

## Candidate for Chair

John West  
Texas Advanced Computing Center, Austin, TX, USA

### **BIOGRAPHY**

#### Academic Background:

MS, Mississippi State University, 1994, Computational Engineering.

#### Professional Experience:

Director of Strategic Initiatives, Texas Advanced Computing Center, Austin, TX, USA, 2014 – Present;

Director, DOD HPC Modernization Program, Washington, D.C., USA, 2011 – 2014;  
Special Asst. to the Director for HPC, US Army Engineer R&D Center, Vicksburg, MS, USA, 2009 – 2014.

#### Professional Interest:

Parallel computing; Scientific and technical computing; Machine learning and artificial intelligence  
Visualization; Management of Computing and Information Systems.

#### ACM Activities:

Vice-Chair, ACM SIGHPC, 2016 – Present;  
Chair, ACM Distinguished Member Committee, 2018;  
Steering Committee, SC Conference Series, 2014 – 2018;  
General Chair, SC16 Conference, 2014 – 2016.

#### Membership and Offices in Related Organizations:

Associate Editor, Computing in Science and Engineering, 2015 – Present;  
Chair, NITRD High End Computing Interagency Working Group, 2012 – 2014.

### **STATEMENT**

The formation of SIGHPC seven years ago gave the members of the HPC community a home within ACM, and a strong advocate within the society for SC, our flagship conference. Our SIG has been one of ACM's fastest growing and most innovative SIGs, and that tradition will continue. Over the past several years we have aggressively grown the number of conferences we sponsor, and the numbers of awards and grants we offer for both students and professionals. My own contribution was the creation of the only mid-career award for women in HPC, and I have taken over leadership of the SIGHPC/Intel fellowships supporting diversity in computational and data science. During the next three years, the SIG will be challenged to find the most meaningful ways to invest in our members and to grow our community, while executing successfully on these new activities. I have been an active contributor to the volunteer and elected leadership of SIGHPC since its formation, and I feel my vision and experience will continue to move our SIG forward.

## Candidate for Vice-Chair

Kurt H. Maier  
Pacific Northwest National Laboratory, Richland, WA, USA

### **BIOGRAPHY**

#### Academic Background:

B.Sc., Middle Tennessee State University, 2009, Science.

#### Professional Experience:

Engineer, Pacific Northwest National Laboratory, Richland, WA, USA, 2016 – Present;  
HPC Engineer, IBM, Baltimore, MD, USA, 2012 – 2016;  
Engineer, Institute for Genome Sciences, Baltimore, MD, USA, 2010 – 2012.

#### Professional Interest:

Distributed computing; Operating systems; Workflow automation; Multiscale modeling systems;  
Administration practice.

#### ACM Activities:

Member: ACM and SIGHPC, 2012 – Present.

### **STATEMENT**

The ACM in general and SIGHPC in particular are in a unique position to shepherd the technical achievements, ethical standards, and outreach goals that are crucial to ensure the continued vibrancy of our field. I'm fortunate enough to be in a position to volunteer in support of the furtherance of these ideals, and I'm eager to help SIGHPC navigate the challenges presented by an increasingly fast-paced domain.

As the focal point of high performance computing expands to encompass new priorities and a broader range of application, our organization is more important than ever. I've spent my career immersed in computing as a platform for scientific advancement in the private sector, in university research labs, and in national-level scientific institutions. I hope that my breadth of experience with these disparate application spaces and engineering approaches will enable me better to represent our community's interests. As more opportunity arises for application of HPC research and practice, I feel it's important for our organization to enable many new voices to be heard and valued, so that SIGHPC remains the most comprehensive and rewarding avenue for engaging the future we will face together.

Thank you for your consideration.

## Candidate for Vice-Chair

Ron Henry Perrott  
Oxford University, Oxford, United Kingdom

### **BIOGRAPHY**

#### Academic Background:

Ph.D., Queen's University, 1970, Mathematics.

#### Professional Experience:

Visiting Professor, Oxford University, Oxford, UK, 2010 – Present;  
Professor, Queen's University, Belfast, UK, 1978 – 2010;  
Researcher, NASA Ames, Mountain View, CA, USA, 1977 – 1978.

#### Professional Interest:

High Performance Computing; eScience/cloud computing; Design and implementation of parallel programming languages; Software Engineering; Technology Transfer.

#### ACM Activities:

Editor in Chief, ACM International Conference Proceedings, 2011 – Present;  
Member, ACM Grace Hopper Award. Committee, 2017 – Present;  
Co-Chair, ACM Heidelberg Laureate Forum, 2012 – Present;  
Member/Chair, ACM Fellows Committee, 2004 – 2009.

#### Membership and Offices in Related Organizations:

Member/Chair, EuroPar Parallel Processing Conference, 2000 – Present;  
Member, SC Conference Executive Committee, 2006 – 2010;  
Chair, UK's HPC Strategy Committee, 2002 – 2008.

#### Awards Received:

ACM Distinguished Service Award, 2017;  
Elected IEEE Fellow, 2004;  
Elected ACM Fellow, 1997;  
Elected Fellow British Computer Society, 1980.

### **STATEMENT**

If elected I will continue to promote and pursue the objectives of SIGHPC using my knowledge and experience of HPC which I have gained both from research activities as well as from HPC strategy and management positions.

I have a keen awareness of the importance of sustaining and developing an HPC community which is appealing to prospective members and which encourages existing members' participation since membership involvement is a key feature of the success of SIGHPC.

For over 25 years I have been active in UK and European HPC research and policy. For example, Chairing the UK's National HPC Strategy Committee, EU Strategy Groups on Grid Computing and Software Services and as a founding member of Euro-Par, the European conference of Parallel Computing.

I have held career positions in both Europe and the USA, giving me a good insight into and understanding of international requirements in HPC.

As Vice-Chair, I will assist the chair as appropriate and stand in as necessary. Both personally and institutionally I have been a strong supporter of SIGHPC and have been an active participant since I became a founding member. I will bring this same passion in my role as Vice-Chair.

## Candidate for Treasurer

Christine Elizabeth Harvey  
The MITRE Corporation, McLean, VA, USA

### **BIOGRAPHY**

#### Academic Background:

Masters of Science, Stockton University, 2013, Computational Science.

#### Professional Experience:

Lead High Performance and Analytic Computing Engineer, The MITRE Corporation, McLean, VA, USA, 2016 – Present;

Senior Modeling and Simulation Engineer, The MITRE Corporation, McLean, VA, USA, 2013 – 2016.

#### Professional Interest:

Distributed Computing; HPC Training/Education; Modeling and Simulation; HPC System Management; Data Science.

#### ACM Activities:

Membership Coordinator, SIGHPC, 2017 – Present.

#### Membership and Offices in Related Organizations:

Committee Member, SC Conference Series, 2014 – Present;

Business Chair, Winter Simulation Conference, 2017 – Present;

Committee Member, SIAM CSE Broader Engagement Program, 2015 – Present.

#### Awards Received:

SummerSim Best Student Research Award, 2015.

### **STATEMENT**

I enthusiastically accept the nomination for SIGHPC Treasurer! My goal is to further the impact of this vibrant organization. Since joining the SIGHPC Executive Committee as membership coordinator, I have managed the SC17 and SC18 SIGHPC booths and implemented several initiatives to recruit and retain members, including the creation of a student member registration rate for the SC Conference. Student membership has doubled and professional membership has grown in the 18 months I have held this role -- during a time in which SIGs as a whole have struggled to grow membership. I am also active on two professional conference committees: SC and WinterSim. Since 2014, I have worked on SC social media and Students@SC programs – serving as SC16/SC17 Student Outreach Chair and SC18 Student Volunteer Chair. On the WinterSim committee, I was selected as the 2020 Business Chair and served as the

2017 Publicity Chair. If elected, I will work to expand the success and reach of SIGHPC; seeking to enhance activities for members and increase award and support opportunities for both student and full members. The growth and success of this SIG allows us to serve members of the HPC community in new and exciting ways.

## Candidate for Treasurer

Rajeev Thakur  
Argonne National Laboratory, Lemont, IL, USA

### **BIOGRAPHY**

#### Academic Background:

Ph.D., Syracuse University, 1995, Computer Engineering.

#### Professional Experience:

Deputy Director, Data Science and Learning Division, Argonne National Laboratory, Lemont, IL, USA, 2018 – Present;  
Senior Computer Scientist, Argonne National Laboratory, Lemont, IL, USA, 2011 – Present;  
Deputy Director, Mathematics and Computer Science Division, Argonne National Laboratory, Lemont, IL, USA, 2012 – 2016.

#### Professional Interest:

High-performance computing data science; Parallel programming models;  
Communication libraries; Scalable parallel I/O.

#### ACM Activities:

Treasurer, SIGHPC, 2016 – Present;  
At-Large Member, SIGHPC, 2013 – 2016.

#### Membership and Offices in Related Organizations:

Director of Software Technology, DOE Exascale Computing Project, 2016 – 2017;  
Steering Committee Member, SC Conference Series, 2015 – 2018;  
Technical Program Chair, SC12 Conference, 2012.

#### Awards Received:

R&D 100 Award, 2005.

### **STATEMENT**

I have served the SIGHPC community actively for the past six years -- first as an At-Large Member and then as Treasurer of SIGHPC. During this time, SIGHPC has remained financially strong and served the needs of the HPC community well. I would like to serve as Treasurer of SIGHPC for the next three years to ensure that SIGHPC finances continue to be responsibly and effectively managed. I have worked in the HPC field for the past 25 years in various capacities. I have also served on the committees of several HPC conferences, particularly the SC conference series for which I have had many roles in the technical program committee, including being technical program chair for SC12. I have also served on the SC Steering Committee from 2015 to 2018.

I have close ties to a broad spectrum of people in the HPC community in academia, industry, and research laboratories in the US, Europe, and Asia. I hope to use my background, experience, and connections with the community to ensure that the community's interests are well served by ACM SIGHPC.



## Candidate for At-Large Member

Candace S. Culhane  
Los Alamos National Laboratory, New Mexico, USA

### **BIOGRAPHY**

#### Academic Background:

Master of Science, University of Maryland at College Park, 1986, Computer Science.

#### Professional Experience:

Program/Project Director, Los Alamos National Laboratory, Los Alamos, NM, USA, 2016 – Present;

Senior Executive, Department of Defense, Washington D.C., USA, 2008 – 2016;

Computer Scientist, Department of Defense, Washington D.C., USA, 1980 – 2008.

#### Professional Interest:

Benchmarking; Quantum Computing; High Performance Computing Architectures;  
Data Analytics; Thermal Management Methods.

#### ACM Activities:

Executive Committee, ACM SIGHPC SC19 conference, 2017 – Present;

Member, Steering Committee, SC Conference Series, 2017 – Present;

Chair, ACM SIGHPC Emerging Woman Leader Award Committee, 2017;

Member, ACM SIGHPC Advisory Board Committee, 2015 – Present.

#### Membership and Offices in Related Organizations:

Member, IEEE Seymour Cray and Sidney Fernbach Award committees, 2013 – 2015;

Member, IEEE Computer Pioneer Award and Computer Entrepreneur Award community, 2011 – 2015.

### **STATEMENT**

As an At-Large Member, I will assist the leadership of SIGHPC to keep our organization vibrant and active. HPC has never been more important or impactful than it is now, as the field expands along the front lines of cloud computing, internet of things, data analytics, artificial intelligence, autonomous vehicles, and even the brave new world of quantum computing. I stand ready to help SIGHPC with its mission to ensure rich and rewarding careers for everyone working in our field.

## Candidate for At-Large Member

Stephen Lien Harrell  
Purdue University, West Lafayette, IN, USA

### **BIOGRAPHY**

#### Academic Background:

Bachelors of Science, Purdue University, 2017, Computer Science.

#### Professional Experience:

Senior Research Analyst, Purdue University, West Lafayette, IN, USA, 2014 – Present;  
Senior HPC System Administrator, Purdue University, West Lafayette, IN, USA, 2008 – 2014;  
System Administrator, Google, Mountain View, CA, USA, 2006 – 2008.

#### Professional Interest:

Cyberfacilitation; HPC and the Cloud; HPC System Failure Analysis;  
HPC Workforce Development; Research and HPC System Administration.

#### ACM Activities:

Secretary, SIGHPC Systems Professionals Virtual Chapter, 2018 – Present;  
Member: ACM and SIGHPC, 2016 – Present.

#### Membership and Offices in Related Organizations:

Chair of Students@SC, SC19, 2019;  
Program Chair, HPCSYSPROS18 Workshop, 2018;  
Technical Papers Chair, PEARC18, 2018.

### **STATEMENT**

I am honored to be nominated for SIGHPC At-Large Member. In this role, I will bring a perspective from the large community of research cyber-facilitator and HPC systems professionals that is active every day, facilitating research for HPC.

I am currently serving as the Secretary for the SIGHPC System Professionals Virtual Chapter and chair of Students@SC at SC19. Last year, I was the technical papers chair at PEARC18. In 2016, I co-founded the HPCSYSPROS workshop and later served as program chair in 2018, and increased the attendance 15%, year over year. During my tenure as program chair, I also developed an artifact curation method for the proceedings, which is crucial for sharing state-of-the-practice innovation in this field. As the Student Cluster Competition Chair at SC16 and SC17, I grew student participation by 25% and instituted a review and feedback proposal process that lowered the barriers for new teams to join the competition.

If elected to the executive committee, I will broaden the impact of the SIGHPC organization by working to increase membership and support for our diverse community. SIGHPC serves the HPC community in many ways, and I am excited at the opportunity to engage.

## Candidate for At-Large Member

Torsten Hoefler  
ETH Zurich, Switzerland

### **BIOGRAPHY**

#### Academic Background:

Ph.D., Indiana University, 2008, Computer Science.

#### Professional Experience:

Professor, ETH Zurich, Switzerland, 2012 – Present;

Adjunct Assistant Professor, University of Illinois at Urbana-Champaign, IL, USA, 2010 – 2013;

Performance Modeling and Simulation Lead, Blue Waters Directorate/NCSA, Champaign, IL, USA, 2009 – 2012.

#### Professional Interest:

High-performance computing; Performance modeling; Deep learning and machine learning performance aspects; Large-scale high-performance networking; Compute and network acceleration.

#### ACM Activities:

At-Large Member, SIGHPC, 2013 – 2016; 2016 – 2019.

#### Awards Received:

Best Paper Awards at ACM HPDC'16 and ACM OOPSLA'16, 2016;

Latsis Prize at ETH Zurich, 2015;

IEEE/TCSC Young Achiever in Scalable Computing & SC13 Best Paper, 2013;

SIAM SIAG/SC Junior Scientist Prize, 2012.

### **STATEMENT**

I view SIGHPC as one of the most important organizations to support the HPC community. I co-organized the first workshop in collaboration with SIGHPC (ROSS'12) which became a big success, featured in newsletters and other community news. I also encouraged the PASC conference to seek SIGHPC sponsoring to provide a strong base for SIGHPC in Europe. PASC is, after SC, the second conference sponsored by SIGHPC (the first in Europe). I will contribute with my service as an At-Large Member on the SIGHPC Executive Committee to further strengthen our growing scientific community.

I am slightly concerned about the increasing costs of some conferences and will support the expansion of student travel grants and competitions. For example, I was chair of the ACM student research competition at SC12 and always enjoy experiences with young and

bright graduate and undergraduate researchers. It is most important to support young scientists entering our field. I like to improve performance measurement techniques and push "scientific benchmarking" as a basis for interpretability of results in our community.

Finally, as an active member of the HPC community, I will ensure that SIGHPC, when appropriate, speaks on behalf of this community and supports its needs.

## Candidate for At-Large Member

Michela Taufer  
The University of Tennessee, Knoxville, TN, USA

### **BIOGRAPHY**

#### Academic Background:

Ph.D., Swiss Federal Institute of Technology Zurich (ETH), Switzerland, 2002,  
Computer Science.

#### Professional Experience:

Jack Dongarra Professor in High Performance Computing, University of Tennessee Knoxville,  
Knoxville, TN, USA, 2018 – Present;  
Professor, University of Delaware, Newark, DE, USA, 2017 – 2018;  
Associate Professor, University of Delaware, Newark, DE, USA, 2012 – 2017.

#### Professional Interest:

High performance computing; Scientific applications; Performance modeling and analysis;  
Volunteer and cloud computing; Big data analytics.

#### ACM Activities:

General Chair, SC Conference, 2019 – Present;  
Steering Committee Member, SC Conference, 2015 – Present;  
Technical Program Co-Chair, ACM HPDC Conference, 2015;  
Technical Program Co-Chair, Technical Program Co-Chair, 2014.

#### Membership and Offices in Related Organizations:

Associate Editor, ParCo, 2015 – Present;  
Program Chair, IPDPS Conference, 2017;  
Editorial Board, International Journal of High Performance Computing Applications,  
2015 – Present.

#### Awards Received:

Best Paper Candidate at the IEEE SBAC-PAD Conference, 2016;  
ACM Distinguished Scientist, 2015;  
Best Paper Candidate at the IEEE Cluster Conference, 2014.

### **STATEMENT**

The SIGHPC is a vibrant community. Still we can do more to further promote SIGHPC and to touch a broader, more diverse community. I have been a member of ACM for the past 20 years; I am an active volunteer contributing to the success of SIGHPC for the past four years. I also served as Committee Member on various ACM conferences and am a Steering Committee

Member of the SC conference. Currently I am serving as the SC19 General Chair. My experience in these positions has prepared me well for serving you, and SIGHPC, as an At-Large Member.

If you choose me, I will continue the tremendous effort and high value activities that the current SIGHPC leadership built in the past years, together with the several SIGHPC volunteers and the SIGHPC community. I will reach out to the new generation of SIGHPC volunteers by promoting the active participation of junior faculty, post-docs, and researchers. I also want to support the building of a more diverse SIGHPC community by including women, small colleges and universities.

As an At-Large Member, I am committed to work with you to make SIGHPC your home base for your educational and research activities.