

Candidate for President
(1 July 2018 – 30 June 2020)



Jack Davidson

Professor of Computer Science
University of Virginia
Charlottesville, VA
U.S.A.

BIOGRAPHY

Education and Employment

- B.A.S. (Computer Science) Southern Methodist University, 1975; M.S. (Computer Science) Southern Methodist University, 1977; Ph.D. (Computer Science) University of Arizona, 1981.
- University of Virginia, Professor, 1982–present.
- President, Zephyr Software, 2001–present.
- Princeton University, Visiting Professor, 1992–1993.
- Microsoft Research, Visiting Researcher, 2000–2001.
- Programmer Analyst III, University of Texas Health Science Center at Dallas, 1993–1997.

ACM and SIG Activities

- ACM member since 1975.
- ACM Publications Board Co-Chair, 2010–present; ACM Publications Board member, 2007–2010.
- ACM Student Chapter Excellence Award Judge, 2010–2017.
- ACM Student Research Competition Grand Finals Judge, 2011–2017.
- Associate Editor, ACM TOPLAS, 1994–2000. Associate Editor, ACM TACO, 2005–2016.

Member of SIGARCH, SIGBED, SIGCAS, SIGCSE, and SIGPLAN

- SIGPLAN Chair, 2005–2007.
- SIGPLAN Executive Committee, 1999–2001, 2003–2005.
- SGB Representative to ACM Council, 2008–2010.
- SGB Executive Committee, 2006–2008.

Awards and Honors

- DARPA Cyber Grand Challenge Competition, 2nd Place, \$1M prize (2016)
- ACM Fellow (2008).
- IEEE Computer Society Taylor L. Booth Education Award (2008).
- UVA ACM Student Chapter Undergraduate Teaching Award (2000).
- NCR Faculty Innovation Award (1994).

Jack Davidson's research interests include compilers, computer architecture, system software, embedded systems, computer security, and computer science education. He is co-author of two introductory textbooks: *C++ Program Design: An Introduction to Object Oriented Programming* and *Java 5.0 Program Design: An Introduction to Programming and Object-oriented Design*. Professionally, he has helped organize many conferences across several fields. He participated in the organization of several international summer schools including the International Summer School on Advanced Computer Architecture and Compilation for Embedded Systems, the inaugural Indo-US Engineering Faculty Leadership Institute held in Mysore, India, and the First International Summer School on Information Security and Protection held in Beijing, China. Most recently he served as Program Chair for the HiPEAC 2018 held in Manchester, U.K.

Davidson's current research focuses on cyber security and societal computing. He is PI on two active research contracts to secure critical infrastructure and autonomous vehicles.

STATEMENT

I joined ACM in 1975 as a student member. Our student group organized programming contests, planned chapter activities, wrote code just for fun, and discussed the awesome power of programs (that generate programs)*.

Since then, I have had the privilege to contribute to ACM's mission in many capacities, most recently serving as co-Chair of ACM's Publication Board. I am honored to have been asked to stand for election as President.

A nomination statement typically discusses the challenges facing ACM and the candidate's plans to address those challenges. As I see it, ACM is a vibrant volunteer-led organization in excellent financial health. Each year thousands of volunteers plan and carry out a variety of activities and initiatives—organizing conferences, performing and publishing the very best research in the field, working to improve diversity in the computing profession, and developing new education programs. These activities are carried out on a solid financial footing. Non-profits normally seek financial reserves equal to one year of annual expenses. Our reserves are approaching twice that.

The most important challenges I believe ACM must confront are outward rather than inward. I advocate we marshal our ample resources and dedicated volunteers to help address the important challenges facing society posed by the powerful and pervasive digital technologies we are creating.

In doing so, on-going internal challenges—membership value, diversity, inclusiveness—can continue to be addressed—but addressed from a more relevant platform.

No doubt each of us could name a half-dozen computing technologies that are or will have a profound impact on society: AI, machine learning, cyber social networks, ubiquitous and invisible networks, cyber currencies, autonomous systems, wearable sensors, and cyber-enhancement of the body. The benefits of these technologies are undeniable.

Unfortunately, such technologies can have unanticipated negative consequences on basic human values of privacy, freedom, democracy, individual autonomy, and quality of life. These technologies and the resulting systems are complex and their integration into society cuts across geographic, cultural, gender, age and socio-economic boundaries. It is only through international, multidisciplinary efforts involving academia, industry and government that these problems can be addressed.

ACM leadership is essential for initiating and facilitating these international collaborative efforts. Our involvement would, as a side effect, strengthen ACM by creating a sense of global unity on important problems that affect us all. By presenting a value proposition to the worldwide computing community that is compelling, meaningful and relevant, we can become a more inclusive and diverse professional society.

Now is the time for ACM to use its resources and the energy of our volunteers to help address pressing societal problems posed by emerging computing technologies. I ask for your vote, support, and involvement.

Candidate for President
(1 July 2018 – 30 June 2020)



Cherri M. Pancake

Professor Emeritus and Intel Faculty Fellow
School of Electrical Engineering & Computer Science
Oregon State University
Corvallis, OR
U.S.A.

BIOGRAPHY

Cherri Pancake is Professor Emeritus and Director of the Northwest Alliance for Computational Science and Engineering (NACSE), an interdisciplinary research center known for software systems that analyze large-scale scientific data to yield results that “make sense” to decision-makers. She is a Fellow of ACM and IEEE.

Pancake started her career as an ethnographer conducting fieldwork in Guatemalan Indian communities, where she applied cross-cultural techniques to study social change. After earning a PhD in Computer Engineering, she leveraged her ethnographic expertise to address problems in computing. She was among the first worldwide to use ethnographic techniques to improve software usability, an approach which is now standard in the field. She also conducted much of the seminal work identifying how the needs of scientists differ from computer scientists.

She then turned to studying how “virtual collaborations”—interactions that span large interdisciplinary and physically distributed communities—differ from those where collaborators are physically co-located. Under her guidance, NACSE developed processes and software tools to make remote collaboration and data sharing fit naturally into typical patterns of scientific research and practice.

A member of ACM since 1982, Pancake has served in a wide variety of roles, including Vice President. Previously, she was Awards Co-Chair, an elected member of ACM Council, and area editor for *Communications of the ACM*. She also led two ACM/IBM industry advisory boards, chaired the Gordon Bell Prize and Fellows committees, and has held leadership roles in one of ACM’s largest conferences since 1990.

Pancake's efforts were instrumental in creating SIGHPC (Special Interest Group on High Performance Computing) and she served as its first Chair. Under her leadership, it grew to over 1,000 members and achieved financial viability in the first year, setting two records for ACM. In 2015, she obtained a \$1.5M endowment from Intel to establish the SIGHPC/Intel Computational & Data Science Fellowships, which to date have provided \$15,000/year to 26 outstanding women and minority graduate students from seven countries. She is currently coordinating efforts to establish a new competition designed to attract students to computing by engaging them in data analysis and computation to address socially relevant problems.

STATEMENT

It's exciting to be nominated for ACM president during a time of real change, within our organization and in our profession. I believe my experience in both has prepared me well for the role. I have served on ACM-wide committees and held the positions of Awards co-chair, Council member, and Vice President. Most of ACM's activities occur at the level of SIGs and boards; I will leverage my past work with conferences sponsored by four different SIGs, in editorial positions, and as founder of one of the newest SIGs to help identify areas for growth and renewal. Across the international community, I've held leadership and advisory roles in a number of research- and data-sharing collaborations, including the Protein Databank, the Long-Term Ecological Research Program, the National Biological Information Infrastructure, and the Network for Earthquake Engineering Simulation. Those experiences plus my unique background—coupling anthropology with computer engineering—have given me the broad perspective needed for the position of President.

I see great opportunities for ACM now that advanced capabilities, such as machine learning, location-aware computing, and wireless sensor networks, have become accessible to a broad spectrum of users in many fields. As the leading society for computing, ACM is uniquely positioned to be the "glue" that joins emerging practitioner communities with classical computer scientists. I believe ACM must proactively engage the new groups, providing conference and publication opportunities that will help drive advances in their fields.

The expansion of computing into other fields has also introduced new challenges for our profession. For example, in many settings it has become critical that computational results be reproducible. Bridging the gap between ease of computing and reproducibility requires patient experimentation. When we formed SIGHPC, one of our first actions was to join forces with the Publications Board and other SIGs to promote reproducibility through competitions, associating data with Digital Library publications, and acknowledgement of outside verification. As President, I hope to expand those efforts and extend them to other audiences.

I also believe ACM should do more in response to the growing demand for computing professionals. As a field, we must attract new people from diverse backgrounds, not just to fill the pressing need but also to enrich the ideas and processes used in computing research, education, and practice. I've seen several ACM boards and SIGs make great strides to increase the diversity of their conferences, publications, and competitions, discovering that relatively simple changes can make a surprising difference. One of my goals as President is to ensure that these best practices are shared across ACM.

In this time of change, ACM needs a President with the experience and expertise to identify strategies that can broaden our base. With your help and support, I believe I can do that.

Candidate for Vice President
(1 July 2018 – 30 June 2020)



Elizabeth Churchill
Director of User Experience
Google
Mountain View, CA
U.S.A.

BIOGRAPHY

Elizabeth Churchill is a Director of User Experience at Google. Her field of study is Human Computer Interaction and User Experience, with a current focus on the design of effective designer and developer tools. Churchill has built research groups and led research in a number of well known companies, including as Director of Human Computer Interaction at eBay Research Labs in San Jose, CA, as a Principal Research Scientist and Research Manager at Yahoo! in Santa Clara, CA and as a Senior Scientist at PARC and before that at FXPAL, Fuji Xerox's Research lab in Silicon Valley.

Working across a number of research areas, she has published research, patented prototypes, and taught courses at a number of universities. She has more than 50 patents granted or pending, seven academic books, and over 100 publications in theoretical and applied psychology, cognitive science, human-computer interaction, mobile and ubiquitous computing, computer mediated communication and social media. In 2016, she received the Citris-Banatao Institute Athena Award for Executive Leadership.

The current Secretary/Treasurer of the ACM, Churchill served on the Executive Committee of the ACM's Special Interest Group on Computer Human Interaction (SIGCHI), for eight years, six years of those as Executive Vice President and two as Vice President for Chapters. She has also held leadership committee positions on a number of ACM SIGCHI associated conferences. Churchill is a Distinguished Scientist and Distinguished Speaker of the ACM, and a member of the SIGCHI Academy.

Churchill earned her BSc. in Experimental Psychology and her MSc. in Knowledge Based Systems from the University of Sussex, U.K., and her PhD in Cognitive Science from the University of Cambridge, U.K. Her dissertation research focused on the design and development of Programmable User Models. After her PhD, she was a Postdoctoral Research Fellow at the University of Nottingham before leaving the U.K. and moving to industry in 1997.

STATEMENT

I am honored to be nominated for ACM Vice President. As the current Secretary Treasurer of ACM, I am very aware of the need to serve our membership effectively through judicious investment in the right initiatives. As an industry applied research leader committed to education, I believe ACM has a central role in academic and practitioner development. Finally, I also believe ACM has an important leadership role to play when it comes to inclusiveness, equality, equity, and ethics in all computer sciences.

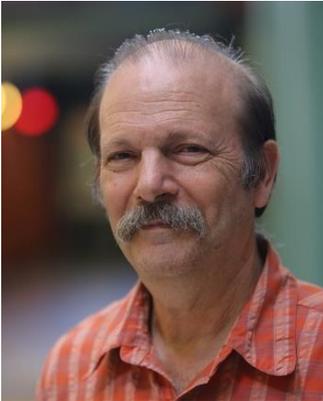
If elected, I will be a strong voice for deepening our efforts in the following areas:

- *Early stage development and career support of our field's future leadership.* ACM membership currently skews toward mid- to late stage professionals. Initiatives focused on early career support, such as the Future of Computing Academy in 2017, will provide a solid foundation for growth and relevance for many years to come.
- *Community development through broader global outreach efforts.* Our membership is globally based, yet ACM is often mistaken as an 'American association' for computing sciences. Greater focus on relevant initiatives, programs, and promotions in the global arena will ensure ACM is known worldwide as '*the* association for computing sciences,' not just the American one.
- *Leveraging ACM's existing programs and platforms to underscore its place as the key, lifelong professional network for those involved in all aspects of computer science.* Drawing on the deep expertise of our membership whose work centers on social networking offers ACM an unrivaled opportunity to further develop the social connectivity of all its members.
- *Meeting increasing challenges faced by the CS and technological world.* Further developing our commitment to ethical, equitable computing education and application, and to the promotion of diversity and inclusiveness in CS education and practice, will benefit not only our members, but also society at large.

The ACM is already a leader. From our Digital Library to our many conferences, symposia, and other events, we provide an essential knowledge platform for the theoretical and applied computing sciences, and an unparalleled opportunity for academics and practitioners to engage in lifelong learning and community.

It would be my privilege, as ACM Vice President, to work with ACM staff and volunteers to ensure this leadership continues.

Candidate for Vice President
(1 July 2018 – 30 June 2020)



Moshe Y. Vardi

Professor in Computational Engineering
Director, Ken Kennedy Institute for Information Technology
Rice University
Houston, TX
U.S.A.

BIOGRAPHY

Moshe Y. Vardi is the Karen Ostrum George Distinguished Service Professor in Computational Engineering and Director of the Ken Kennedy Institute for Information Technology Institute at Rice University. He is the co-recipient of three IBM Outstanding Innovation Awards, the ACM SIGACT Goedel Prize, the ACM Kanellakis Award, the ACM SIGMOD Codd Award, the Blaise Pascal Medal, the IEEE Computer Society Goode Award, the ACM Outstanding Contribution Award, and two ACM Presidential Awards. He is the author and co-author of over 500 papers, as well as two books: *Reasoning about Knowledge* and *Finite Model Theory and Its Applications*.

He is a Fellow of the Association for the Advancement of Artificial Intelligence, the Association for Computing Machinery, the American Association for the Advancement of Science, the Institute for Electrical and Electronic Engineers, and the Society for Industrial and Applied Mathematics. He is a member of the U.S. National Academies of Science and of Engineering, the American Academy of Arts and Science, the European Academy of Science, and Academia Europaea.

He holds honorary doctorates from the Saarland University in Germany, Orleans University in France, UFRGS in Brazil, and University of Liege in Belgium. He served for a decade as the Editor-in-Chief of *Communications of the ACM*, and chaired the ACM Job Migration Taskforce. Vardi's research interests focus on automated reasoning, a branch of Artificial Intelligence with broad applications in computer science, including database theory, computational-complexity theory, multi-agent systems, computer-aided verification, and teaching logic across the curriculum.

STATEMENT

Serving as Editor-in-Chief of *Communications of the ACM* for about a decade has offered me a unique opportunity to get a very broad view of computing and of ACM. ACM is facing today a significant challenge, I believe; at the same time ACM has a unique opportunity to play a major societal role.

Challenge: A quick examination of ACM's annual report indicates that scholarly publishing is the financial mainstay of ACM. Publishing profits help ACM carry a wide area of activities. Yet, the emerging sense of the scientific community is that science publishing should be done under an open access model, which means that articles should be available to readers without charge. ACM is under significant pressure from its membership to move from a subscription based publishing model to an open access publishing model. Such a transition is exceedingly challenging. A significant drop in ACM's publishing revenue, which would threaten ACM's financial viability, is a risk that must be taken seriously. ACM must engage with its membership to develop and carry out such a transition plan, yet ACM has an obligation to manage such a transition in a way that protects the organization's financial viability and vibrancy.

Opportunity: A profound shift in the public view of computing has taken place recently. Computing was traditionally viewed as a source of innovation, economic growth, good jobs, and cool gadgets. In the past few months, one reads in the mainstream media descriptions of cyberspace as "a dark and lawless realm where malevolent actors ranging from Russian trolls to pro-ISIS Twitter users could work with impunity to subvert the institutional foundations of democracy." Computing today is one of the greatest forces driving societal change, and computing professionals must accept their share of social responsibility. ACM is involved in several activities related to social responsibility. Yet, these efforts are dispersed and lack coordination. ACM must be more pro-active in addressing social responsibility issues raised by computing technology. An effort that serves as a central organizing and leadership force within ACM would bring coherence to ACM's various activities in this sphere, and would establish ACM as a leading voice on this important topic.

Candidate for Secretary/Treasurer
(1 July 2018 – 30 June 2020)



Yannis Ioannidis

President and General Director
"Athena" Research & Innovation Center
Professor of Informatics & Telecom
University of Athens
Greece

BIOGRAPHY

Yannis Ioannidis holds a PhD in Computer Sciences (Univ. of California–Berkeley, 1986), an MSc in Applied Mathematics (Harvard Univ., 1983), and a Diploma in Electrical Engineering (National Technical Univ. of Athens, 1982).

He is currently President and General Director of the “Athena” Research & Innovation Center in Athens, Greece (since 2011) and a professor of Informatics & Telecom at the Univ. of Athens (since 1997). Previously, he was a professor of Computer Sciences at the Univ. of Wisconsin–Madison (1986–1997). His research interests include database and information systems, data science, recommender systems and personalization, and electronic infrastructures. His work is often motivated by data management problems that arise in the context of other scientific fields (Life Sciences, Cultural Heritage and the Arts, Physical Sciences). He has published over 150 articles in leading journals and conferences and also holds three patents.

Ioannidis is an ACM and IEEE Fellow (essentially both “for contributions to database systems, particularly query optimization”), a member of Academia Europaea, and a recipient of several research and teaching awards, including Presidential Young Investigator (1993), UW Chancellor’s Teaching Award (1996), VLDB 10-Year Best Paper (2003).

An ACM member since 1983, he currently serves on the ACM Europe Council (since 2017), the SIG Governing Board Executive Committee (since 2012), and the ACM Publications Board as SGB liaison (since 2014). He has also served four-year terms as vice chair and then chair

of the Special Interest Group on Management of Data (SIGMOD). In 2017 he received the ACM SIGMOD Outstanding Contributions Award.

Ioannidis is the Greek delegate to the European Strategy Forum on Research Infrastructures (ESFRI) and a member of its Executive Board. He is also a member of the steering committee of the IEEE Int'l Conf. on Data Engineering, and has served on several other professional boards and committees, including the IEEE Technical Committee on Data Engineering and the VLDB Endowment Board of Trustees.

STATEMENT

The very concept of a scientific society is being challenged these days. If honored to be elected as ACM Secretary/Treasurer, I will use my past experience as a volunteer in several roles to serve the community and help ACM maintain and further strengthen its current position of scientific leadership and financial stability. In this direction, I believe ACM should enrich and diversify its profile in at least three key dimensions: scientific areas of concern, membership, and conceptions of publication.

While remaining current on the purely technological advances in computing, ACM should significantly expand its scientific domain and become the home of all interdisciplinary areas that involve computing, possibly through strategic alliances with peer scientific and scholarly societies and appropriate joint activities. This will have the added benefit of attracting new members with non-traditional backgrounds, for example, computational or data scientists and practitioners.

It is also important that ACM strengthens its role in computing education at all levels globally, starting with very young kids, so that they grow up well versed in algorithmic thinking (a fundamental skill) and possibly inspired to follow a relevant career in computing. In the long term, this should largely eliminate most ACM member underrepresentation based on gender, geography, or age.

Finally, in the new era of Open Science, as a top quality publisher, ACM should be a pioneer again and help redefine scholarly communication and the entire research life cycle, under the principles of reproducibility and accountability. It should treat software and data as first-class publishable results, embed all provenance artifacts in a publication, and explore new review processes and access policies.

Candidate for Secretary/Treasurer
(1 July 2018 – 30 June 2020)



Mehran Sahami

Professor (Teaching) and Associate Chair for Education
Computer Science Department
Stanford University
Stanford, CA
U.S.A.

BIOGRAPHY

Mehran Sahami is a Professor (Teaching) and Associate Chair for Education in the Computer Science department at Stanford University. He is also the Robert and Ruth Halperin University Fellow in Undergraduate Education at Stanford. Prior to joining the Stanford faculty in 2007, he was a Senior Research Scientist at Google (2002–2007) and a Senior Engineering Manager at Epiphany (1998–2002).

Mehran is currently completing his second two-year term as Co-chair of the ACM Education Board and Education Council, helping to initiate and oversee educational activities for the ACM. He co-chaired the ACM/IEEE-CS joint task force on Computer Science Curricula 2013 (CS2013), which was responsible for creating curricular guidelines for college programs in Computer Science at an international level. In 2014, he received the ACM Presidential Award for his leadership of this effort. He also co-founded and served as the first General Chair of the ACM Conference on Learning at Scale, which has become an annual meeting (now in its 5th year) focused on interdisciplinary research at the intersection of the learning sciences and computer science. Additionally, he was co-founder and first Chair for the annual Symposium on Educational Advances in Artificial Intelligence (EAAI), now in its 8th year.

Mehran's research interests include computer science education, artificial intelligence, and Web search. He has published numerous technical papers, including the book Text Mining: Classification, Clustering and Applications. He has over 20 patent filings on a variety of topics including machine learning, Web search, recommendation engines in social networks, and email

spam filtering that have been deployed in several commercial applications. He received the 2017 CIKM Test of Time Award, recognizing outstanding papers published 10 or more years ago that had a sustained impact on the research community.

He received his BS, MS, and PhD in CS from Stanford. And despite all that, he still hasn't figured out how to get his kids to brush their teeth at bedtime without a fuss.

STATEMENT

As a Life Member of ACM, I am honored to be nominated for the position of Secretary/Treasurer. As Co-chair of the ACM Education Board, I've served on the Extended Executive Committee of the ACM for nearly four years. That experience gives me a deep appreciation for the issues facing the organization and provides the opportunity to hit the ground running in the new capacity of Secretary/Treasurer.

My main goals are working to better serve the needs of the membership, specifically pursuing opportunities to push for more open access models for publications, increasing development of content relevant to practitioners, and more fully realizing ACM's mission to be a global association. Additionally, I am concerned with the enormous enrollment growth in college CS programs and am committed to exploring how ACM might be able to help educational institutions better address this issue. Of course, the challenge is to pursue these goals while ensuring the financial viability of the organization. By pushing ACM to remain relevant for younger academics and practitioners, we can help to extend the membership base and expand support for the organization more globally.

Another responsibility of the Secretary/Treasurer is chairing ACM's investment committee. I have over a decade of experience with investment stewardship, including as an investor and limited partner in several venture capital funds. As Secretary/Treasurer, I would help ACM continue to develop agreements with other organizations to pursue our mutual goals. Previously, I helped create agreements for joint projects between ACM and IEEE, AIS, and other computing societies. I look forward to continuing to serve as an ACM volunteer (in any capacity) and I appreciate your consideration. Thank you for reading this statement.

Candidate for Member-at-Large
(1 July 2018 – 30 June 2022)



Claudia Bauzer Medeiros
Professor of Computer Science
University of Campinas
Brazil

BIOGRAPHY

Claudia Bauzer Medeiros is full professor, Computer Science, at U. of Campinas (Unicamp), Brazil, with Brazilian and international awards for excellence in research, teaching, and work fostering the participation of women in computing. She is a Commander of the Brazilian Order of Scientific Merit, and holds two honorary doctorates from U. Antenor Orrego, Peru, 2007, and U. Paris IX Dauphine, France, 2015. For engaging women in IT, she earned the Google Brazil Award and the Grace Hopper Agent of Change Award.

Her research is centered on managing scientific data. In 1994, she created Unicamp's Laboratory of Information Systems, one of the first labs in Brazil dedicated to interdisciplinary data-intensive research. Since 1997, she has headed large multi-institutional projects in biodiversity, health, agriculture and environmental planning, involving universities in Brazil, Germany, and France. One of the few Brazilians to become a Distinguished Speaker of ACM, she is a member of IEEE, SIGMOD, SIGSPATIAL and ACM-W and has served as ACM-W Latin America ambassador and SIGMOD liaison.

While President of the Brazilian Computer Society (2003–2007), she launched the first countrywide initiatives to draw women to computing, and liaised with funding agencies to create opportunities in CS research and education. She has served as member and/or chair of scientific evaluation panels in Brazil, for the Ministries of Education and of Science and Technology, and the São Paulo State Foundation (FAPESP).

Since 2013, she's represented FAPESP in a network of agencies from 12 countries, for research in the Social Sciences and Humanities. Since 2014, she's coordinated the FAPESP eScience research-funding program to foster data- and/or computing-intensive interdisciplinary research.

STATEMENT

It is an honor to be nominated for Member at Large. I became an ACM member in 1983 as a PhD student, and have not ceased to discover the many opportunities it offers—for learning, research, professional growth, and networking. If elected, I would like to help expand some key activities along these lines. I look at ACM from at least three perspectives: as a (Latin American) academic; as an active player in creating and enforcing policies for universities and scientific societies; and as someone who has closely worked with and for several funding agencies in Brazil and abroad.

Information technology is all pervasive. ACM should find new ways to raise awareness of ethical issues associated with computing research and practices, not only among computing professionals (handled by its Code of Ethics), but also among those whose work requires some kind of computing skills. Data and algorithm ethics need to be better exploited, as do ethical concerns raised by other domains.

My eScience research and work for funding agencies taught me the advantages (and pitfalls) of interdisciplinarity. I would like to help promote mechanisms to foster this, both within computing fields and in our work with other domains. We should encourage interactions across SIGs, and open science initiatives. Cross-disciplinary collaboration should be fostered early, and nurtured throughout one's career—through advocacy, mentoring, and educational material.

Last but not least, there is still much to be done toward attracting women and minorities to computing, particularly in Latin America. ACM should further promote inclusiveness in the workplace and give more visibility to initiatives within ACM-W. To this end, cultural and social differences must be carefully analyzed and taken into account.

Candidate for Member-at-Large
(1 July 2018 – 30 June 2022)



Nenad Medvidović

Professor of Computer Science & Informatics
University of Southern California
Los Angeles, CA
U.S.A.

BIOGRAPHY

Nenad Medvidović is a professor in the Computer Science Department and in the Informatics Program at the University of Southern California (USC). Medvidović is the Founding Director of the SoftArch Laboratory at USC. He has previously served as Director of the USC Center for Systems and Software Engineering (2009–2013), Associate Chair for PhD Affairs in USC’s CS Department (2011–2015), and Chair of the Steering Committees for the two premier conferences in his field: ICSE—International Conference on Software Engineering (2013–2015) and FSE—Symposium on the Foundations of Software Engineering (2015–2017). He has been the Program Chair for several conferences, including ICSE 2011. Medvidović has served as an Associate Editor of ten different journals. He is currently the Editor-in-Chief of *IEEE Transactions on Software Engineering*, a flagship software engineering journal, as well as the Chair of ACM SIGSOFT.

Medvidović received his PhD in 1999 from the Department of Information and Computer Science at UC Irvine. He is a recipient of the National Science Foundation CAREER (2000) award, the Okawa Foundation Research Grant (2005), the IBM Real-Time Innovation Award (2007), the USC Mellon Mentoring Award (2010), and Orange County Engineering Council’s Distinguished Engineering Merit Award (2018). Medvidović has over 200 publications in the area of software engineering research. Several of his publications have received Most Influential Paper (a.k.a. “Test of Time”), Best Paper, and Most Cited Paper awards. He is a coauthor of a textbook on software system architectures. Medvidović is an ACM Distinguished Scientist and an IEEE Fellow.

STATEMENT

ACM serves a broad constituency with divergent perspectives, interests, and needs. I have been involved with ACM and my home SIG—SIGSOFT—for almost 25 years in a number of capacities: as a volunteer, attendee, and presenter at ACM-sponsored conferences; in various conference organizing and overseeing roles; and as Chair of ACM SIGSOFT. During the past quarter-century, the computing community has grown and changed tremendously. Our field has become global and interdisciplinary. Even within SIGSOFT, our flagship conference, International Conference on Software Engineering (ICSE), was held for the first time outside the West only 10 years ago. Since then, we have gone to China, South Africa, India, and Argentina.

ACM's future will be shaped by the growth and globalization of computing. As an ACM Council Member at Large, I will dedicate my energy to help ACM in its efforts to embrace and facilitate these trends. I will rely on my experience in expanding the reach of SIGSOFT into different geographic regions and different segments of the software engineering community. As illustrations of this experience, I chaired or participated in "Warm-up Workshops" for ICSEs held in South Africa and Argentina, whose shared objective was to expose the local computing communities to SIGSOFT; I served as Program Co-Chair of last year's Indian Software Engineering Conference; and in my role as SIGSOFT Chair, I oversaw the creation of CSoft, SIGSOFT's Chinese Chapter. I have also been active in efforts to engage a larger cross-section of the professional software community in the activities of SIGSOFT, for example, through the appointment of a SIGSOFT Industry Liaison. I believe these experiences make me well positioned to participate in and impact ACM Council's important work.

Candidate for Member-at-Large
(1 July 2018 – 30 June 2022)



P J Narayanan
Professor and Director
IIIT Hyderabad
India

BIOGRAPHY

Education: BTech in CSE (1984), IIT Kharagpur; PhD in CS (1992) University of Maryland, College Park.

Employment: Lipi Indian language word-processor group of CMC Ltd.; Research Faculty Member, Robotics Institute of CMU (1992–1996); Head of Vision and VR group, Centre for Artificial Intelligence and Robotics, DRDO; (1996–2000), Faculty member, IIIT Hyderabad (from 2000).

Contributions: Narayanan's PhD thesis was on parallel processing for Computer Vision. At CMU he built Virtualized Reality, the first system to capture 3D representations of dynamic events using cameras. He built a VR resource center at CAIR, resulting in applications of VR in DRDO. The IIIT Vision group is among the world's largest, with over 100 researchers. Early work on using the GPU for Vision and other tasks has influenced the GPU-led deep learning revolution. At IIIT, Narayanan was the first postgraduate coordinator and the first Dean of Research. He was appointed Director of IIIT in 2013. The institute has since established stronger connections with industry and vital engagements with startups. TCS Foundation endowed a Kohli Centre on Intelligent Systems, the largest AI group in India, at IIIT in 2015. Narayanan was General Chair of the 2nd Indian Vision conference (ICVGIP) in 2000 and the Program Chair of ICVGIP2010 and ACCV2006. He was an SPC member or Area Chair of IJCAI2007, ICCVs (2007, 2011, 2015), CVPR 2017; ACCVs (2007, 2009, 2010, 2018), among others. He was on the JPDC Editorial Board till 2017.

Narayanan helped establish ACM in India as the founding Co-Chair and the first elected President, 2012–2014. He now leads the ACMI Research Board and is active in creating a computing community within India. He has also been on several committees related to research and education in India.

STATEMENT

I started volunteering for ACM from 2009 as a founding Co-Chair of ACM India Council, its first elected President, and the chair of its Research Board. We set out to make ACM India the voice of the Indian computing community. We set up an ACM India Dissertation award, a survey on Indian PhD production, an annual event attended by Turing Award Laureates as well as hundreds of students, a student travel-support scheme for conferences abroad, an annual Research Summit with Microsoft Research, and several education initiatives. ACM membership tripled in India from 2009, to become the second-largest country by membership.

The impact of computing on life continues to grow, with AI potentially enhancing and disrupting unimaginable aspects of life everywhere. The non-Western geographies will have greater roles in coming years, with the growing access to computing, communication, and social media. The positive and detrimental impacts of computing need to be understood also from a point of view of impoverished populace, inadequate resources, and deficient governments. Technology can be a strong force to promote equity and to lessen the gap. Teachers, researchers, and professionals should keep in mind the human and social impact of each advancement. ACM will need to enhance and diversify its activities to enhance its influence in such a future. I will try to make this happen from the Council.

Several experiences influence my professional outlook: research roles in USA/India; teaching, especially as the head of a top institution, in India; and voluntary activities for ACM and different academic/government bodies. I believe my experiences can greatly help ACM traverse the future with greater balance. I pledge my efforts toward a more relevant ACM.

Candidate for Member-at-Large
(1 July 2018 – 30 June 2022)



Theo Schlossnagle

Founder and CEO
Circonus
Fulton, MD
U.S.A.

BIOGRAPHY

Theo Schlossnagle has spent the last 20 years applying computer science to pressing problems in industry. He founded four companies all grounded in large-scale distributed systems technology.

Theo studied at The Johns Hopkins University where he received a BS in Computer Science in 1997 and a MSE the following year related to his graduate work. In 2003, he left academia for industrial pursuits prior to completing his doctorate.

Beginning in 1996, Theo began participating in various open source communities including the Apache Software Foundation and in 1999 began a career in public speaking on topics both technical and professional. He has contributed significantly to over 100 open source projects and shared his experience with industry peers through over 200 speaking engagements.

Theo authored *Scalable Internet Architectures*, (Sams) and wrote chapters for *Web Operations* (O'Reilly) and *Seeking SRE* (O'Reilly). Having founded four engineering-led organizations, his perspective on the computing profession is both varied and well informed; a perspective formed by operating some of the largest systems architectures on Earth, on-call rotations as an Site Reliability Engineer, developing both open and closed software systems, hiring engineering staff, mentoring, and guiding professional development of staff.

STATEMENT

The ACM is dear to me; it represents the industry I love and those that are positioned to build the technology underlying our future. With eight years of exposure to academia and 20 years of intense, entrepreneurial participation in industry I feel I have a grounded perspective on how best the ACM can serve its members.

My experience as co-chair of ACM's *Queue* and participation on the ACM Practitioners Board provides immersion in the parts of ACM that directly touch the largest portion of its membership: the practitioner. The ACM must represent the practicing computer scientist in all of their various forms. As ACM Member at Large, I will aim to influence decisions to consistently align them with the needs of practitioners of today and tomorrow.