

Candidate for President
(1 July 2020 – 30 June 2022)



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 (HCI) and User Experience (UX), 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 the Palo Alto Research Center (PARC) and FXPAL, Fuji Xerox's Research lab in Silicon Valley.

Working across a number of research areas, she has over 100 peer reviewed top-tier journal and conference publications in theoretical and applied psychology, cognitive science, human-computer interaction, mobile and ubiquitous computing, computer mediated communication, and social media, more than 50 patents granted or pending, and 7 academic books. Her team produces research that impacts a large number of Google's products (by shaping Google's Flutter and Material Design), influencing the work of hundreds of thousands of designers and developers globally, and thus affecting the user experience of millions of end-users. She continues to guest lecture at universities and to mentor early stage career professionals and students. In 2016, she received the Citris-Banatao Institute Athena Award for Executive Leadership.

The current Vice President of the ACM, Churchill served as ACM Secretary/Treasurer from 2016-2018, and served on the Executive Committee of the ACM's Special Interest Group on Computer-Human Interaction (SIGCHI), for 8 years, 6 years of those as Executive Vice President and two as Vice President for Chapters. She has held leadership committee positions on numerous ACM associated conferences. Churchill is a Distinguished Scientist and Distinguished Speaker of the ACM, will become an ACM Fellow in June 2020, and is a member of the SIGCHI Academy.

Churchill earned her BSc. in Experimental Psychology (1983) and her MSc. in Knowledge Based Systems (1987) from the University of Sussex in the UK, and her Ph.D. in Cognitive Science from the University of Cambridge, also in the UK (1994). 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 moving to the US and into industry in 1997. She holds honorary doctorates from the University of Sussex (awarded 2018) and Stockholm University (awarded 2019) for her continued contributions to the academy in the field of HCI.

STATEMENT

I am honored to be nominated for the position of ACM President.

As a longtime ACM member, current ACM Vice President, and an industry research leader with strong connections to academia, I believe ACM plays a leadership role in shaping not only the fields of computer science and computer engineering, but also many related disciplines. Through this connection, ACM influences industries built upon computing science and computer engineering expertise and practice.

My vision for continued ACM relevance and influence requires we focus efforts. ACM can significantly shape future research and education directions as well as future industries built on computing foundations. Toward that vision, if elected, I will be a strong voice for deepening efforts in the following areas:

- Career development: ACM provides the premier platform for career development and growth for all upcoming and established computer science and computer engineering professionals. However, we can do more. A priority area must be appealing more deeply to those in early-stage career. ACM membership currently skews toward mid- to late-stage professionals. Initiatives focused on early CS education and early professional career support will provide solid groundwork for ACM's growth and continued relevance for years to come.
- Broader promotion of our content through multi-channel platforms and diverse events: Continued investment for enabling broader access to our growing repository of high-quality, peer-reviewed content for current and future members and beyond is critical. Making our content more accessible will ensure ACM cultivates its position as the community for all professionals associated with computing sciences.

- Enhance community networking: From our Digital Library to our many events and chapters, we provide essential community platforms for those interested in theoretical and applied computing sciences and related engineering disciplines. We can further leverage ACM's existing platforms to underscore its place as a lifelong professional network for all aspects of computer science. ACM has an unrivaled opportunity to further develop the social connectivity of its members and to create more platforms where members can share expertise with fellow members and communities beyond ACM.
- Emphasize ACM's global impact: Our membership is globally based, yet ACM is often mistaken as an 'American' association for CS academics. A focus on deepening our understanding of the needs and perspectives of our very diverse and global community will help ensure we accentuate our leadership as the premier society for computer science and engineering professionals worldwide.

For all of these areas, we must address where to refresh current efforts and where to invest in new efforts.

It would be my privilege, as ACM President, to work with ACM staff, volunteers, and members to address these areas, to focus on thoughtful investments, and ensure ACM's leadership not only continues but expands and deepens.

Candidate for President
(1 July 2020 – 30 June 2022)



Gabriele Kotsis

Full Professor in Computer Science, Head of Department
Department of Telecooperation
Johannes Kepler University Linz
Linz, Austria

BIOGRAPHY

Gabriele Kotsis is Full Professor in computer science at Johannes Kepler University, Linz, Austria, and a Distinguished Member of ACM. Receiving recognition for her work from the very beginning (her master's thesis, submitted at the University of Vienna in 1991, was honored with the student sponsorship award of the Austrian Computer Society, and her Ph.D. in 1995 was honored with the highly prestigious Heinz-Zemanek award) was doubtlessly a motivating factor for her and her decision to dedicate her career to research in academia and to the scientific community. In 2002, she was one of the co-founding chairs of the working group for professors in computer science within the Austrian Computer Society (OCG). From 2003 to 2007 she was President of the Austrian Computer Society, being the first female holding this position in Austria. In addition to her two-term presidency at OCG, Gabriele takes an active part in the Editorial Board of the OCG Book Series, in the working group Fem-IT (Association of Female University Professors in IT) and in the OCG award committee.

From 2007 to 2015 she served as Vice-Rector for Research at Johannes Kepler University (JKU). Her responsibilities included the development of R&D strategies and policies within the university, coordination and interaction with national and international governmental organisations and funding bodies, and the establishment of collaborations with other research organisations and business partners. Since 2016, Gabriele has been JKU's representative in the ASEA-UNINET academic research network, which promotes cooperation among European and South-East Asian public universities. Her active involvement in this network led to her nomination and election as President for the current period, February 2019 to July 2020.

Within ACM, Gabriele has gained a reputation for organizing ACM conferences and workshops. In 2016, she received an award in appreciation of her accomplishments regarding the ACM WomEncourage conference series. Gabriele is a founding member of the ACM Europe Council, serving at the Council from 2008 to 2016. In 2014, she became an ACM Distinguished Member for her contributions to workload characterization for parallel and distributed systems, and to the founding of ACM Europe. Since 2016, she has been an elected Member-at-Large of the ACM Council.

STATEMENT

Formal thinking and reasoning together with abstract and geometric modelling is what led me into computer science in the first place. Fascinated by the beauty and purity of binary systems in number theory, I was particularly passionate about Euclid's algorithm and prime factorization. I was appealed by the understanding of computers as machines being able to unfold the thinking condensed into algorithms. This picture has crystallized clearly over the past three decades of my active life as a computer scientist.

In our discipline, we have advanced linear (Turing-)machines to multidimensional complexity management machines, algorithmic unfolding machines to creative generative machines in artificial intelligence, and deterministic machines to true randomness in executive machine behavior in quantum computing.

These advances have opened the doors to an infinite spectrum of use domains, out of which a few are currently showing remarkable progress. Research prototypes have rapidly developed into living examples of totally autonomic machines (level 4-5 vehicles, drones, ...), very-large-scale collectives of cooperative machines (combinations of smart phones, watches, cars, homes, ...) or of self-adaptive and locally interactive machines (surgical micro-robots, personal digital agents or twins, ...).

ACM (which stands for the Association for Computing Machinery) has already reacted to significant transitions in the past by redefining and reshaping its agenda. Among the many emerging topics, for the upcoming ACM presidency I consider the following as immediately urgent:

- Computing Machinery fighting the CO2 dilemma
- Computing Machinery fertilizing medical research and health care
- Computing Machinery protecting democracy

No other discipline or technology will have more impact on shaping our future than computer science and technology. This implies a major responsibility for our community, not only from a scientific and technical perspective in being able to provide correct solutions, but also from an ethical and societal point of view. Moreover, global problems must be addressed in a global way, independently from particular individual, national or commercial interests. My vision is that ACM, being a global organization, can and must become the platform which enables us to achieve all goals in question.

I feel honored having been nominated for the position of ACM President. ACM is a volunteer organization, and its impact depends on the help and support from all of us. We are a strong community and it will be my responsibility as President to ensure that ACM serves our needs. But we have to take a step forward. Let us work together, across the globe, not only to serve the needs of our own community, but to utilize our

knowledge and expertise in “computing machinery” in order to cope with the challenges we are faced with in our global society.

Candidate for Vice President
(1 July 2020 – 30 June 2022)



Joan Feigenbaum

Grace Murray Hopper Professor of Computer Science
Professor of Economics (by courtesy)
Yale University
New Haven, CT
U.S.A.

Amazon Scholar
Amazon Web Services, Inc.
Seattle, WA
U.S.A.

BIOGRAPHY

Joan Feigenbaum is the Grace Murray Hopper Professor of Computer Science at Yale, where she also holds a courtesy appointment as Professor of Economics. She joined Yale in 2000 and served as Computer Science Department Chair from July 2014 through June 2017. Before Yale, she was at AT&T for 14 years (AT&T Bell Labs from July 1986 to December 1995 and AT&T Labs – Research from January 1996 to June 2000); there, she participated broadly in the company’s Information-Sciences agenda, e.g., by creating a research group in Algorithms and Distributed Data. Feigenbaum received her AB in Mathematics from Harvard in 1981 and her Ph.D. in Computer Science, under the direction of Andrew Chi-Chih Yao, from Stanford in 1986.

A member of ACM since grad school, Feigenbaum has served in many roles, including SIGACT Executive Committee member (2005-09) and SIGEcom Vice Chair (2005-11); in SIGEcom, she played a leading role in establishing the *ACM Transactions on Economics and Computation (TEAC)*. She has served as PC Chair or Co-Chair for three ACM conferences, PC member for 16 ACM conferences, and editorial-board

member for TEAC. Currently, she is on the Gödel-Prize committee and previously served on the SIGEcom Test-of-Time award committee, the ACM Fellows-selection committee, and the Knuth-Prize committee. Most recently, she led the creation of the ACM Symposium on Computer Science and Law and served as General Chair for the inaugural symposium in 2019.

Feigenbaum's research interests are in Security, Privacy, and Anonymity; Internet Algorithmics; and Computational Complexity. Well known for her ability to establish and explicate research priorities, she has done direction-setting work in computational accountability, authorization and trust management, distributed algorithmic mechanism design, and massive-data-set algorithmics. She is an ACM Fellow, an American Association for the Advancement of Science Fellow, a member of the Connecticut Academy of Science and Engineering, and a Connecticut Technology Council Woman of Innovation.

STATEMENT

It is an honor to be nominated for the position of ACM Vice President at this tumultuous time in computing history. Since ACM was founded in 1947, computers have become indispensable tools in many aspects of daily life. Recently, a more profound change has begun: *Sophisticated computation* is becoming an essential component of many spheres of human activity. People who can understand and exploit computational methods and principles, rather than simply use computers as appliances, now have a decisive advantage over their less computationally astute competitors.

ACM members can address myriad threats now facing society. These threats combine sophisticated computation in critical ways with politics (as in "election hacking"), economics (as in technology-induced unemployment), journalism (as in "fake news"), law (as in mass surveillance in the name of national security), international relations (as in "cyber war"), finance (as in bitcoin speculation), and many other fields. In tackling them, computer scientists will work collaboratively with people in social sciences, law, and many disciplines besides the STEM fields with which we have collaborated for decades. My experiences as a leader of ACM's efforts in Economics and Computation and, more recently, as a founder of its efforts in Computer Science and Law have given me the skills and perspective needed to support ACM members in wide-ranging, interdisciplinary work.

As the premier organization of computing professionals, ACM must convince young computer scientists to join and participate. Our conference proceedings and journals are highly valued, but, with ArXiv preprints readily available and access to the Digital Library through employers, many people feel no need to join. Similarly, ACM-sponsored awards are prestigious, but non-members are eligible for many of them. If elected, I will conduct a series of structured discussions with non-members to learn their views on the proper role of a professional society.

On an optimistic note, ACM members are increasingly interested in real solutions to serious problems, such as carbon-intensive conference participation and limited access to published research. If elected, I will work to accelerate our transition to sustainable practices such as online conferences, remote participation in face-to-face conferences, and fully funded open-access publication.

Candidate for Vice President
(1 July 2020 – 30 June 2022)



Yannis Ioannidis

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

BIOGRAPHY

Yannis Ioannidis is the 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). Prior to that, he was a professor of Computer Sciences at the Univ. of Wisconsin–Madison (1986–1997).

He holds a Ph.D. 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).

His research interests include database and information systems, data science, data and text analytics, 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 160 articles in leading journals and conferences and 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 is the current Secretary/Treasurer of ACM and also serves on the ACM Europe Council. Previously he was a member of the SIG Governing Board Executive Committee (6 years) and the ACM Publications Board (4 years) and served 4-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 Contributions Award.

Ioannidis is a vice chair of the European Strategy Forum on Research Infrastructures (ESFRI), the Greek delegate to 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, while in the past he has also served on the IEEE Technical Committee on Data Engineering and the VLDB Endowment Board of Trustees.

STATEMENT

The “tetrahedron” formed by mutually interlinking *research, education, industrial innovation* (the three nodes of the well-known “triangle of knowledge”), and *policy* is a great framework for conceptualizing the essential activities of a disciplinary professional society. If honored to be elected as ACM Vice-President, I will use my experience from earlier volunteer positions, especially that of ACM Secretary/Treasurer, to help ACM further strengthen its current leadership role within our thriving community, expand its already extensive services across the four areas/nodes of the tetrahedron, and attract, embrace, and benefit all computing professionals globally. Below are some of the directions I care deeply about.

Expand footprint and become the home of all interdisciplinary areas that involve computing: Our field is now on the critical path of most scientific and societal activities, coming itself to an exciting turning point. While remaining current on the purely technological advances, ACM should form strategic alliances with peer scientific societies and have joint activities, expanding and enriching its membership with non-traditional backgrounds.

Include computing as a basic curriculum strand right from the beginning of schooling: Algorithmic thinking is a fundamental skill and ACM should continue its efforts and intensify its involvement in shaping all levels of formal and alternative education. ACM can inspire many young people to follow a career in computing and, thus, lead to a community that is balanced on gender, geography, and age.

Identify major technology-dependent challenges connected with the UN SDGs: ACM should capture the pulse of the computing industry and establish links for better integration of industry-relevant activities. In the spirit of its co-leadership role in events such as the “AI for Good” Global Summit, ACM should coordinate with industrial

innovators, establish competitions towards solving global challenges, and support winning teams of inspired community members.

Prioritize social responsibility. Today our creations “run the world” and with this comes great responsibility. ACM should promote its new Code of Ethics widely within the community and also engage with and advise policy makers on cutting-edge technologies, including on their invention without restrictions and their application within clear ethical boundaries.

Candidate for Secretary/Treasurer
(1 July 2020 – 30 June 2022)



Elisa Bertino

Samuel Conte Professor of Computer Science
Computer Science Department, Purdue University
West Lafayette IN
U.S.A

BIOGRAPHY

Elisa Bertino is a professor of Computer Science at Purdue University, where she leads multi-disciplinary research in IoT security, data security and privacy, 4G and 5G cellular networks and mobile systems security, analytics for security, and digital identity management. She has made pioneering contributions over 30 years to data management and data security theory and systems, and has worked to broaden participation in computing via professional leadership and mentoring. Her work in data security and privacy include context-based access control, privacy-preserving analytics, and data protection from insider threats. She led the development of Purdue Computational Research Infrastructure for Science (CRIS), released as open source software in 2016.

Previously, she was a professor in and head of the Department of Computer Science at the University of Milan, a postdoc at the IBM Research Laboratory (now Almaden), and a visiting professor at Singapore Management University and Singapore National University.

She served as editor-in-chief of *IEEE Transactions on Dependable and Secure Computing*, and coordinating co-editor-in-chief of the *Very Large Database Systems (VLDB) Journal*. She chaired ACM's Special Interest Group on Security, Audit and Control (SIGSAC) from 2009-2013. In 2011, she co-founded ACM's Conference on Data and Application Security and Privacy, now considered the main forum for high-quality research on data privacy and security.

Bertino is a Fellow of ACM, IEEE, and AAAS. She received the 2019-2020 ACM Athena Lecturer Award and was named to GSMA's Mobile Security Research Hall of Fame for her work on 4G and 5G cellular network security. She received the 2014 ACM SIGSAC Outstanding Contributions Award for her seminal research and outstanding leadership in data security and privacy over 25 years; the 2002 IEEE CS Technical Achievement Award for her contributions to database systems and security and advanced data management systems; and the 2005 IEEE CS Tsutomu Kanai Award for pioneering and innovative research contributions to secure distributed systems.

STATEMENT

I have been a member of ACM for 38 years. I am honored to have been nominated as a candidate for Secretary/Treasurer of ACM.

I strongly believe that the field of computer science is today more exciting than ever. We see fundamental advances, such as those made possible by AI, IoT systems, quantum computing, and 5G technologies, and unprecedented opportunities for novel applications. Our technologies have a fundamental role in shaping society. However key questions need to be addressed including AI and data ethics, data transparency, personal privacy versus collective security, and sustainability. Answers to those questions as well as others posed by the pervasive use of our technologies must be given by taking into account a broad multi-disciplinary perspective. If elected, I will work together with the ACM Executive Committee, and the many volunteers and leaders in ACM to make sure that ACM has a central role in fostering discussions and initiatives to answer those questions as well others posed by society concerning our technologies. I will also focus on important matters, such as broadening diversity in our field, supporting younger researchers, open access to data and publications, the role of conferences vs. journals, industry engagement, large scale research infrastructures, and last but not least making sure that ACM stays technically relevant by organizing workshops and conferences on new emerging technologies and applications.

The ACM Secretary/Treasurer also oversees ACM's finances. If elected, I will leverage my past experience as a volunteer in different roles to help ACM maintain and enhance its current financial stability, while at the same time ensuring that ACM funds are used to best serve our research community.

Candidate for Secretary/Treasurer
(1 July 2020 – 30 June 2022)



Jeff Jortner

Principal Member of Technical Staff, Solutions Architect
Sandia National Laboratories
Livermore, CA
U.S.A.

BIOGRAPHY

Jeff Jortner holds a Ph.D. in Mechanical Engineering (minor in Computer Science, Louisiana State University 1986), a MS in Mechanical Engineering (LSU, 1982), and a BS in Mechanical Engineering (LSU, 1977). His dissertation research involved the development of a new curve algorithm for Computer-Aided Design (CAD).

As a staff member at Sandia National Laboratories, Jortner has over 33 years of experience in leading, developing, evaluating, and applying novel tools for Scientific Visualization, Geospatial Analysis, Visual Analytics, and Computer-Aided Modeling. His current interests involve multi-site collaborative VR for design and secure videoconferencing technologies. He is working on strategy development for a Unified Communication environment across the Department of Energy.

Jeff has experience in leading projects for communication technologies in public alert and warning systems (in the aftermath of Hurricane Katrina) and image analysis and assessment of next-generation transportation security systems.

An ACM member since 1987, Jortner served on the Special Interest Group on Computer Graphics and Interactive Techniques (ACM SIGGRAPH) Executive Committee for eleven years, six of those years as President and five years as Treasurer. He has held other committee positions for a number of SIGGRAPH conferences and the

ACM SIGGRAPH organization (Registration, Networking, Panels, Information Director, Chapter Leader), and represented ACM SIGGRAPH as Treasurer at the DUX2005 Conference in collaboration with AIGA and SIGCHI.

Jortner is currently the Chair of the ACM Special Interest Group Governing Board (SGB).

STATEMENT

I am honored to be nominated for ACM Secretary/Treasurer.

As the ACM SGB Chair, I am proud to have participated in the steps that ACM has taken as a leader in ethics, inclusivity, Open Access and in providing independent technical policy advice to the public. These efforts should be enhanced and continued.

The computing community is expanding to include a diverse set of backgrounds, locations, and skillsets. ACM is positioned through publications, conferences, chapters, and councils to be a conduit for this diverse community. Digital technologies provide ways to increase connectivity through remote engagement, online media and social networks. The technologies encourage greater participation which can only enrich our field. I look forward to helping expand digital opportunities provided by ACM.

The Digital Library (DL) is a valuable funding source for ACM that supports activities that include the Special Interest Groups (SIGs) and Chapters. ACM is actively deploying and innovating with DL Open Access publication models. A revamped DL is in development that enhances the personal experience for research and education. I believe that we need to continue such developments, increase practitioner content, and add more reproducibility artifacts to the DL.

The SIGs interact with a significant cross-section of our community through conferences and other activities that provide a significant income stream to ACM. Continued engagement with the SIGs is crucial in the areas of volunteer recruitment, retention and development. Of equal importance is membership retention and the diversity of volunteers, speakers and attendees.

It would be my privilege to serve as Secretary/Treasurer and continue working with ACM staff and volunteers in providing services to our community.

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



Nancy M. Amato

Abel Bliss Professor and Department Head of Computer Science
University of Illinois at Urbana-Champaign
Urbana, IL
U.S.A.

BIOGRAPHY

Nancy M. Amato is Abel Bliss Professor and Department Head of Computer Science at the University of Illinois at Urbana-Champaign. Before joining Illinois in January 2019, she was Regents Professor and Unocal Professor of Computer Science and Engineering at Texas A&M University, where she had been on the faculty since 1995. She received M.S. and Ph.D. degrees in computer science from UC Berkeley (1988) and the University of Illinois (1995), respectively, and bachelor's degrees in mathematical sciences and economics from Stanford (1986).

Her research focuses on motion planning and robotics, computational biology and geometry, and parallel computing and she has been working to broaden participation in computing for more than two decades. She has graduated 23 Ph.D. students, including 11 from underrepresented groups. She is VP for Member Activities for the IEEE Robotics and Automation Society (RAS), served as program chair for the 2015 IEEE International Conference on Robotics and Automation (ICRA) and for Robotics: Science and Systems (RSS) in 2016. She is an elected member of the Computing Research Association (CRA) Board of Directors (2014-2020), is Vice Chair of the CRA Executive Committee (2019-2020), and was co-Chair of CRA-WP (2014-2017) and of the NCWIT Academic Alliance (2009-2011).

Amato received the 2019 IEEE RAS Saridis Leadership Award in Robotics and Automation, the 2014 CRA Habermann Award, the inaugural NCWIT Harrold/Notkin Research and Graduate Mentoring Award in 2014, the 2013 IEEE Hewlett-Packard/Harriet B. Rigas Award, and Texas A&M university-level awards in teaching (2011) and research (2018). She is a Fellow of the AAI, AAAS, ACM, and IEEE.

STATEMENT

I have been an active member of the ACM since my days as a graduate student (30+ years!) -- I am honored by this nomination and would welcome the opportunity to contribute to the ACM.

This is an extremely exciting time for our field. Advances in computing have led to breakthroughs that are changing how we solve problems in all disciplines and to new technologies and products that have impacted all sectors of the society and all aspects of daily life, providing unprecedented opportunities for computing researchers and generating tremendous interest in our field. This is in turn driving demand for and innovation in computing education.

These developments provide many opportunities for the ACM to take leadership and have impact. As the field expands, we need to ensure that the ACM portfolio covers all relevant research areas, including multidisciplinary areas in which computing plays a central role (e.g., robotics), and to ensure that the most important and impactful research results are published in our conferences and journals and are available to all. Additionally, there are many societal issues which ACM has an opportunity, and in many cases an obligation, to play a leading role in shaping the conversation. This includes being viewed as a trusted and honest source of information about issues related to computing, serving as an advocate for lifelong computing education, and ensuring that the entire population feels welcome to, and indeed does, engage in all aspects of our profession.

Given the myriad opportunities, ACM, and in particular its society-level bodies such as the ACM Council, needs to strategically determine where, when and how to engage. If elected, I would be honored to serve as a Member-at-Large of the ACM Council.

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



Tom Crick

Professor of Digital Education & Policy
Computational Foundry and School of Education
Swansea University
Swansea, UK

BIOGRAPHY

While Tom's disciplinary background is in computer science and informatics, his academic interests are naturally interdisciplinary and sit at the research/policy interface, solving data-driven and computationally-intensive problems across a range of domains: data science, intelligent systems, cyber security, smart cities, software sustainability and reproducibility, as well as STEM education, science/innovation policy, digital public services, and skills/infrastructure for the digital economy. His research and policy work has been funded by the UK Research Councils (EPSRC, ESRC, Innovate UK), the European Commission and the Welsh Government. He was previously the Nesta Data Science Fellow (2013-2015), developing approaches to embedding data science capability into government for more effective data-driven policymaking; a Fellow of the UK Software Sustainability Institute (2014); an HEA National Teaching Fellow (2014) for his work in computer science education; and a Science Media Fellow (2011) with the BBC. In 2017, he was appointed MBE in the Queen's Birthday Honours for "services to computer science and the promotion of computer science education".

Tom has significant experience of non-executive governance, advisory roles and influencing at senior levels in government and industry. He has chaired national curriculum reviews in the UK over recent years, especially reforming computer science, digital skills and STEM education in Wales. He is an inaugural Commissioner of the National

Infrastructure Commission for Wales (2018-present), as well as a Vice-President of BCS, The Chartered Institute for IT (2017-2020). He is Vice-Chair (2019-present) of the ACM Europe Council, having been elected in 2017, and a member of the ACM Europe Technology Policy Committee.

STATEMENT

I am honored to be nominated as a potential Member-at-Large of ACM Council. While I have supported a variety of ACM conferences, activities and initiatives over recent years, especially through the ACM Europe Council, I am enthusiastic about serving ACM more widely to further support and develop a diverse and impactful international computing community. It is clear we face a number of challenges – and opportunities – as a discipline and community over the coming years. There are broad social, cultural and economic imperatives; for example: the widespread impact of technology, data and computational processes on our lives; digital innovation, automation and the future of work; shifting legal, ethical and professional responsibilities; national and international collaborative research agenda (funding, industrial strategies, mobility, open access/data/research); dramatic changes to our education systems: curriculum reform, qualifications, accreditation and certification, and a range of challenges for universities; and supporting the careers and professional development of a diverse global computing/IT profession.

In a rapidly-shifting political and policy landscape, much is possible – but this requires more explicit international collaboration with national academies and professional bodies, as well as with industry and the general public. Building on my previous experience and networks as an academic, policy advisor and extensive industry non-executive roles (including multi-billion pound utilities and public services), I would relish the opportunity to serve as a Member-at-Large on ACM Council.

(for more information about my research/policy work, as well as my aspirations for the ACM Council Member-at-Large role, see: <https://proftomcrick.com> and @ProfTomCrick).

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



Susan Dumais

Technical Fellow and Director
Microsoft Research Labs in New England, New York City and Montréal
U.S.A and Canada

BIOGRAPHY

Susan Dumais is a Technical Fellow and Director of the Microsoft Research Labs in New England, New York City and Montréal, and an adjunct professor at the University of Washington. Prior to joining Microsoft, she was a Member of Technical Staff at Bell Labs and Bellcore.

Her research spans information retrieval, human-computer interaction and data science with a focus on algorithms and interfaces that help people more easily find and derive insights from relevant information. She is a co-inventor of Latent Semantic Analysis, a well-known dimension-reduction technique for concept-based retrieval. She has conducted research and developed systems for email spam filtering, desktop and Web search, context-aware information systems, understanding behavioral interactions, and temporal dynamics of information. She has also worked closely with Microsoft teams on search-related innovations for the desktop, enterprise and web. Her interdisciplinary research has been widely cited (~75000 citations), and she holds more than fifty patents.

Dumais is Past-Chair of ACM SIGIR (1999-2003), served as an editor for ACM ToIS (1999-2011) and ToCHI (2001-2011), was technical co-chair of ACM CHI (1994) and ACM SIGIR (2006), served on several ACM committees including Fellows, Athena Lecturer and Nominations, and has been a Member-at-Large on the ACM Council since 2016. She was elected to the CHI Academy (2005), ACM Fellow (2006), National Academy of Engineering (2011), American Academy of Arts and Sciences (2015),

and received the ACM SIGIR Gerard Salton Award for Lifetime Achievement (2009), ACM SIGCHI Lifetime Research Award (2020), Tony Kent Strix Award (2014), ACM Athena Lecturer Award (2014), and Lifetime Achievement Award Indiana Univ Psychological and Brain Science (2017).

STATEMENT

I have been an active member of ACM for my entire professional career and would appreciate the opportunity to serve as a Member-at-Large on the ACM Council. As a current Council member I have worked on the Future of Computing Academy and new technology directions. Although ACM is widely recognized as the premier professional computer society, with strong commitment from volunteers, there are challenges ahead.

ACM has a long history of advancing computing through conferences, publications and resources for education and professional development. The digital library will have to continue to evolve to address the need for open access and the inclusion of rich media, open data, and other resources for students, practitioners and researchers. There are also new opportunities to augment conferences to better support remote participation to mitigate the need for travel and broaden participation.

Many of the challenges that the computer science community faces today will not be solved by a single discipline in isolation and would benefit from inter-disciplinary perspectives. I would like to see us develop opportunities for people with different backgrounds to come together to address important technical and societal problems. I will also work to continue to broaden participation from individuals with diverse backgrounds and to support their career development. Finally, I would like to see ACM take a more proactive role in informing policy around important issues such as personal privacy, and network and data security.

I believe that my sustained service to ACM and multi-disciplinary background provide me with perspectives that would be an asset to ACM in addressing computing challenges moving forward. If elected, I would be honored to serve as a Member-at-Large on the ACM Council.

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



John C.S. Lui

Choh-Ming Li Chair Professor, CSE Department
The Chinese University of Hong Kong (CUHK)
Hong Kong, China

BIOGRAPHY

John C.S. Lui is the Choh-Ming Li Chair Professor in the CSE Dept. at The Chinese University of Hong Kong (CUHK). He received his Ph.D. in Computer Science from UCLA. He is a Fellow of ACM, Fellow of IEEE, Senior Research Fellow of the Croucher Foundation, Fellow of the HK Academy of Engineering Sciences, and was the past chair of ACM SIGMETRICS (2011-2015). After his graduation, he joined IBM Laboratory and participated in research on file systems and parallel I/O architectures. He later joined CUHK. He has been a visiting professor at UCLA, Columbia Univ., Univ. of Maryland at College Park, Purdue Univ., Univ. of Massachusetts at Amherst and Universit degli Studi di Torino in Italy. His research interests are in machine learning algorithms, mathematical analysis and design of large scale networking/computing systems. John is currently the senior editor of the IEEE/ACM Transactions on Networking, and has been serving on the editorial board of ACM Transactions on Modeling and Performance Evaluation of Computing Systems, IEEE Transactions on Network Science & Engineering, IEEE Transactions on Mobile Computing, IEEE Transactions on Computers, IEEE Transactions on Parallel and Distributed Systems, Journal of Performance Evaluation. He is a member of the review panel of the IEEE Koji Kobayashi Computers and Communications Award committee, and has served on the IEEE Fellow Review Committee. John served as the chairman of the CSE Department (2005-2011), the Associate Dean of Research in the College of Engineering at CUHK (2014-2018). John is an active consultant and advisor in many high tech. companies. John also received various departmental teaching awards, the CUHK Vice-Chancellor's

Exemplary Teaching Award and the CUHK Faculty of Engineering Research Excellence Award (2011-2012).

STATEMENT

It is a privilege to be nominated for Member-at-Large. I've been an ACM member since I was a Ph.D. student, and have been constantly amazed by the various educational opportunities and scholarly events that ACM offers to our community, and I am equally impressed by the many dedicated ACM members for their passion of pushing forward computing technologies in all aspects of human activities.

If elected, I would like to help expand some key activities along these lines.

- Promote volunteering services from Asian countries (e.g., China, India, Japan and Singapore, ..etc.) and European countries (e.g., England, France, Germany, Italy, ...etc.).
- Promote closer collaboration between IT companies and academic researchers around the world.
- Promote more volunteering participation in organizing educational and academic events.

Information technology is crucial to our economic growth, and ACM has the responsibility of creating more public awareness of IT technologies, and how these technologies may transform our jobs and working environment. ACM also needs to have a firm commitment to relay the advantages and pitfalls of some of the latest computing technologies to different government agencies around the world. My academic training, industrial experience, and relationship with government agencies gives me the unique view point of how to promote the above items. But, to be successful, I also need all ACM members to join hands and help out so that our community can make a bigger impact.

In summary, we now have the wonderful opportunity to shape a better and brighter future for our next generation. Let's join hands to create a better place for our future generations.

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



Sanjiva Prasad

Professor and Head of Dept. of Computer Science & Engineering
Indian Institute of Technology Delhi
India

BIOGRAPHY

Sanjiva Prasad is a Professor and current Head of the Department of Computer Science and Engineering at the Indian Institute of Technology Delhi, where he has worked for 25 years. He headed the Khosla School of IT (2011-2015). Earlier, he worked at ORA Corp., Ithaca, and ECRC GmbH, Muenchen, and was a visiting Lektor at Aarhus Universitet.

Sanjiva earned a B. Tech. in Computer Science at IIT Kanpur (1985), and received a Ph.D. from Stony Brook University (1991). His research interests lie in formal methods and verification. In particular, he is interested in languages, types and logics for concurrent and distributed systems, and on problems such as:

- formal foundations of network routing;
- mobility and security protocols;
- analysis frameworks for secure information flow;
- operational semantics of modern architectures.

He has worked on applications of computing in fields such as:

- neurosurgery and mHealth;
- systems biology;
- eco-design;
- ICT for underserved communities.

Since 2019, Sanjiva is Editor-in-Chief of ACM Books. He chairs the executive committee of Association for Logic in India. He has co-chaired the Program Committee of FSTTCS twice, ICLA and ICDCIT, and served on the program committees of many conferences e.g., POPL, LPAR, ICTAC, SEFM, ATVA, FoSSACS, APLAS, FORTE, etc. He has

delivered invited lectures at many international conferences and workshops, and talks at leading universities across the world.

Sanjiva serves on several apex committees overseeing research and doctoral programs funded by the ministries of IT and Health of the Indian Government. He has designed curricula in CS, IT, and engineering for 6 universities (India, Kuwait). He has advised leading Indian hospitals (AIIMS, NEIGRIHMS), Indian Railways, and several cultural organisations.

STATEMENT

I am honoured to be nominated as a candidate for the Member-at-Large office. I joined ACM as a grad student over 3 decades ago, and treasure the support I received from SIGPLAN for attending my first major conference.

As ACM has grown internationally, especially in Asia, it must continue to reach out: making its flagship events, activities, and publications accessible to the growing diversity (in country, gender, age, profession) of its membership. I will work towards extending ACM's culture of community, collaboration, mutual respect, inclusiveness, and spirit of volunteering to researchers and professionals across the world.

As Editor-in-Chief of ACM Books, I consider it important that young researchers and working professionals be able to access the best pedagogical and research material in a timely and affordable manner. I believe that ACM must transit soon to an open access model for its research publications that is equitable for researchers across the world. It should also provide practical technical material for working professionals in its Digital Library. I believe we are inventive enough to manage this transition without impacting ACM's other major activities.

With computing finding its way into every aspect of our lives, "advancing computing as a science and profession" means:

- imbuing in every individual (across nationality, age, gender, etc.) a computational way of thinking;
- educating society about opportunities and threats which new technologies pose;
- disseminating the ethics and ethos needed for creating responsible computing professionals.

I would like to see ACM take a proactive role in influencing international policies on important societal issues such as fairness, personal privacy, software and system safety, and network and data security.

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



Mehran Sahami

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

BIOGRAPHY

Mehran Sahami is 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). He is an ACM Distinguished member.

Mehran is currently Past Chair of the ACM Education Board, having completed two 2-year terms as Co-Chair, helping to initiate and oversee educational activities for ACM on a broad scale. He Co-Chaired the ACM/IEEE-CS joint task force on Computer Science Curricula 2013 (CS2013), which was responsible for creating international curricular guidelines for college programs in CS and, in 2014, 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, an annual meeting focused research at the intersection of learning science and computer science, and was co-founder and first Chair for the annual Symposium on Educational Advances in Artificial Intelligence (EAAI).

Mehran's research interests include computer science education, computer ethics, and machine learning. He has published numerous technical papers, including the book "Text Mining: Classification, Clustering and Applications," received various awards and recognitions for his work, and has over 20 patent filings. He is currently working on a new book on ethics and technology. He received his B.S., M.S., and Ph.D. in Computer Science from Stanford.

STATEMENT

I am honored to be nominated to run for a Member-at-Large. As Co-chair of the ACM Education Board, I've served on the Extended Executive Committee of the ACM for four years. That experience gives me a deep appreciation for the issues facing ACM and provides the opportunity to be effective from day one as a Member-at-Large.

My main goals are working to better serve the needs of the membership, specifically pursuing opportunities to push for more open access models for publication, increasing development of content relevant to practitioners, and more fully realizing ACM's mission to be a truly global association. Open access in publications is an area where ACM needs to take a stronger stance, both internally by charting a part for opening up the digital library, as well as externally by being an advocate for more open access to scholarly research in general. This is the direction the field needs to go and ACM should be leading.

Additionally, I am deeply concerned about ethical issues that have become commonplace in computing and believe that ACM needs to take a more active role in educational and policy activities to address these issues. Ethics in technology is an active area of work for me, including teaching a multi-disciplinary course, for which we produced professionally written case studies on several topics (algorithmic decision-making, autonomous systems, data privacy, the power of large computing platforms/companies) and made them all freely available. While updating the ACM Code of Ethics was a good step, I believe that ACM needs to be more active in engaging with the policy conversations around how technology should be regulated for the benefit of all.

I look forward to continuing to serve ACM and I appreciate your consideration for a Member-at-Large seat.

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



Alejandro Saucedo
Engineering Director (Machine Learning), Seldon Technologies
Chief Scientist, The Institute for Ethical AI & Machine Learning
London, UK

BIOGRAPHY

Saucedo actively contributes to the ACM as a member of the European Technology Policy Committee through his work on Explainable AI systems and responsible machine learning development, which advocates ACM's Code of Ethics and Professional Conduct. He is the Chief Scientist at the Institute for Ethical AI & Machine Learning, where he leads the development of industry standards on machine learning bias, adversarial attacks and differential privacy. Saucedo is also the Director of Machine Learning Engineering at Seldon Technologies, where he leads large scale projects extending and implementing open source and enterprise infrastructure for production machine learning systems that manage thousands of models. With over 10 years of software development experience, Saucedo has held technical leadership positions across hyper-growth scale-ups and has delivered multinational projects with top tier investment banks, magic circle law firms, and global insurance companies. He has a strong track record building cross-functional departments of software engineers from scratch and leading the delivery of large-scale machine learning systems across the financial, insurance, legal, transport, manufacturing, and construction sectors (in Europe, U.S. and Latin America).

- LinkedIn: <https://linkedin.com/in/axsauceado>
- Twitter: <https://twitter.com/axsauceado>
- Github: <https://github.com/axsauceado>
- Website: <https://ethical.institute/>

STATEMENT

- The ACM continues to represent the core values that encompass my passion for our profession, and as an organisation it has managed to evolve through the decades to continuously drive our field forward whilst staying true to its grass-root values. I am honored to be nominated as a Member at Large, as that offers me the opportunity to give back directly to the great ACM community and contribute to the many initiatives that make this member-driven organisation so great.
- As a member of the ACM community I have been active through several practitioner, academic, and policy initiatives. My volunteering work has consisted mostly around contributions through workstreams that focus on social responsibility and emerging technologies. I am active across various communities advocating the ACM values through global open source and technology conferences and forums, as well as through my advisory roles at the Linux Foundation, the European Commission, the Royal Society, and the Institute for Ethical AI. I am continuously looking to explore ways of expanding the ACM's reach through internal and external initiatives.
- As an ACM Member at Large, my main objective will be to focus on the core internal member-driven initiatives that have made the ACM an organization whose members are proud to continue contributing and representing. The social, professional, and ethical responsibilities of practitioner and academic members are a key area that I am keen to continue advocating through the great resources ACM members have created. As an ACM Member at Large, I will be committed to represent the ACM community and drive forward the initiatives that will help strengthen this great members driven organisation.

Candidate for Member-at-Large
(1 July 2020 – 30 June 2024)



Alfred Z. Spector

Chief Technology Officer, Two Sigma
New York, NY
U.S.A.

BIOGRAPHY

Dr. Alfred Spector is the Chief Technology Officer at [Two Sigma](#), a firm dedicated to algorithmic approaches to a wide collection of financial optimization problems. His career has led him from innovation in large scale, networked computing systems to broad engineering and research leadership.

Prior to Two Sigma, Spector spent nearly eight years as VP of Research at [Google](#). Before Google, Spector held various senior-level positions at [IBM](#), including as global VP of Services and Software Research. He previously founded [Transarc Corporation](#), a pioneer in distributed transaction processing and wide-area file systems, and he was a tenured professor at [Carnegie Mellon University](#). Dr. Spector was an undergraduate at [Harvard](#) and obtained a Ph.D. in computer science from [Stanford](#).

Spector was a [Hertz Fellow](#) at Stanford and is also a Fellow of both the [ACM](#) and the [IEEE](#). He is an active member of the [National Academy of Engineering](#) and the [American Academy of Arts and Sciences](#), where he serves on the [Council](#). Dr. Spector won the [2001 IEEE Kanai Award for Distributed Computing](#) and the [2016 ACM Software Systems Award](#). In 2018-19, Dr. Spector lectured widely as a [Phi Beta Kappa Scholar](#) and has been a member of the [ACM Turing Award Committee](#). As to government service, Spector was a member of the [Army Science Board](#), and he chaired the NSF's [CISE Advisory Board](#). He has had extensive international experience due to broad responsibilities at IBM, Google, and Two Sigma.

Recently, Spector has lectured widely on the growing importance of computer science across all disciplines based on the evocative phrase, CS+X. More recently, he has written and lectured on the societal implications of data science -- both the great benefits and the unintended consequences.

STATEMENT

Computers have become 1+ trillion times more capable since the introduction of transistors, and computer science's innovations in the analytical/algorithmic and engineering domains have been equally remarkable. Our field has also added a strong empirical dimension, both benefiting from and facilitating the vast growth of computing worldwide. Unsurprisingly, this innovation is impacting us all: as information technology professionals and as citizens, and it is affecting the ACM.

With their great reach and capability, our field has delivered amazing and sometimes insufficiently understood benefits. But, society is rightly concerned with the downsides of technology, both actual, potential, and sometimes even fictional. Those concerns, if not properly addressed, run many risks, including to ourselves and the opportunities we collectively have to improve our world. Without our attention, idealistic youth might even stop flocking to our field.

If I am elected an ACM Member at Large, I will use my broad perspective to provide both strategic and operational counsel to ACM. For example, I will seek to improve the relevance of ACM to our diversifying field; to push for open access publication while ensuring a sound business model; to catalyze the publication of novel software artifacts as an intellectual pursuit; to maintain our proudly international organization in an era of increased nationalism; to accelerate the diversification of computing to all who can contribute; to thoughtfully lead discussions of policy and ethics that benefit society, our field, and our membership; and to balance the diversification of our field (e.g., the rise of data science as a quasi-parallel discipline) while promoting the core of our field. I hope to contribute to these topics and many more.