate for Chair

David Bell
Brunel University London, Uxbridge, United Kingdom

BIOGRAPHY

Academic Background:
Ph.D., Brunel University London, 2006, Computer Science.

Professional Experience:
Reader, Brunel University London, UK, 2006 – 2020;
CTO, HecoAnalytics Limited, London, UK, 2018 – 2020;
Technology Director, Deutsche Bank, London, UK, 1994 – 2003.

Professional Interest:
Hybrid Modelling and Simulation, Machine Learning, Semantic Modelling, Multi-scale Model Integration, Agent Based Modelling and Simulation.

ACM Activities:
SIGSIM Education Chair, SIGSIM, 2014 – 2020

STATEMENT

Over the last six years I have thoroughly enjoyed Chairing the ACM SIGSIM Education Committee (raising WSC applicant numbers by over 300%). If elected, I hope to further develop our engagement with students and early career academics through strategies that promote Web based technical tutorials and more in-depth social media content and debate.

The early part of my career was spent working in the finance sector, using simulation in the most part for risk analysis. After fifteen years in the commercial sector (later years as a Director), I returned to academia to undertake a Ph.D. in Computer Science and then as an academic. I am currently a Reader in the Department of Computer Science at Brunel University London where I have recently been exploring the use of hybrid modelling and simulation in healthcare, heritage and migration. This has often involved the use of machine learning to analyse model input data (particularly human behaviour).

SIGSIM management and organisation is a team environment and I hope to fully support and recognise the excellent work done by others in our SIGSIM community (including the success and quality of our conferences).

Candidate for Chair

Kalyan Perumalla
Oak Ridge National Laboratory, Knoxville, TN, USA.

BIOGRAPHY

Academic Background:
Ph.D., Georgia Institute of Technology,1999, Computer Science.

Professional Experience:
Distinguished Research Staff Member, Oak Ridge National Laboratory, 2005 – Present;
Joint Full Professor, University of Tennessee, 2018 – Present;
Adjunct Professor, Georgia Institute of Technology, 2006 – Present.

Professional Interest:
Parallel Discrete Event Simulation, Cyberphysical Systems and Security, High Performance Computing, Discrete Optimization, Reversible Computing.

ACM Activities:
Associate Editor, ACM TOMACS Journal, 2008 – Present;
Program Committee Member, ACM SIGSIM PADS Conference, 2003 – 2019;
Program Co-Chair, SimuTools Conference, 2017;
Program Co-Chair, ACM PADS Conference, 2007.

Membership and Offices in Related Organizations:
Associate Editor, TSMSI SIMULATION Journal, 2008 – Present;
Program Co-Chair, IEEE MASCOTS Conference, 2012;
Steering Committee Member, ACM PADS Conference, 2007 – 2011.

Awards Received:
ORNL CSM Division Award "Most Significant 5-Year Contribution", 2017;
Best Paper, SPECTS-SummerSim'14, 2014;
Dept. of Energy CAREER Award, 2010;
Best Paper, ABS-SpringSim'08, 2008.

STATEMENT

Building on my 20+ years of contributions as a proud member of the simulation research community, I am excited at the opportunity to serve the SIGSIM community with new vision and leadership. As an active researcher and organizer in multiple venues relevant to SIGSIM, including MSI/SCS, TOMACS, WSC, PADS, SpringSim, DS-RT, MASCOTS, and SimuTools, the strong interactions and collaborations over many years have established many warm relationships with leaders in the world-wide simulation community. I expect to build on them in leading SIGSIM forward.

I am eager to tap into my ongoing engagements with multiple government agencies, expertise in cutting-edge high-end computing, and important intersections with scientific computing applications of national and global interest. In terms of management skills, I hold a managerial role at the Oak Ridge National Laboratory, with experience in managing sizable budgets and project teams. I have also mentored many young minds via supervising students, postdocs, and research staff members, and hosting. Cognizant of the promise of latest advancements such as artificial intelligence (AI), machine learning (ML) and cyberphysical systems (CPS), I plan to seek out complementary and supplementary initiatives to bridge traditional simulation methods.

Candidate for Vice Chair

Andreas Tolk
The MITRE Corporation, Hampton, VA, USA

BIOGRAPHY

Academic Background:
Ph.D., University of the Federal Armed Forces, Munich, 1995, Computer Science.

Professional Experience:
Senior Principal M&S, The MITRE Corporation, Hampton, VA, 2015 – Present;
Chief Scientist, SimIS Inc., Portsmouth, VA, 2013 – 2015;
Professor, Old Dominion University, Norfolk, VA, 2006 – 2013.

Professional Interest:
Interoperability and Composability of Simulation Solutions, Artificial Societies extending the Agent-based Paradigm, Simulation and Complexity Science, Epistemology of Simulation, M&S Support of System of Systems Engineering.

ACM Activities:
Board Member (Vice Chair and Secretary), SIGSIM, 2010 – Present;
WSC Advisory Board Member, SIGSIM, 2014 – Present.

Membership and Offices in Related Organizations:
Board of Directors, Society for M&S (SCS), 2012 – 2017.

Awards Received:
ACM SIGSIM Distinguished Contributions Award, 2019;
Albert Nelson Marquis Lifetime Achievement Award, 2017;
Fellow of the Society for Modeling and Simulation, 2016;
SCS Distinguished Professional Achievement Award, 2014.

STATEMENT

I am the longest serving member of the current ACM SIGSIM board and would like to support the new chair with my knowledge and experience collected over the recent years. Having been active in all SIGSIM activities - SIGSIM Board, SIGSIM Conferences, and Editorial board of TOMACS - I feel qualified to do so. As my goal, I am particularly interested in supporting our junior members. Belonging to a professional society gives stability and guidance, plus networks needed in later stages of the career. Recognizing their contributions, supporting their participation, and encouraging their professional engagement is my main motivation to continue to support the SIGSIM board.

Technically, I see the role of simulation growing. Complexity cannot be managed or governed without simulation-based methods and tools. Computational sciences are using executable theories to conduct experiments, which translates into the use of discipline-specific simulation. Cyber-physical systems used computational forecasting for their decision, which is simulation. Data science can become more important by adding the dynamics of simulation. As a professional society, we must serve our colleagues better to communicate our simulation knowledge in a way they can apply it in these new domains.

Candidate for Secretary/Treasurer

Jason Liu
Florida International University, Miami, FL, USA

BIOGRAPHY

Academic Background:
Ph.D., Dartmouth College, 2003, Computer Science.

Professional Experience:
Professor, Florida International University, Miami, 2019 – Present.

Professional Interest:
Parallel Discrete-Event Simulation, Performance Modeling, Network Simulation and Modeling, Simulation of Computer Systems, HPC Simulation and Modeling.

ACM Activities:
Steering Committee, ACM SIGSIM PADS Conference, 2008 – Present;
Associate Editor, ACM TOMACS, 2014 – Present;
General Chair, ACM SIGSIM PADS Conference, 2020;
Program Chair, ACM SIGSIM PADS Conference, 2019.

Membership and Offices in Related Organizations:
Track Coordinator, Winter Simulation Conference, 2017 – 2019;
General Chair, IEEE/ACM MASCOTS (2010), SIMUTools (2011), 2010 – 2011;
Associate Editor, SCS Simulation Transactions, 2009 – Present.

Awards Received:
ACM Distinguished Scientist, 2014;
ACM SIGSIM PADS Best Paper Award, 2014;
SpringSim CNS Best Paper Award, 2012.

STATEMENT

I would like to run for the treasurer position for ACM SIGSIM, through which I can contribute to the modeling and simulation community. I have extensive research experience in this field and have organized several major conferences in the area, including SIGSIM-PADS, WSC, MASCOTS, SIMUTools, and others. I have also been involved in the editorial boards of TOMACS and SIMULATION. I believe with my experience I can help the SIGSIM leadership in advancing both research and education agenda related to modeling and simulation.

Candidate for Secretary/Treasurer

Kara A. Olson
University of Washington, Seattle, WA, USA.

BIOGRAPHY

Academic Background:
Ph.D., Old Dominion University, 2014, Computer Science.

Professional Experience:
Research Scientist, Industrial & Systems Engineering, University of Washington, Seattle, WA, 2019 – present;
Computational Scientist, Woodruff Scientific, Inc., Seattle, WA, 2014 – 2019;
Research Assistant, NASA Langley Research Center, Hampton, VA, 2010 – 2012.

Professional Interest:
Modeling & Simulation, Discrete Event Simulation, Code Analysis, Model Understanding, High Performance Computing.

ACM Activities:
Treasurer/Secretary, ACM SIGSIM, 2016 – Present;
Chair, Old Dominion University ACM Student Chapter, 1995 – 2003;
Vice Chair, Old Dominion University ACM Student Chapter, 1994 – 1995.

Awards Received:
SIGSIM Winter Simulation Conference Student Travel Award, 2014;
SIGSIM PADS Student Travel Award, 2013;
I/ITSEC Doctoral Student Award, 2008;
VMASC (Va. Modeling, Analysis and Simulation Center) Fellowship, 2008.

STATEMENT

I have appreciated being your Secretary/Treasurer and would be honored and thankful to continue! Being an annual Business Meeting attendee for 15 years, it is stimulating to follow and contribute directly to the extended conversations.

As Secretary/Treasurer, I've aimed for each financial presentation to have cleaner, clearer slides to aid in understanding, including additional, relevant details about both the sources of SIGSIM income and expenses. Most recently, we've moved the annual budget presentation from "accounting results" to "actual results", making it clear what we are contributing to ACM, and what ACM is investing in SIGSIM. It is important that members be able to plainly discern how their organization operates.

As Secretary/Treasurer, I continue to be glad to take notes and am always a willing, available listener. Thank you for the opportunity to serve this past term. I would be both delighted and honored to continue as your Secretary/Treasurer.

Candidate for Secretary/Treasurer

Srikanth Yoginath
Oak Ridge National Laboratory, Oak Ridge, TN, USA

BIOGRAPHY

Academic Background:
Ph.D., Georgia Institute of Technology, 2014, Computational Science and Engineering.

Professional Experience:
R&D Staff, Computer Science and Mathematics Division, Oak Ridge National Laboratory, TN, 2015 – Present;
R&D Associate, Computational Sciences and Engineering Division, Oak Ridge National Laboratory, TN, 2010 – 2015;
R&D Assistant, Computational Sciences and Engineering Division, Oak Ridge National Laboratory, TN, 2007 – 2010.

Professional Interest:
Modeling and Simulation, Large-scale Simulations, Digital-Twins, Reversible Computing Machine Learning.

ACM Activities:
Publicity Chair, IEEE/ACM SimuTools, 2014 – 2014;
Technical Reviewer, ACM TOMACS, 2016 – 2019;
Member, ACM (SIGSIM), 2015 – Present.

Membership and Offices in Related Organizations:
Program Committee Member, ICPP, WSC, SpringSim Conferences, 2018 – Present;
Technical Reviewer, JOS, JPDC, SIMPAT, CCPE Journals, 2016 – 2019;
Technical Reviewer, US DOE Energy Efficiency and Conservation Block Grant (EECBG), 2009.

Awards Received:
Best Paper finalist, ACM-SIGSIM PADS 2011.

STATEMENT

I am honored to run for Secretary/Treasurer of SIGSIM. I have been part of the SIGSIM research community for several years and have valued the benefit from continual interactions with its members, especially in key conferences such as WSC and PADS.

With the interests in distributed computing over IoT systems and AI at their helm, I believe the contributions that SIGSIM could make toward the evolution of these futuristic systems is

highly significant and impactful. I would very much like to play an active role in enhancing and engaging the SIGSIM community in the rapidly evolving world of systems. At ORNL, I have been serving as PI or Co-PI on multiple projects, with experience in adopting sound budgeting, fiscal discipline, and project management practices. If elected, I will work with other elected members to enhance the organization’s financial well-being and will ensure our activities adhere to the budget constraints