

**Candidate for President**  
**(1 July 2016 – 30 June 2018)**



**Erik R. Altman**

IBM Director of Technology  
IBM Watson Research Center  
Yorktown Heights, N.Y.  
U.S.

**BIOGRAPHY**

Altman has been an ACM volunteer for more than two decades and currently serves as ACM Secretary/Treasurer. In addition to general ACM governance, he helps ensure ACM's budget is in good order. (It is, thanks to Darren Ramdin and others at ACM HQ). He is past Chair of the ACM SIG Governing Board (SGB) and its 37 constituent Special Interest Groups. One of his initiatives as SGB Chair was to create the [11 knowledge groups](#) to ease finding SIGs of interest ([acm.org/special-interest-groups](http://acm.org/special-interest-groups)) as well as chartering SIGLOG. He worked with ACM HQ to pilot daily newsfeeds for each SIG, an incomplete effort on which he would like to renew efforts if elected.

Altman previously served as Awards Chair on the SGB Executive Committee and is immediate past chair of ACM SIGMICRO. Under his watch, SIGMICRO established a Hall of Fame and an Oral History project and relaunched its Newsletter. He joined ACM in 1992, and has been a member of SIGARCH, SIGPLAN, SIGSOFT, SIGHPC, SIGMOBILE, SIGMETRICS, and SIGGRAPH. His first paper was in the 1993 Genetic Algorithms conference.

At IBM, Altman helps develop material for monthly readouts to CEO Ginni Rometty and other senior IBM executives on key technology issues. Earlier at IBM Research he directed two projects: WAIT: on performance tooling; Liquid Metal – Programming FPGAs & GPUs in a Java-like language. He has coauthored more than 45 papers, and more than 30 patents and pending applications. He was a co-founder of IBM's DAISY binary translation project and an architect of the Cell processor in Sony's Playstation 3. He worked as a hardware and software engineer at Bauer Associates, Machine Vision, and Tek Microsystems. More info: [researcher.ibm.com/person/us-ealtman](http://researcher.ibm.com/person/us-ealtman)

Other Service: Editor-in-Chief, *IEEE Micro*; Program Co-Chair and General Chair: PACT and NPC Conferences; Program Chair: CASES Conference; Co-Founder and three-year General Chair: Workshop on Binary Translation; Co-Founder: FastPath Workshop and IBM P=ac2 Conference; Dagstuhl Organizer; Guest Editor: *IEEE Computer*, *Journal of ILP*; *IBM Journal of R&D*; Chair, ACM Student Research Competition at PACT, Keynotes: 2009 PEPSMA Workshop; 2011 CGO Conference, 2013 Cosmic Workshop.

Altman received an S.B. (MIT, 1985), an M.S. (McGill, 1991), and Ph.D. (E.E., McGill, 1995).

## STATEMENT

*"We must think and act anew."* – A. Lincoln

ACM's stated mission is "Advancing computing as a science and profession." The value of science in ACM is clear with 170 conferences globally, 40+ journals, and a Digital Library (DL) of 400,000+ papers. ACM also helps computing professionals via free ebooks on CUDA, User Experience, AI, and thousands more. ACM offers Learning Packs on security, cloud computing, SaaS, mobile, etc. The relaunched *acmqueue* has great practical content. ACM is also a driving force in keeping undergraduate curricula up to date.

But despite abundant offerings and 100,000+ members, ACM has challenges. It is not clear ACM's financial model based on publishing revenue can endure. Many are not involved in ACM, e.g. the 10+ million programmers worldwide. These challenges are connected and have many causes:

- Difficulty knowing what ACM material others found valuable and why.
- The Open Access movement and free content:
  - stackoverflow helps with targeted questions; recent academic papers are often found elsewhere.
- A mismatch between most ACM material and practitioner needs.
  - Much ACM content is papers or instruction to teach a new area – not focused material for a how-to Web search like "efficient SQL join".
  - The DL is currently indexed for researchers by paper titles, authors, conferences.

How to overcome these challenges? "Nothing will come of nothing" (a). I propose a mix of technical and social improvements leveraging ACM's unique material:

- Chunk papers, books, and more, in small pieces like paragraphs for search engines to facilitate targeted how-to search.

- Let users guide other users, via "star" ratings, easy posting of comments tagged to "chunks", and noting "Users who looked at X also did Y".
  - Enhance ACM's international value by machine translations of papers and other material.
  - Simple interfaces for ACM users to improve the translations.
    - Confirm improvements by a reader vote.
    - Reward highly ranked translators.

Indeed "A little Madness in the Spring is wholesome even for the King." (b) Such experimentation can guide ACM to things valued by the computing community, and provided funds to support ACM and its good works.

Such initiatives can also cross-pollinate research and practice, e.g. tagging chunks of research papers of interest to practitioners; conversely providing insight to researchers about practical problems. This interaction could also help ACM quickly identify and support emerging areas via FAQs, conferences, SIGs, etc.

All of these efforts follow a broader theme: inclusion and computer science for all. More accessible and open offerings foster broader participation: globally and by income, gender, age, etc. Broad participation also means hearing everyone and I welcome comments ([altmane@acm.org](mailto:altmane@acm.org)).

It is the most exciting time in my 20+ years service to be in computing and ACM. It would be an honor to serve as President and help make things even better. I ask for your vote.

- (a) Shakespeare
- (b) Emily Dickinson

**Candidate for President**  
**(1 July 2016 – 30 June 2018)**



**Vicki L. Hanson**

Distinguished Professor of Computing  
Rochester Institute of Technology  
Rochester, N.Y.  
U.S.

Professor and Chair of Inclusive Technologies  
University of Dundee  
Dundee, Scotland  
U.K.

**BIOGRAPHY**

Vicki Hanson is a Distinguished Professor of Computing at Rochester Institute of Technology, U.S. (since 2013), Professor and Chair of Inclusive Technologies, Computing, University of Dundee, U.K. (since 2009), and an IBM Research Staff Member Emeritus (since 2009). Previously, she was Research Staff Member and Manager, IBM T. J. Watson Research Center (1986-2008), Research Associate, Haskins Laboratories, New Haven, CT (1980-86), and Postdoctoral Fellow at the Salk Institute for Biological Studies (1978-80).

Vicki is the ACM Vice President. She also currently serves as a member of the ACM Executive Committee and Council, on the ACM-W Europe Executive Committee, on the ACM Fellows Awards Committee (Chair, 2015). She is Vice President at Large of ACM SIGCHI and an ACM Distinguished Speaker. She has served on the SIG Governing Board Executive Committee (2005-14; SGB Chair 2010-12), and as Chair of SIGACCESS, where she revitalized the SIG and established a successful annual conference (ASSETS). She co-founded the field's premier archival journal (*ACM Transactions on Accessible Computing*) and served as Associate Editor of *ACM TWEB*. She was on the organizing committee for several SIGPLAN OOPSLA conferences, chaired the recent ACM CEO Search Committee, and currently serves on the Royal Society of Edinburgh Fellows committee (since 2013; Convener 2015).

She is an ACM Fellow, a Chartered Fellow of the British Computer Society, a Fellow of

the Royal Society of Edinburgh, and a Senior Member of IEEE. Vicki has served on research advisory boards in the U.S. and the U.K. including the committee that established the U.S. National Science Foundation (NSF) research agenda in Human-Centered Computing. Her research focuses on accessibility of technology for people with disabilities, the aging population, and related research ethics. She has received substantial support for this research from Research Councils U.K., industry, the Royal Society, the Leverhulme Trust, and NSF. She has been honored with a Royal Society Research Merit Award, the Anita Borg Woman of Vision Award for Social Impact (2013), the ACM SIGCHI Social Impact Award (2008), and an IBM Corporate Award for Contributions to Accessibility (2009).

Vicki received her M.A. and Ph.D. from the University of Oregon (Cognitive Psychology, 1976; 1978), receiving the University's Alumni Fellows Award in 1995.

## **STATEMENT**

I am honored to have been nominated for the position of ACM President. ACM is a strong organization, but there are on-going challenges we must address. With my experience in industry, academia, and within ACM itself, I believe I am well positioned to lead our work on these challenges. I seek your support and your help in making ACM the strongest organization it can be.

ACM is a volunteer-driven society. Throughout my career I have been involved with ACM as a member and volunteer, as an officer at both SIG and SIG Board levels, as a journal Editor-in-Chief, as a member of the ACM Executive Committee and Council, and now as Vice President. In all these roles I have come to admire the dedication of the many people who further our shared community objectives. As a result of their efforts, ACM has the largest membership in its history, a record number of conferences and publications, and a world-leading Digital Library. Our global members are well served through our SIGs and our contributions to a broad range of educational programs for both students and professionals.

Although strong, we must continue to evolve in response to societal shifts, and we must do this without sacrificing our reputation for quality or our financial viability. We must create mechanisms to rapidly identify and support emerging technical areas. We also must continue to find ways to provide value to practitioners. This past year saw new offerings with the launch of the *acmqueue* app and the Applicative conference, but additional practitioner-focused opportunities are needed. Efforts to interconnect our global computing community as well as our diversity efforts related to women, ethnicity, and accessibility have been well received, but work remains to integrate these into the core fabric of ACM.

In addition to these focus areas, two topics will dominate ACM deliberations going forward: membership and publishing. Both are key to our future.

For membership, ACM must better meet the needs of young professionals. Coming of age surrounded by readily available content, and having increasingly fluid careers shaped by social networking, many wonder what additional value can be derived from ACM membership. As Vice President, I have brought these concerns to the foreground and have started efforts to reach out, such as spearheading ACM's first participation at South by Southwest Interactive 2016 and proposing the formation of a Young Professionals Advisory Board.

In publishing, we must continue to explore how best to address requirements for increasingly open access and the inclusion of rich media and open data in our Digital Library. As we move forward, we must keep in mind that publishing is key to ACM's financial health. Our goal, therefore, must be a plan that financially sustains ACM while addressing these evolving needs.

There is much to do at ACM. With your help and support, as President I will work to ensure that ACM initiatives meet the needs of our community.

**Candidate for Vice President**  
**(1 July 2016 – 30 June 2018)**



**Fabrizio Gagliardi**

Independent Consultant  
Geneva, Switzerland

Polytechnic University of Catalonia  
Spain

**BIOGRAPHY**

**Current positions:**

- Former ACM Europe President and current EUACM chair
- Distinguished Research Director, Polytechnic University of Catalonia, Spain – Senior advisor of the Barcelona Supercomputing Centre, Spain
- Visiting professor, Gran Sasso Scientific Institute, L'Aquila, Italy
- Independent computing consultant, Geneva, Switzerland

**Other current positions:**

Founding member of the Research Data Alliance Organisational Advisory Board

**List of previous positions held positions:**

**2011-2015** member of the board of Informatics Europe

**2009-2015** founding member and chair of the ACM European Council

**2009-2013:** Director, Microsoft External Research, for Europe, Middle East and Africa

**2010-2012:** Principal initiator and chair of the management board of the EU FP7 Cloud Computing Project VENUS-C

**2005-2008:** Microsoft, Director for Technical Computing for Europe, Middle East, Africa and Latin America

**2004-2005:** Principal initiator and director of the EU funded project EGEE: Enabling Grid for E-science

**2001-2004:** Principal initiator and project leader of the EU DataGrid project

**2000-2002:** Director of the CERN Summer School of Computing

**1999-2013:** Co-founder of the Global Grid Forum

**1985-2000:** Several technical and managerial positions at CERN and associated international laboratories

**1983-1984:** Visiting scientist at the Stanford Linear Accelerator Laboratory of the University of Stanford, California

**1978-1982:** Principal designer of several on-line data acquisition systems for physics experiments at CERN

**1975-1977:** Scientific Fellow at CERN

#### **Awards:**

**2013:** ACM Presidential Award, for his instrumental role in creating and leading the ACM Europe Council, composed by some of the most distinguished computer scientists in Europe

**2008:** Best speaker award at the GridKa computing school in Karlsruhe, Germany (three years in a row)

**1999:** Price for best track speaker and best overall speaker at the EuroStorage international conference in Berlin.

#### **STATEMENT**

I am honored to have been asked to run for ACM Vice President. ACM is a strong organization. Some of that strength comes from recent efforts to be a truly international society. While much has been accomplished with ACM's international initiatives (especially in Europe, India, and China), there is much more to do. I believe my experience in building ACM Europe, combined with the experience gained from being an active member of the European research community throughout my career, gives me the background needed to strengthen and grow ACM's international agenda.

Over the past seven years, I have been responsible for the launch and development of ACM Europe. I helped build the ACM Europe Council and, as chair, drove it to set an agenda for ACM in Europe. As a result of this effort, we have more chapters and members in Europe than at any point in ACM's history. We have engaged with multiple organizations, particularly Informatics Europe, on important issues like computing/informatics education at the secondary level. We issued a joint report on issues in European informatics education and are co-leading and co-funding a two-year research project to really assess the state of pre-university informatics education throughout Europe.

In addition to our efforts on education, we created ACM-W Europe to bring the agenda, resources, and vision of ACM-W to the European issue of women in computing. Several special events have been held, and ACM Europe is gaining traction on this important issue. Finally, I led the effort to create EUACM – ACM Europe's policy arm. EUACM is modeled after USACM and is bringing ACM into important conversations and positioning ACM Europe as a privileged partner of the European Commission funding activity for computer science research and education in Europe.

While we are off to a solid start, there is much more to do – not just in Europe, but throughout the world. My experience at CERN, Microsoft, and now the Barcelona Supercomputing Center, has given me a sense of how an international society should engage with the global computing community. I believe ACM can and should do more – both to build the initiatives we have started and to launch new efforts, particularly in Latin America.

There is much to do at ACM. With your help and support, I believe we can bring ACM to a new level of presence and prominence in the international computing community.

**Candidate for Vice President**  
**(1 July 2016 – 30 June 2018)**



**Cherri M. Pancake**

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

**BIOGRAPHY**

Cherri Pancake is Professor Emeritus of Oregon State University and Director of the Northwest Alliance for Computational Science and Engineering, an interdisciplinary research center known for software systems that analyze scientific and climate data to provide information that “makes sense” to decision makers who are not scientists themselves. She is a Fellow of ACM and IEEE.

Early in her career Pancake conducted ethnographic fieldwork in Guatemalan Indian communities, where she applied cross-cultural techniques to study social change. After earning a Ph.D. in Computer Engineering, she was among the first worldwide to apply ethnographic techniques to identify software usability problems – an approach which is now mainstream – and she conducted much of the seminal work identifying how the needs of scientists differ from computer science and business users.

More recently, she has focused on how “virtual collaborations” – interactions that span large interdisciplinary and physically distributed communities – differ from situations where colleagues have the opportunity to meet and work together physically. She develops processes and software tools to make remote collaboration and data sharing fit naturally into normal patterns of scientific research and practice.

A member of ACM since 1982, Pancake has been ACM Awards Co-Chair since 2012 and a member of ACM Council since 2013. Over the past 25 years, she has served in a wide variety of roles. Pancake was an area editor for *Communications of the ACM*, led two ACM/IBM industry advisory boards, and chaired the Fellows and Gordon Bell Prize

committees. She has held leadership roles with the SC Conference (formerly called Supercomputing) since 1990, serving in more roles and over a longer period of time than any other person.

Pancake led efforts to create a new SIG focusing on High Performance Computing – formalized in 2012 as SIGHPC – and has served as Chair since its inception. Under her leadership, SIGHPC grew to over 1,000 members and achieved financial viability in the first year, setting two new records for ACM.

## **STATEMENT**

In more than two decades of ACM volunteer service, I have led major ACM conferences, formed a new SIG, served in a variety of editorial positions, chaired the ACM Awards Committee, and served on ACM Council. I have also held leadership and advisory roles in a number of major national/international 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. I believe my varied experience, coupled with my unique professional background, has prepared me well for serving you as Vice President.

More than half of ACM's 100,000+ members live outside the United States. This presents many new opportunities for collaborating with colleagues worldwide, but to take full advantage of them we must first overcome the challenges of distance and culture. While these challenges are not unique to ACM, we do have a unique resource to leverage in overcoming them: our volunteers. I believe the most effective way to overcome the challenges of distance and culture is to actively engage our worldwide membership in shaping the ACM of the future. Participating in ACM volunteer activities, especially at the national and international level, has broadened my own perspective immeasurably. It is something I think many more people can – and should – be able to experience. As Vice President, I will draw upon my research and practical experience with distributed collaborations to make volunteer opportunities more visible, accessible, and rewarding for all members.

I also believe that ACM should be doing more to lead the search for solutions to the “crisis” in business and industry caused by the lack of computing professionals. I recently negotiated with Intel to donate \$1.5 million over the next five years for SIGHPC/Intel Computational & Data Science Fellowships, which explicitly target the need to tap new sources of trained professionals by increasing diversity in the field. If elected Vice President, I will work to establish ACM's role in this arena. As the leading professional organization for computing, we are uniquely positioned to bring together key stakeholders from academia, industry, and government to develop collaborative models and mechanisms for expanding participation in our field.

**Candidate for Secretary/Treasurer**  
**(1 July 2016 – 30 June 2018)**



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

**BIOGRAPHY**

Elizabeth Churchill is a Director of User Experience at Google. Her field of study is Human-Computer Interaction, and her current focus is on the design and development of connected devices and of developer tools for device ecosystems.

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, 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.

Churchill served as on the Executive Committee of the ACM's Special Interest Group on Computer-Human Interaction (SIGCHI), for eight years, six of those years as Executive Vice President. She has also held committee positions on a number of ACM SIGCHI associated conferences.

A Distinguished Scientist and Distinguished Speaker of the ACM and a member of the SIGCHI Academy, Churchill has worked in a number of research areas and has been successful at publishing, prototyping, and patenting. She has more than 50 patents granted or pending, and over 100 publications in theoretical and applied psychology, cognitive science, human-computer interaction, mobile and ubiquitous computing, computer mediated communication and social media.

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

## **STATEMENT**

ACM is the premier professional organization for Computer Science as a field of enquiry and application. ACM provides a platform for the best academic research and a bedrock for academics and practitioners alike to engage in lifelong learning.

ACM also faces challenges. Membership may be steady, but some view the organization as not addressing the needs of practitioners and not addressing the needs of young people starting their careers – people who are served just as well by informal social networks for career growth. Further, discussions about open content publishing are seen to be at odds with one of the cornerstones of the ACM's business model: charging for access to content.

One of the challenges I would like to address with others in the leadership group of ACM is how we can ensure future growth by providing a better platform for those in early stage careers and how we can more effectively capitalize on our global presence, acknowledging academics and practitioners alike. It is my belief ACM can continue to provide the strongest foundational social network for a life-long career in all aspects of computer science.

I have been a member of the ACM for two decades. Volunteer activities to date have been within SIGCHI, one of the largest SIGs. In addition to technical program committee activities, I have chaired conferences and was on the Executive Committee for SIGCHI for eight years, two years as VP for Chapters, and a further six years as Executive Vice President. Key initiatives I worked on with other committee members in those positions were accessibility, HCI and Computer Science Education, and HCI and Policy.

I am honored to be nominated for the position of Secretary/Treasurer of the ACM and look forward to continuing my volunteer activities for ACM

**Candidate for Secretary/Treasurer**  
**(1 July 2016 – 30 June 2018)**



**Craig Partridge**  
Chief Scientist  
Raytheon BBN Technologies  
Cambridge, MA  
U.S.

**BIOGRAPHY**

Craig Partridge is a Chief Scientist at BBN Technologies, where he has worked on research problems in data communications networks, especially the Internet, since 1983. His contributions include architecting how today's email is routed, co-inventing anycast addressing, and developing the first multigigabit IP router and IP security gateway. Partridge holds 15 patents and has published approximately 60 papers in refereed journals and conferences. He has held adjunct professorships at Stanford University, the University of California at Berkeley, and the University of Michigan.

Partridge has been an active volunteer in ACM since 1987, when he became editor-in-chief of *ACM Computer Communication Review*. A former chair of ACM SIGCOMM, he is a Fellow of the ACM and the current chair of the ACM Fellows Committee. He has served as general chair of ACM SIGCOMM and program co-chair for ACM SIGCOMM and the Internet Measurement Conference. He has been on the program committee for many ACM conferences including the ACM Conference on Information-Centric Networking, the ACM Internet Measurement Conference, ACM HOTNETS, ACM SIGCOMM, and ACM MobiHoc.

Partridge is also a Fellow of the IEEE. He is a former editor-in-chief of *IEEE Network Magazine*, and a former member of the IEEE Communications Society's Fellows committee and the IEEE Communications Society's Awards committee.

He has served on multiple committees of the US National Research Council, including chairing the committee regarding the behavior of the Internet on 9/11/2001. An early member of the Internet Engineering Task Force, Dr. Partridge was a founding member

of the Internet Engineering Steering Group (IESG).

His research focus has been on data communications, broadly construed. Any problem that involves getting information from one place to another is of interest to him.

He received his A.B. degree in History, his M.Sc. in Computer Science and his Ph.D. in Computer Science all from Harvard University.

## **STATEMENT**

I have been a member of ACM for 35 years. I am honored to be considered as a candidate for Secretary/Treasurer of ACM.

ACM Secretary/Treasurer has two major roles. The first is overseeing ACM's finances. Currently ACM's finances are good and trends suggest finances will remain good for the next few years. Much of the Secretary/Treasurer's role, therefore, is likely to be ensuring that ACM is using its funds to serve ACM members and achieve ACM goals.

That leads to the second role of Secretary/Treasurer, which is to serve as a member of the ACM Executive Committee and participate in decisions that seek to better serve members and better achieve those ACM goals. In that light, I think it is useful to explain my perspectives as an ACM volunteer.

I am deeply interested in ACM's role in exposing the best ideas of practitioners and researchers, through conferences, tutorials, webinars, publications and the like. Two examples hint at how challenging that role can be. Recently we learned that graduate students at ACM SIGCOMM were having trouble understanding the papers being presented because they lacked the necessary background. Our field has become so diverse that it is hard for a person to track all the advances, and graduate students are just getting started. So we created a program of short lectures at the conference to provide the background. Those short lectures were so popular we ran out of meeting space. Another example is that about 15 years ago, SIGCOMM decided to put conference papers online, for free, before conferences took place. There was a fear this would undermine attendance. Instead, conference attendance grew. The moral I take from these experiences is that we have to regularly improve how we make good ideas accessible to our membership.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Manindra Agrawal**

Professor, Department of Computer Science  
and Engineering  
India Institute of Technology Kanpur  
Kanpur, India

**BIOGRAPHY**

Manindra Agrawal did his B.Tech and Ph.D. in Computer Science from IIT Kanpur in 1986 and 1991, respectively. His thesis was in complexity theory. After graduating, he worked at Chennai Mathematical Institute and University of Ulm (Germany) as Humboldt Fellow before joining IIT Kanpur as Assistant Professor in 1996. His areas of research are complexity theory, computational number theory, and algebra.

He is a recipient of several awards and honors including the Gödel Prize, Fulkerson Prize, Humboldt Forschungpreis, and Infosys Prize in Mathematics. He is a Foreign Associate of the National Academy of Sciences (U.S.), and a Fellow of the World Academy of Sciences, Indian National Science Academy, and Indian National Academy of Engineers.

**STATEMENT**

While ACM has a strong presence in many countries of the world, it has only recently started expanding its presence in India. India has a large number of IT and CS professionals, and ACM can provide them an excellent platform to contribute to the domain as well as learn from others. As member at large, my aim would be to help in the expansion of ACM activities in India and nearby regions.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Susan Dumais**

Distinguished Scientist, Deputy Managing Director  
Microsoft Research  
Redmond, WA  
U.S.

**BIOGRAPHY**

Susan Dumais is a Distinguished Scientist and Deputy Managing Director of the Microsoft Research Lab in Redmond, and an adjunct professor at the University of Washington (1997-present). Before joining Microsoft, she was a Member of Technical Staff at Bell Labs and Bellcore (1979-1997). She earned her Ph.D. in cognitive psychology from Indiana University (1979) and B.A. in mathematics and psychology from Bates College (1975).

Her research spans a variety of topics at the intersection of information retrieval and human-computer interaction with a focus on algorithms and interfaces to help people more easily find relevant information and derive insights from it. She is a co-inventor of Latent Semantic Analysis, a well-known dimension-reduction technique for concept-based retrieval. She has developed systems and methods for email spam filtering, desktop search and navigation, context-aware Web search systems, and dynamic information environments. She has also worked closely with Microsoft teams on search-related innovations for the desktop, enterprise, and Web. Her interdisciplinary research on search algorithms and interfaces has been widely cited (more than 45,000 citations), and she holds more than 40 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), and served on several ACM committees including Fellows, Athena Lecturer, and Nominations. 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), Tony Kent Strix Award (2014) and ACM-W Athena Lecturer Award (2014).

**STATEMENT:**

I have been an active member of ACM for my entire career and am honored by this nomination and the opportunity to serve the community in a new capacity. ACM is widely recognized as the premier professional computer society, with strong commitment from volunteers, and a broad set of activities and resources for members, yet there are also challenges ahead.

ACM has a long history of advancing computing research through its conferences and publications and increasingly through 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 opportunities to augment conferences with richer real-time engagement and a more permanent record of talks, workshops and panels.

Many of the challenges that the computer science community faces today will not be solved by a single technical discipline in isolation and would benefit from cross-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 them in career development. Finally, I would like to see ACM take a more proactive role in informing policy around important societal 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 2016 – 30 June 2020)**



**Judith Gal-Ezer**

Professor of Computer Science  
Open University of Israel  
Ra'anana, Israel

**BIOGRAPHY**

Judith Gal-Ezer is a professor of computer science at the Open University of Israel (OUI). She served as Vice President for Academic Affairs at the Open University for almost ten years: 1999-2005, and 2009-2012.

She developed numerous courses in Mathematics and Computer Science (CS) at the Open University, was one of the designers of the CS undergraduate program, and later the CS Masters. She served as head of the Development division, and then as head of the Mathematics and Computer Science department.

She has served as **Advisor to the President on Women's and Gender Issues since 2014.**

After several years of research work on wave propagation and seismology, her research turned to teaching computer-integrated mathematics and CS education which became her main area of interest.

She is the ACM SIGCSE 2007 "Special Contribution to Computer Science Education" award winner, and the recipient of the IEEE 2015 Computer Society Taylor L. Booth Education Award.

Gal-Ezer co-supervised numerous Ph.D. students and Master students of other universities, and supervised Master students at the Open University. She serves on professional journals editorial boards and was an Associate Editor of *ACM Inroads*.

*Professional Committees:* Gal-Ezer was on the Ministry of Education professional committee which put together the CS curriculum for Israeli high-schools which is considered as a breakthrough in CS education worldwide. She later chaired this

committee. Gal-Ezer is now on the advisory council of the CSTA (The international Computer Science Teacher Association, founded by the ACM), and chaired again the professional committee for high school CS curriculum in Israel until January 2015. Since April 2014 she serves as a member of the CHE, Israeli Council for Higher Education.

For more information, see: [http://www.openu.ac.il/Personal\\_sites/judith-gal-ezerE.html](http://www.openu.ac.il/Personal_sites/judith-gal-ezerE.html)

## **STATEMENT**

My main area of interest is computer science education research. This includes designing curricula for different levels of studies, schools and universities; designing computer science teacher training; examining misconceptions of computing concepts, and addressing problems in the teaching of complex concepts. Being engaged in CS education motivated me to examine diversity issues, trying to understand the existing gender gap in schools, universities, and industry.

If elected as a member-at-large, I would strive to place computer science on par with other sciences: physics, chemistry, and biology. In countries where sciences are mandatory, CS should be included too. If the other sciences are electives CS should be included among them. CS should be counted for credit wherever sciences are counted for credit.

Increasing the availability of computer science education in high school is one of the strategies suggested to address the widely reported gender gap. Computer science as a discipline and not just coding in the narrow sense of the word. From my point of view, young people in schools -- male and female -- should be exposed to the various facets of CS. In addition to designing applications, curricula should address abstraction and problem solving, writing robust algorithmic solutions, considering their correctness and efficiency, implementing algorithms in a programming language, and running them on a computer.

Most important, teachers qualified to teach CS should have appropriate, formal education: at least a bachelor's degree in CS and a teaching certificate. This means teacher training programs are needed where CS is an integral part of the school system.

CS education research tools and methodologies also require being developed for conducting scholarly research.

When elected I hope to join forces with ACM efforts already underway in convincing stakeholders and policy makers towards making real progress in placing computer science on par with the other sciences, and not less important bring women and minority groups into computing.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Gabriele Anderst-Kotsis**

Professor and head of the  
Department of Telecooperation  
Johannes Kepler University Linz  
Linz, Austria

**BIOGRAPHY**

Gabriele Anderst-Kotsis received her master's degree ('91, honored with the Award of the Austrian Computer Society) and her Ph.D. ('95, honored with the prestigious Heinz Zemanek PhD award) from the University of Vienna. After visiting professor positions at the Business Schools in Vienna and Copenhagen, she accepted a position as full professor in computer science at Johannes Kepler University Linz where she has been since 2002. She is the head of the Department of Telecooperation with a research focus in mobile computing, performance management as well as cooperative and collaborative systems.

Anderst-Kotsis is author of over 150 scientific publications. She has successfully led several research projects, such as the EU-funded networks of Excellence CRUISE and EuroNGI. She is also well known for her active engagement in organizing international conferences, including iiWAS or MoMM.

She is a member of the Austrian Computer Society and was one of the cofounding chairs of the Society's working group for professors in computer science. From 2003 to 2007 she was president of the Austrian Computer Society.

She is a founding member and currently elected Secretary of the ACM Europe Council. In 2014, she was recognized as ACM Distinguished Scientist.

For Anderst-Kotsis, a pillar in her academic life has been the management of scientific research. She was appointed in 2007 and reelected in 2011 as Vice Rector for

Research at JKU Linz. In this role she has been responsible for the strategic planning and support of the University's research agenda.

She is dedicated to the support and promotion of women in ICT, acting as mentor and role model for young female researchers and establishing specific funding and support programs.

## **STATEMENT**

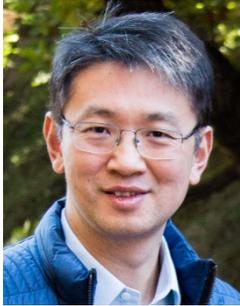
In my scientific career I have always been dedicated to contributing to the larger scientific community, which for me meant being an active member of my national organization, the Austrian Computer Society, and of ACM as the international community for scientists and practitioners in ICT.

Active involvement means for me the individual contributions each of us will make within our own specialized fields as well as initiating and supporting larger collaborative activities. For such activities, ACM has proven to be a valuable and essential platform.

I do strongly believe that we can make the most out of any (scientific) community if we do not wait for the benefits and advantages of the community or organization to be delivered to us but rather to focus on what we can contribute and give to the others.

I would be happy to spread and promote this attitude if elected Member at Large and would see it as my major task in the Council to bring forward and support initiatives and new ideas for ACM members and ensure ACM receives the appropriate support and infrastructure needed to continue its important work.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Yunhao Liu**

Chang Jiang Chair, Professor, and  
Dean of the School of Software  
Tsinghua University  
Beijing, China

**BIOGRAPHY**

Yunhao Liu is Chang Jiang Chair Professor and Dean of the School of Software at Tsinghua University, China, and he is also an ACM Fellow and an IEEE Fellow. Yunhao received his B.S. degree from Tsinghua University's Automation Department in 1995, and M.S. and Ph.D. degrees in Computer Science and Engineering from Michigan State University in 2003 and 2004, respectively.

He joined the Hong Kong University of Science and Technology as an assistant professor in 2004, and was promoted in 2008 to associate professor. Yunhao served as the postgraduate director in the computer science department in HKUST from 2009 to 2011. He joined Tsinghua as Professor and Chair in 2011. He was elected to be the Dean of the School of Software in Tsinghua in 2013.

Yunhao is currently the Chair of the ACM China Council. He served as the Associate Editor-in-Chief for the *IEEE Transactions on Parallel and Distributed Systems* from 2011-2014, and he is now Associate Editor for the *IEEE/ACM Transactions on Networking* and *ACM Transactions on Sensor Network*. Among the awards that he received were four Best Paper Awards at several leading international conferences, such as ACM MobiCom 2014, as well as many other prestigious awards including the 2012 ACM Presidential Award, the 2011 China National Natural Science Award, the National Distinguished Young Scholar Award, and the Hong Kong Best Innovation and Research Award in 2008.

## **STATEMENT**

I have been an active member of ACM for many years. When ACM started to expand international influence by forming regional councils in Europe, China, and India, I was closely involved with the creation of the ACM China Council and have been active in its operation since 2009. After I became the Chair of ACM China Council in 2013, I became involved in many aspects in promoting the development of ACM in China.

In the past few years, the ACM membership in China has increased from about 1,000 members to more than 15,000 members, and the number of local chapters has increased to more than 20. Professional activities at the national and chapter levels are growing. The ACM China Rising Star Award and ACM China Doctoral Dissertation Award have been endowed for two years.

The rapid development of ACM in China made me realize that, that while ACM is an internationally recognized computing association there is much that still could be done in the global arena. For many professionals in China, ACM is still unreachable: they can rarely hear the lectures from Turing Award Laureates, ACM Distinguished Speakers, or even international experts, nor attend ACM's top conferences. To my knowledge, this happens not only in China, but also in many other regions and countries.

Based in the U.S., ACM is a resource that could benefit computer scientists throughout the world, and I would like to work with ACM to grow its activities and create more links within the community of computer scientists, and to see more ACM members benefit from the links and bridges ACM built for them to advance their computing careers and broaden their networks.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Elizabeth D. Mynatt**

Professor of Interactive Computing  
College of Computing  
Georgia Institute of Technology  
Atlanta, GA  
U.S.

**BIOGRAPHY**

Elizabeth D. Mynatt is a Professor of Interactive Computing in the College of Computing at Georgia Tech and the Executive Director of Georgia Tech's Institute for People and Technology (IPaT). From 1995-1998, Mynatt was a member of the research staff at the Xerox Palo Alto Research Center (PARC). She earned her Bachelor of Science summa cum laude in Computer Science from North Carolina State University and her Master of Science and Ph.D. in Computer Science from Georgia Tech.

Mynatt is an internationally recognized expert in the areas of ubiquitous computing, personal health informatics, computer-supported collaborative work and human-computer interaction. Named Top Woman Innovator in Technology by *Atlanta Woman* magazine in 2005, Mynatt has created new technologies that support the independence and quality of life of older adults "aging in place," that help people manage chronic disease, and that increase creative collaboration in workplaces. At Georgia Tech, Mynatt played an active role in creating and directing a new Human-Centered Computing (HCC) Ph.D. program, with roots in computing, psychology, cognitive science, sociology, and anthropology.

Mynatt is an ACM Fellow, a member of the ACM SIGCHI Academy, and a Sloan and Kavli Research Fellow. In 2007, Mynatt joined the Computing Community Consortium (CCC) and became vice-chair in 2014. She will chair the CCC through June 2018. As a committee of CRA, the CCC's mission is to "catalyze the computing research community and enable the pursuit of innovative, high-impact research." Mynatt served as general chair of the 2010 ACM CHI conference, ACM UIST'98 and ICAD'97 (International Conference on Auditory Displays). She has served on industry advisory boards, including Microsoft Research's Technical Advisory Board.

## **STATEMENT**

ACM has been at the center of my professional life since my early student years. I have progressed from student to professor, from conference volunteer to conference chair, from mentee to mentor of junior faculty and students. ACM shaped my understanding of computing as a scientific field, profession and community. ACM is part of my daily existence; writing and reviewing papers, digging into the depths of the Digital Library, planning or attending a conference, and teaching my students how to be informed, productive and imaginative researchers, educators and computing professionals. In my academic home, ACM keeps me grounded and connected to our profession across a spectrum of institutions.

I am honored to be nominated as a potential Member at Large. While I have supported a variety of ACM conference and publication activities, I am enthusiastic about serving ACM as a whole on behalf of a tremendous computing community. We face many challenging issues as our field and community rapidly changes to meet new demands and opportunities. Our universities face rapidly increasing enrollments but many of these new students may not identify as computing professionals. Discussions around open access to publications will transform into new challenges around open access to data as structures and expectations for scientific collaboration evolve. Even more challenging are the needs for sustained leadership as computing plays an increasingly important role in society. Challenges abound as our profession grapples with the tight interplay between the social and the technical in domains such as healthcare, “smart” cities, transportation and communication. Much is possible and ACM has the responsibility to engage its membership and society as a whole in charting this future.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Pamela Samuelson**

Richard M. Sherman Distinguished Professor  
of Law and Information  
School of Law, University of California, Berkeley  
Berkeley, CA  
U.S.

**BIOGRAPHY**

Pamela Samuelson is a 1971 graduate of the University of Hawaii and a 1976 graduate of Yale Law School. After graduation, she worked for the New York law firm Willkie Farr & Gallagher. From 1981 through June 1996 she taught at the University of Pittsburgh Law School. In the mid-1980s, she led the Software Licensing Project of the Software Engineering Institute at Carnegie Mellon University. She joined the Berkeley faculty in 1996. She is now the Richard M. Sherman '74 Distinguished Professor of Law and Information and a Director of the Berkeley Center for Law & Technology.

Samuelson teaches courses on intellectual property, cyber law, and information privacy. She has written and spoken extensively about the challenges that new information technologies pose for traditional legal regimes, especially for intellectual property law.

As a Contributing Editor of *Communications of the ACM* since 1990, she has written a regular “Legally Speaking” column. She was named a Fellow of the ACM in 1998. She serves on the USACM Public Policy Committee.

Samuelson is a Fellow of the American Academy of Arts & Sciences, a past Fellow of the John D. & Catherine T. MacArthur Foundation, and an Honorary Professor of the University of Amsterdam. She is President and Chair of the Board of Directors for Authors Alliance, a nonprofit whose mission is to facilitate authorship in the public interest. She has been on the Board of Directors of the Electronic Frontier Foundation since 2000 and has been its Vice Chair since 2009. She is a member of the Advisory Boards for Public Knowledge and the Electronic Privacy Information Center.

## **STATEMENT**

Throughout my career, I have served as a bridge between the fields of law and computing, translating legal developments, such as the copyright "look and feel" lawsuits, to computing professionals, and taking insights from the computing field to inform legal policy debates (for instance, when courts were ruling that mathematical algorithms were not patentable, but non-mathematical algorithms were, I wrote to legal professionals that computing professionals do not think that is a viable distinction).

I have organized debates for ACM conferences about legal issues of concern to computing professionals and written three "Legally Speaking" columns a year for the past 26 years, explaining legal developments of concern so that ACM members could understand the terms of important debates. I have helped formulate some positions that the USACM public policy committee has taken on some of these important issues.

Because legal and policy issues are of growing concern to those in the computing field, what I would bring as a member at large to ACM is a wealth of expertise on legal and policy issues, as well as the difficult transitions that journals are making in the turbulent field of publishing and the open access options that authors often prefer.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Eugene H. Spafford**

Professor and Executive Director  
Purdue University CERIAS  
West Lafayette, IN  
U.S.

**BIOGRAPHY**

Eugene H. Spafford (Gene, Spaf) received a B.S. in both math and computer science from SUNY at Brockport ('79). He received his M.S. ('81) and Ph.D. ('86) in CS from Georgia Tech. After a post-doc at Georgia Tech he joined the faculty at Purdue University in 1987 as a professor in CS. He also has courtesy appointments in ECE, Philosophy, Political Science, and Communication.

His current research interests are prevention, detection, and remediation of information system failures and misuse, with an emphasis on applied information security. He also been deeply involved in issues of science and national security policy. He founded the COAST Laboratory at Purdue in 1992, which became the Center for Education and Research in Information Security and Assurance (CERIAS) in 1998.

Spaf has received many awards for research, teaching and service, including: National Computing Systems Security Award, ACM SIGSAC Outstanding Contribution, ACM SIGSAC Making a Difference Award, ISSA Hall of Fame, SANS Lifetime Achievement Award, Computer Society Taylor Booth Award, Upsilon Pi Epsilon ABACUS Award, CRA Distinguished Service Award, ACM President's Award, and an Air Force Civilian Meritorious Service Medal. He is a Fellow of the ACM, IEEE, AAAS, (ISC)<sup>2</sup>, and a Distinguished Fellow of the ISSA.

A member of ACM for over 30 years, he has been a member of or chaired nine major ACM committees including the ACM/IEEE Joint Curriculum Taskforce (1989-1991), and the editorial boards of two ACM journals. He was an ACM representative on the CRA Board of Directors (1998-2007) and has served as chair of the ACM's U.S. Public Policy Council since 1998. He is currently a member of several company, government and

institutional advisory boards, including those of the U.S. Naval Academy, and the GAO.

## **STATEMENT**

I have been actively involved with ACM for over 30 years, as a researcher and as a member involved in issues of security, privacy, ethics, public policy, and education. This has included serving on or chairing several ACM Task Forces and committees, representing ACM as a CRA board member, and serving as chair of the ACM's U.S. Public Policy Council for over a decade. I have been serving as an at-large member of ACM Council for the last four years. Thus, I have broad experience with ACM concerns and activities.

ACM should be more engaged in some of the issues being raised by the increasing use of computing in critical applications. Issues related to computing and networking are now major topics in public life. ACM can play an important role as a trusted source of expertise and information in these matters, and should be involved in discussing them. Whether those discussions are about the role of early computing education, the issues of privacy in a global community, or the role of social media in political dissent, ACM has members and resources that can make a difference. Over the last few decades, ACM has grown into a major international organization, with much more to offer than the presentation and publication of new research results. More than scholars, we can be leaders at the forefront of changes in the world around us, and advocates for appropriate behavior.

As a member of the Council I will continue to support opportunities to help grow ACM as an internationally prominent organization sought out for our technical expertise — not as advocates but as temperate professionals. This will be in addition to strong support of our base functions — conferences, education, publications, the Digital Library, and SIG activities — and of our increasingly global membership.

**Candidate for Member-at-Large**  
**(1 July 2016 – 30 June 2020)**



**Paul Spirakis**

Professor in Computer Science  
University of Liverpool  
Liverpool, England  
U.K.

**BIOGRAPHY**

Paul G. Spirakis is a Chair and Professor in the Computer Science Department at Liverpool and an international leader on algorithms, complexity, distributed computing and algorithmic game theory. His work is characterized by the use of Applied Probability.

Spirakis (born 1955) got his five year Engineering Diploma from the National Technical University of Athens (NTUA), his M.Sc. and his Ph.D. from Harvard University. He has been a faculty member of NYU Courant (U.S.) and is also a Professor at Patras University (Greece). He directs the initiative of Networks Sciences and Technologies of the School of EEE-CS at the University of Liverpool. He is also the President of the Computer Technology Institute (CTI) of Greece.

He has co-authored over 380 papers in the most significant journals and conference proceedings in computer science. He has co-authored three scientific books and several book chapters.

He is a Member of Academia Europaea and an inaugural Fellow of the European Association for Theoretical Computer Science (EATCS) as well as its Vice-President. He is a Member of the ACM Europe Council and has been the Chair of the EU ERC Panel on Informatics (2015-16), a member of the EU ISTAG, and a National Rep. in the IST Committee of the EU.

Spirakis has led scientific teams in 19 EU projects and has led 10 Greek research projects, and has chaired the program committees of some of the most prestigious conferences in the Foundations of Computer Science. He is the Editor-in-Chief of *Theoretical Computer Science (TCS)* and is an editor for *Algorithmica*, *JPDC*, *Theory of Computing Systems*, *PPL*, *Acta Informatica* and *Computer Science Reviews*.

## **STATEMENT**

I have been an ACM Member for many years and I currently serve as a Member of the ACM Europe Council. I have organized the conferences such as ACM STOC, SPAA and have chaired the PCs of ACM SPAA and PODC. I believe I can contribute toward spreading the values of ACM in Europe at large and toward helping ACM to advance the computing profession, especially in countries that critically need it (like Greece).