Meet the candidates who introduce their plans—and stands—for the Association.

ACM's 2012 General Election

Please take this opportunity to vote.

THE ACM CONSTITUTION provides that our Association hold a general election in the even-numbered years for the positions of President, Vice President, Secretary/Treasurer, and Members-at-Large. Biographical information and statements of the candidates appear on the following pages (candidates' names appear in random order).

ACM members have the option of casting their vote via the Web or by postal mail. The election is being conducted by a third party, ESC, on ACM's behalf and an email message was sent to members in mid-April that contains electronic and mail balloting procedures (please contact acmhelp@electionservicescorp.com or +1-866-720-4357 if you did not receive this message).

In addition to the election of ACM's officers—President, Vice President, Secretary/Treasurer—five Members-at-Large will be elected to serve on ACM Council.

Electronic Balloting Procedures. Please refer to the instructions posted at: <https://www.esc-vote.com/acm2012>.

You will need your 7-digit ACM Member Number to log into the secure voting site. For security purposes your ACM Member number was not included with your PIN (your PIN was included in the April email message from ESC). Your membership number can be found on your Membership card, or on the label of your copy of *Communications of the ACM*, or by accessing ACM's home page: "Membership," "ACM Web Account," "Forgot Your Password" (<https://campus.acm.org/public/accounts/Forgot.cfm>)

Paper Ballots. Should you prefer to vote by paper ballot please contact ESC to request a ballot and follow the postal mail ballot procedures (acmhelp@electionservicescorp.com or +1-866-720-4357).

Postal Mail Ballot Procedures. Please return your ballot in the enclosed envelope, which must be signed by you on the outside in the space provided. The signed ballot envelope may be inserted into a separate envelope for mailing if you prefer this method.

All ballots must be received by **no later than 12:00 noon EDT on May 22, 2012.**

The computerized tabulation of the ballots will be validated by the ACM Tellers Committee. Validation by the Tellers Committee will take place at 10:00 a.m. EDT on May 23, 2012.

If you have not done so yet, please take this opportunity to review the candidates and vote via postal mail or the Web for the next slate of ACM officers.

Sincerely,

Gerald Segal, CHAIR, ACM ELECTIONS COMMITTEE

candidates for

PRESIDENT

(7/1/12–6/30/14)

BARBARA G. RYDER

J. Byron Maupin Professor of Engineering
Head, Department of Computer Science
Virginia Tech
Blacksburg, VA, USA

Biography

A.B. in Applied Math, Brown University (1969); M.S. in Computer Science (CS), Stanford University (1971); Ph.D. in CS, Rutgers University (1982). Assoc. Member of Prof. Staff at AT&T Bell Labs, Murray Hill (1971–1976). Asst. Prof. (1982–1988), Assoc. Prof. (1988–1994), Prof. (1994–2001), Prof. II (2001–2008), Rutgers University, Head, Dept. of CS, Virginia Tech (2008–), <http://people.cs.vt.edu/~ryder/>

Fellow of the ACM (1998) for seminal contributions to interprocedural compile-time analyses. Member, Bd. of Directors, CRA (1998–2001). ACM Presidential Award (2008). SIGPLAN Distinguished Service Award (2001). Rutgers Grad. School Teaching Award (2007). Rutgers Leader in Diversity Award (2006). CRA-W Distinguished Prof. (2004). Prof. of the Year Award from CS Grad Students (2003).

ACM Vice President (2010–2012), Secretary/Treasurer (2008–2010), Council Member-at-Large (2000–2008). Chair, Federated Computing Research Conf (FCRC 2003). SIGPLAN Chair (1995–1997), Vice Chair for Confs (1993–1995), Exec Comm. (1989–1999). General Chair of: SIGSOFT Int'l Symp. on Software Testing and Analysis (ISSTA, 2008), SIGPLAN Conf on History of Programming Languages III (HOPL-III, 2007), SIGPLAN Conf on Programming Language Design and Implementation (PLDI, 1999, 1994). Program Chair of: HOPL-III (2007), PLDI (1991). Recent PCs: PLDI (2012), ISSTA (2010), ICSE (2009). Member, Outstanding Contribution to ACM Award Comm. and ACM-W Athena Award Comm. ACM Nat'l Lecturer (1985–1988).

Member, Ed Bd: Sci. of Comp. Programming (2009–), ACM Trans on Programming Languages and Systems (TOPLAS, 2001–2007), and IEEE Trans on Software Engineering (2003–2008). Member, Comm. for CRA Snowbird Workshop for New Dept. Chairs (2010). Panelist: CRA Workshops on Academic Careers for Women in CS (1993, 1994, 1996, 1999, 2003), SIGSOFT New SE Faculty Symp. (2003, 2005, 2008). Exec. Champion of CS@VT in NCWIT Pacesetters (2009–). Organizer of NCWIT VA/DC Aspirations in Computing Awards (2011–). Chair, VT College of Engineering HPC Comm. (2009–). Member, VT HPC Infrastructure Investment Comm. (2009–). Member, ADVANCE VT Faculty Advisory Comm. (2008–).

Member: SIGPLAN, SIGSOFT, SIGCSE, ACM, IEEE Computer Society, AWIS, AAUW, EAPLS.

Statement

As a candidate for President, I ask your help in strengthening ACM, the largest independent international computing society in the world. We face major opportunities: in the internationalization of our membership, in computing education (K–12, college, postgraduate), in providing services for computing practitioners and researchers, and in ensuring diversity in the computing profession. My extensive experience as a SIG leader, General Chair of FCRC 2003, 8 years as ACM Council member and 4 years on the ACM Executive Committee as Secretary/Treasurer and Vice President have prepared me well to lead ACM as President.

The ACM Councils in Europe, China and India are established; new members from these regions must be recruited into SIG/ACM leadership. Student chapters in these regions need support. The commitment to hold ACM meetings outside of North America must be continued. We should be actively recruiting contacts from Southeast Asia/Australia and South America for future growth.

We need to continue the efforts of the ACM Education Board and Council on computing curricula and building bridges to K–12 educators (e.g., in the U.S., CS Teachers Association). By collaborating with members of each international ACM Council, we can leverage our experience to support computing education. The specific problems may vary by region, but the need to ensure a quality education in computing is worldwide.

ACM is a membership organization of computing practitioners, managers, and researchers; we need to offer benefits to all of our members. ACM serves as the 'gold standard' of computing research through our sponsored conferences, publications and the Digital Library. We must continue to enhance our support for scholars and students worldwide. We need to find new ways of making our conferences available to a wider audience, synchronously and asynchronously. We should continue to provide new services to researchers (e.g., author pages, Author-Izer). Equally important are new products for practitioners and students such as Tech Packs and Learning Paths. This support must be augmented by new services for life-long learning in the computing profession.

ACM must be a leader in actively supporting diversity in computing. ACM can offer a framework to support continuing and new diversity activities, in collaboration with sister organizations (e.g., CRA, CDC, NCWIT).

The SIGs must remain a strong, integral part of ACM, developing volunteer leaders, providing valuable computing research content for the Digital Library and recruiting students to ACM membership. Without volunteers, ACM cannot thrive. We need to support existing SIGs and continue to look for new areas in computing which can benefit from organization as a SIG.

In closing, I ask for your vote so that my 10 years of SIG leadership, 12 years of ACM leadership, and 37 years of active ACM membership can be put to work on these goals.

candidates for PRESIDENT

(7/1/12–6/30/14)

VINTON G. CERF

Vice President and Chief Internet Evangelist
Google
Reston, VA, USA

Biography

Vinton G. Cerf has served as VP and chief Internet evangelist for Google since October 2005. Previous positions include SVP of Technology Strategy and SVP of Architecture and Technology for MCI; VP of the Corporation for National Research Initiatives (CNRI); VP of MCI Digital Information Services; principal scientist at DARPA; and assistant professor of computer science and electrical engineering at Stanford University. He is also a distinguished visiting scientist at NASA's Jet Propulsion Laboratory (JPL).

Cerf is the co-designer of the TCP/IP protocols and the architecture of the Internet. Among honors received for this work are the U.S. National Medal of Technology, the ACM A.M. Turing Award, the Presidential Medal of Freedom, the Japan Prize, the Marconi Fellowship, Charles Stark Draper award, the Prince of Asturias award, the IEEE Alexander Graham Bell medal, the NEC Computer and Communications Prize, the Silver Medal of the ITU, the IEEE Koji Kobayashi Award, the ACM Software and Systems Award, the ACM SIGCOMM Award, the CCIA Industry Legend Award, the Kilby Award, the IEEE Third Millennium Medal, and the Library of Congress Bicentennial Living Legend medal. He has been inducted into the National Inventors Hall of Fame and was made an Eminent Member of the IEEE Eta Kappa Nu honor society. He is a Stanford Engineering School "Hero" and received a lifetime achievement award from the Oxford Internet Institute.

Cerf served as chairman of the board of ICANN for seven years. He is honorary chair of the IPv6 Forum, was a member of the U.S. Presidential Information Technology Advisory Committee 1997–2001, and sits on ACM Council and the boards of ARIN, StopBadWare, CosmosID and Gorilla Foundation. He serves on JPL's Advisory Committee and chairs NIST's Visiting Committee on Advanced Technology. He is a Fellow of the ACM, IEEE, AAAS, the American Academy of Arts and Sciences, the Computer History Museum, the Annenberg Center for communications, the Swedish Royal Academy of Engineering, the American Philosophical Society, the Hasso Plattner Institute. He is a member of the US National Academy of Engineering, a Distinguished Fellow of the British Computer Society, and was named one of *People* magazine's "25 Most Intriguing People" in 1994.

Cerf holds a B.S. in Mathematics from Stanford and M.S. and Ph.D. in CS from UCLA. He is the recipient of 20 honorary degrees.

Statement

I have been a member of ACM since 1967 and served as a member of Council in the distant past during which time my primary policy objective was to create the Fellow grade of ACM membership, and currently serve as a Member at Large on Council. I also served for four years as chairman of ACM SIGCOMM.

As President, I consider that my primary function will be to convey to Council and ACM leadership the policy views of the general membership. To this end, I will invite open dialog with any and all members of ACM so as to be informed of their views. I offer to do my best to represent these views and also to exercise my best judgment in the setting of ACM policy and assisting the staff in their operational roles.

It seems clear that ACM can and must take increasing advantage of the online environment created by the Internet, World Wide Web, and other applications supported by this global networking infrastructure. This suggests to me that Council and ACM leadership should be looking for ways to assist Chapters and Special Interest Groups to serve as conduits for two-way flows of information, education, training and expertise. The power and value of ACM membership flows from the contributions and actions of its members.

As a consumer of ACM publications, I am interested in increasing the accessibility and utility of ACM's online offerings, including options for reducing the cost of access to content in this form. By the same token, I am interested in making the face-to-face events sponsored by ACM and its affiliates useful during and after the events have taken place. The possibility of audio, video, and text transcripts of presentations (perhaps starting with keynotes) seems attractive. If these forms of content can be made searchable, their value may well increase and persist over longer periods of time.

I am aware of the time commitment required of this position and can confirm that I am prepared to honor that commitment with the support of my employer, Google.

candidates for

VICE PRESIDENT

(7/1/12–6/30/14)

MATHAI JOSEPH

Advisor, Tata Consultancy Services
Pune, India

Biography

Mathai Joseph is an Advisor to Tata Consultancy Services. He has been a Member-at-Large of the ACM Council since 2008 and Treasurer of the ACM India Council, which he helped to found, since 2009. He received an ACM Presidential Award in 2010.

He was Executive Director, Tata Research Development & Design Centre from 1997–2007. Earlier, he held a Chair in Computer Science at the University of Warwick from 1985–1997 and was Senior Research Scientist at the Tata Institute of Fundamental Research in Mumbai, India. He has been a Visiting Professor at Carnegie Mellon University, Eindhoven University of Technology, University of Warwick, and University of York.

Joseph is a founder of international conference series such as FST&TCS (Foundations of Software Technology and Theoretical Computer Science) in 1981, FTRTFT (Formal Techniques in Real-Time and Fault-Tolerant Systems) in 1988 and SEAFOOD (Software Engineering Approaches to Outsourced and Offshore Development). He set up the workshop series TECS Week in 2003 to promote computer science research in India. He established and managed research collaborations with universities such as University of California Riverside, Columbia University, Georgia Institute of Technology, Indian Institute of Technology Powai, King's College London, Stanford University, University of Wisconsin, and University of York.

His main research interests have been in real-time and fault-tolerant computing, with emphasis on formal specification and timing analysis. He has written and edited a number of books and conference and journal papers in these areas. He has worked on software systems for many years and wrote an early book on the design of a multiprocessor operating system.

Joseph has a Master's degree in Physics from Bombay University and a Ph.D. from the Mathematical Laboratory, University of Cambridge, U.K. He has worked in several countries and now lives in Pune, India. He has been investigating early work in computing in India and is now investigating new courseware for teaching computer science at engineering colleges in India.

Statement

ACM is renowned for representing the best of computer science in its conferences, publications, and awards. Until recently, most ACM activities took place in the Western world but there are now new ACM Regional Councils in China, Europe, and India. Within these regions, participation in ACM activities is growing but outside them there are many countries where computing professionals work in relative isolation.

I was closely involved with the creation of the ACM India Council in 2009 and have been active in its operation since that time. There are now significant ACM events at the national and chapter level and tours by visiting lecturers. A number of new chapters have been formed and membership has doubled in this period. Compared to the number of computing professionals, the size of the Indian software industry and the needs of the academic institutions, the influence of ACM in India is still small but it is growing to play a major role in computer science education and research.

As in India, I believe that in many other regions ACM should be active in growing professional activities and creating links between their education and research communities and the best in computer science. Wider distribution of ACM publications and conferences will not only allow them to be more effective in growing professional activities and promoting high quality research, it will enable them to be more representative of all such work being done across the world.

A great deal of my professional work has been to create forums for the exchange of ideas, new research, and people among industry and educational institutions in India and outside. I would like to work with ACM to grow its activities, within the main regions of ACM activities and beyond them to areas where it is as yet underrepresented. In this, I see a major opportunity for initiatives for the better acceptance of computer science as a core scientific discipline, for improving the quality of education and research and for increasing the understanding of computing as a global manufacturing industry.

candidates for

VICE PRESIDENT

(7/1/12–6/30/14)

ALEXANDER L. WOLF

Professor
Department of Computing
Imperial College London, U.K.

Biography

Alexander Wolf holds a Chair in Computing at Imperial College London, U.K. (2006–present). Prior to that he was a Professor at the Univ. of Lugano, Switzerland (2004–2006), Professor and C.V. Schelke Endowed Chair of Engineering at the Univ. of Colorado at Boulder, U.S. (1992–2006), and Member of the Technical Staff at AT&T Bell Labs in Murray Hill, New Jersey, US (1988–1992).

Wolf earned his MS (1982) and Ph.D. (1985) degrees from the Univ. of Massachusetts at Amherst, from which he was presented the Dept. of Computer Science Outstanding Achievement in Research Alumni Award (2010).

He works in several areas of experimental and theoretical computer science, including software engineering, distributed systems, networking, and databases (see <http://www.doc.ic.ac.uk/~alw/> for links to his papers). He is best known for seminal contributions to software architecture, software deployment, automated process discovery (the seed of the business intelligence field), distributed publish/subscribe communication, and content-based networking.

Wolf currently serves as Secretary-Treasurer of the ACM. He is a member of the ACM Council and ACM Executive Committee. He is also a member of the ACM Europe Council. He serves on the editorial board of the Research Highlights section of CACM. Previously, he served as Chair of the ACM SIG Governing Board (2008–2010) and Chair of the ACM Software System Award Committee (2009–2011). He served as Vice Chair (1997–2001) and then Chair (2001–2005) of ACM SIGSOFT, Chair of the ACM TOSEM EIC Search Committee (2006), a member of the SGB Executive Committee (2003–2005), and an SGB representative on the ACM Council (2005–2008). He was a member of the editorial boards of ACM TOSEM and IEEE TSE, and has chaired and been a member of numerous international program committees.

He is a Fellow of the ACM, Fellow of the IEEE, Chartered Fellow of the British Computer Society, holder of a U.K. Royal Society–Wolfson Research Merit Award, winner of two ACM SIGSOFT Research Impact Awards, and is an ACM Distinguished Speaker.

Statement

I have been an active member of ACM for much of my career. Over these 25+ years, computing has become central to advancing society. As a volunteer I have tried to help shape ACM into a similarly central role in advancing the educators, practitioners, researchers, and students at the core of computing. In my recent leadership roles I have contributed to important outreach efforts, including formation of regional councils (so far, Europe, India, and China), formation of SIGs in new areas of computing (so far Bioinformatics, Health Informatics, and High Performance Computing), enrichment of the Digital Library, and a revamp of CACM to be more relevant, informative, and authoritative. There are many ways to measure the impact of these efforts, but a simple one is the growth of ACM into the world's largest computing association.

Essential to these and future initiatives is a clear and convincing long-term strategy that draws together the talents of volunteers and staff, supported by sufficient financial resources. Indeed, the world financial crisis has been a necessary focus of my term as Secretary-Treasurer. Managing financial risk while maintaining the integrity and momentum of the community is a difficult challenge. The crisis has hit different sectors and regions at different times and degrees. For example, the peak effect on academia has lagged that of industry, and Europe and Asia that of North America. This will continue to impact conference planning and regional growth initiatives (e.g., in South America). Nonetheless, our efforts at securing a significant fund balance have contributed to the fundamental stability of the organization, such that we can absorb much of the pain of the crisis and yet still grow ACM's offerings and services.

As an ACM leader, I am regularly asked where the value lies in being a member, a question you may ask yourself each time you renew. Some obvious benefits are CACM, discounted registration fees, and access to professional development materials. But beyond that, most important to me is a less tangible benefit: the opportunity to publicly endorse the activities of an organization whose standards of excellence and commitment to advancing professionalism, scholarship, and innovation are unsurpassed in the computing community. The opportunity to serve as Vice President of such an organization is a privilege and an honor.

candidates for

SECRETARY/TREASURER

(7/1/12–6/30/14)

GEORGE V. NEVILLE-NEIL Neville-Neil Consulting
New York, NY, USA

Biography

George Neville-Neil is a computer scientist, author, and practicing software engineer who currently builds high-speed, low latency systems for customers in the financial services sector.

Neville-Neil is the co-author of *The Design and Implementation of the FreeBSD Operating System*, the only university quality textbook to cover a broadly deployed, open source operating system, used daily by software engineers around the world.

He has been a member of ACM since his undergraduate days at Northeastern University, where he received his Bachelor of Science degree in computer science.

For the last 10 years Neville-Neil has been an integral part of ACM's *Queue* magazine editorial board, joining it before the first edition of the magazine was published and helping to find, select, and bring to publication the best writing from practitioners in our field.

While working with the *Queue* editorial board, Neville-Neil developed the column, Kode Vicious, which has been a staple of both *Queue* and the recently revamped *Communications of the ACM* for the last eight years.

More recently Neville-Neil has been an active member of the ACM Practitioner Board, which is a key component of ACM's program to broaden its membership.

From 2004 until 2008 Neville-Neil lived and worked in Japan, developing a set of courses dubbed "The Paranoid University" teaching safe and secure programming to thousands of engineers at Yahoo Inc. at all of their offices in Asia, Europe, and North America. While on assignment in Japan, Neville-Neil became fluent in Japanese.

Statement

For the past 25 years I have been associated with the ACM. During that time I have felt that the organization did its best work when it was reaching out beyond its academic focus. It has always been clear that ACM is the preeminent professional organization for computer scientists and researchers, publishing the best papers and organizing the most respected conferences in the field.

When I began working on *Queue* I saw that ACM was serious about the need to bridge the gap between research and the daily practice of programming. The last 10 years have been an exhilarating experience helping people take the best research and turn it into something that software engineers can use every day. It was through my work on *Queue*, and the Practitioner Board, that I saw how ACM could evolve into an even broader professional society.

Being nominated for Secretary/Treasurer showed me that there was another way to help ACM grow and to serve the global community.

Living and working in Asia gave me a unique perspective on ACM's challenges in addressing the coming wave of people in our field.

ACM's ability to help improve computer science education globally is without question, but it is just as important to understand how we can continue our relationship with the people who are building our technological world, throughout their careers.

My experience building systems for the global financial markets has given me insight into how money is managed in large organizations.

Working as the Secretary/Treasurer for ACM carries the same challenges and responsibilities as building systems that exchange millions of dollars every day.

It has always been a pleasure to be an ACM volunteer. I hope that as Secretary/Treasurer I can do even more for the ACM, and help them to do more for others.

candidates for

SECRETARY/TREASURER

(7/1/12–6/30/14)

VICKI L. HANSON

Professor and Chair of Inclusive Technologies
University of Dundee
Dundee, Scotland

Biography

Employment

Professor and Chair of Inclusive Technologies, School of Computing, University of Dundee, UK; IBM Research Staff Member Emeritus. Previously, Research Staff Member and Manager, IBM T. J. Watson Research Center, USA (1986–2008); Research Associate, Haskins Laboratories, New Haven, CT (1980–1986); Postdoctoral Fellow, Salk Institute for Biological Studies, La Jolla, California (1978–1980).

Education

B.A. (University of Colorado, Psychology, 1974); M.A., Ph.D. (University of Oregon, Cognitive Psychology, 1976, 1978).

ACM Activities

SIG Governing Board: Chair (2010–2012), Vice-Chair for Operations (2007–2010), Executive Committee (2005–2007). ACM Council (2010–2012). Founder and Co-Editor-in-Chief of *ACM Transactions on Accessible Computing* (since 2006); Associate Editor, *ACM Transactions on the Web* (since 2005). Outstanding Contribution to ACM Award Committee (2006–2010; Chair, 2009). ACM Student Research Competition: Grand Finals judge (2008–2012). ASSETS conference: General Chair (2002), Program Chair (2010), Steering Committee Chair (2005–2009). CHI conference: Associate Program Chair (2009, 2012). Hypertext conference: Program Committee Co-Chair (2007). CUU conference: General Chair (2003), Associate Program Chair (2000). Multiple program committees. OOPSLA conference: Treasurer (1993–1995, 1999, 2005).

Professional Interests:

Human-computer interaction; accessibility of technology for people with disabilities and the aging population; computer-supported education.

Honors/Awards/Achievements

ACM Fellow (2004). ACM SIG-CHI Social Impact Award (2008). Chartered Fellow of the British Computer Society (2009). IBM Corporate Award for Contributions to Accessibility (2009); multiple IBM Outstanding Contribution Awards. More than 120 peer-reviewed and book chapter publications, multiple conference keynotes, awarded 8 U.K. Research Council grants as PI or co-Investigator; 3 NIH grants as PI; 5 other industry and Scottish government grants. Co-inventor on 8 awarded patents. Holder of a UK Royal Society Wolfson Research Merit Award.

Statement

I have been an active ACM volunteer for two decades and am honored by this nomination and the opportunity to continue to serve the organization.

In multiple leadership roles within ACM, I have worked with both volunteers and staff who are committed to increasing the society's reach and impact. ACM is the leading professional society in computing. Its membership has been steadily increasing with significant worldwide growth. Its premier journals, conference proceedings, and magazine publications serve a broad readership of computing professionals, and its educational initiatives are contributing to the development of computing professionals at all stages of their career. In the past few years, significant ACM efforts have involved working with computing professionals in China, India, Europe, and South America to understand and address their needs. In a professional environment that is increasingly global, continuing to reach out internationally serves to strengthen not only ACM, but also the computing profession as a whole.

In my current position as Chair of the SIG Governing Board, I have been privileged to work with SIG leaders who contribute so much to ACM's strength as an organization. The SIGs create a large portion of the Digital Library content, draw in new student and professional members, and provide much of ACM's volunteer core. As we move forward, we must continue to support and grow the SIGs to retain this technical vitality.

Financially, ACM is strong even in these economically challenging times. This reflects the very real value members derive from their participation in ACM activities. As Secretary/Treasurer, I will remain committed to growing ACM and supporting its technical, education, and advocacy roles around the world.

candidates for

MEMBERS AT LARGE

(7/1/12–6/30/16)

RADIA PERLMAN Intel Fellow
Redmond, WA, USA

Biography

Radia Perlman, Intel Fellow, is director of Network Technology at Intel. She received her S.B. and S.M. in mathematics from MIT, and her Ph.D., in 1988, in computer science from MIT with thesis “Network Layer Protocols with Byzantine Robustness.”

While a student at MIT, she created systems for making programming concepts accessible to children as young as 3 years old. Her work is credited for starting the field of “tangible computing,” in which computer commands are physical objects that are plugged together to create programs.

At Digital, she designed layer 3 of DECnet. Her innovations include making link state protocols stable, manageable, and scalable. The routing protocol she designed (IS-IS) remains widely deployed today. She also created the Spanning Tree algorithm that has been the heart of Ethernet for decades. After Digital, she worked at Novell and at Sun, designing network and security protocols. Most recently, she designed the concept that became the TRILL standard, which allows Ethernet to use layer 3 techniques such as shortest paths, and multipathing, while remaining compatible with existing endnodes and switches. She has also made significant contributions to network security, including PKI trust models, assured delete, protocols resilient despite malicious insiders, and strong password protocols.

Perlman is the author of the textbook *Interconnections*, and coauthor of *Network Security*. She has served on many program committees, holds over 100 patents, and has taught at MIT, Harvard, and the University of Washington. She was awarded an honorary Ph.D. by KTH (Royal Institute of Sweden), lifetime achievement awards by SIGCOMM (2010) and USENIX (2006), and the Women of Vision award for Technical Innovation by the Anita Borg Institute.

Statement

ACM has played a critical role in shaping the field of computing, and I think there are several areas in which it is well positioned to help the industry in new ways.

Academia and industry would benefit from more cross-fertilization. Industry can bring a fruitful selection of real-world problems, and academia can bring rigor. Most industry people would find a lot of the content at academic conferences incomprehensible and irrelevant. Academics do not have the time or funds to spend enough time at standards meetings to extract conceptual problems to study out of the sea of acronyms and marketing hype.

One idea that might help is to encourage papers at conferences that can organize the field, such as sorting through several overlapping systems to get to the heart of what is really intrinsically different, and the real trade-offs. Some academics would not think such a paper was “novel enough to be publishable,” and yet the academic rigor to do this sort of analysis can be very challenging, and influential to the field. It is entertaining to have a panel of people on various sides of controversies debate each other, but having a careful analysis by someone without bias is critical. With content like this, more industry people would attend the conference, and even hallway interaction will spark collaboration.

Another problem in our field is misperceptions that cause some groups to believe they would not be good at it, or that they would not enjoy it. To enrich the industry by bringing in people with diverse thinking styles, perhaps ACM could sponsor contests for young students with interests other than building computers, such as music, art, or social interaction, that will inspire them to realize they can make a difference in our field.

RICARDO BAEZA-YATESVP of Research for EMEA & LatAm
Yahoo! Research Barcelona
Barcelona, Catalunya, Spain

Biography

Ricardo Baeza-Yates is VP of Yahoo! Research for Europe, Middle East, and Latin America, leading the labs at Barcelona, Spain and Santiago, Chile, since 2006, as well as supervising the lab in Haifa, Israel since 2008. He is also a part-time professor at the Dept. of Information and Communication Technologies of the Universitat Pompeu Fabra in Barcelona, Spain, since 2005. Until 2005 he was a professor and director of the Center for Web Research at the Department of Computer Science of the Engineering School of the University of Chile.

He obtained a Ph.D. from the University of Waterloo, Canada, in 1989. Before he obtained two master's (M.Sc. CS and M.Eng. EE) and the electrical engineering degree from the University of Chile, Santiago.

He is co-author of the best-seller *Modern Information Retrieval* textbook, published in 1999 by Addison-Wesley with a second enlarged edition in 2011, as well as co-author of the 2nd edition of the *Handbook of Algorithms and Data Structures*, Addison-Wesley, 1991; and co-editor of *Information Retrieval: Algorithms and Data Structures*, Prentice-Hall, 1992, among more than 300 other publications.

He has received the Organization of American States award for young researchers in exact sciences (1993) and the CLEI Latin American distinction for contributions to CS in the region (2009). In 2003 he was the first computer scientist to be elected to the Chilean Academy of Sciences. During 2007 he was awarded the Graham Medal for innovation in computing, given by the University of Waterloo to distinguished ex-alumni. In 2009 he was named ACM Fellow and in 2011 IEEE Fellow.

Statement

I became an ACM member back in 1984 when I was a student in Chile. My initial motivation was to be part of the largest CS community in a time when there was no Internet. This feeling of belonging has been constant until today. In 1998 I was invited to be part of the first South American steering committee for the regional ACM Programming Contest, a position that I held for eight years. In 2007 I was invited to become a member of the Publications Board for a three-year term and since 2010, I have been a member of the ACM Europe Council. Thus, I know reasonably well how the ACM works across several continents.

On the technical side, I have been a member of the ACM SIGIR community for many years. I am also a member of SIGACT, SIGKDD, SIGMOD, and SIGWEB. Therefore, I also feel that I know well my research peers. For that reason, although I have received several awards, being named ACM Fellow in 2009 was for me the highest possible recognition given by my peers. So, when I was asked to be a Member at Large candidate, I gladly accepted.

So, based on my ACM experience, as a Member-at-Large my main goal will be to extend the influence of ACM in emerging regions, involving developing countries in Africa, Asia, and Latin America. To achieve this goal we need to promote the ACM Distinguished Speakers Program in places that never had the opportunity of listening to senior members of our community, extend the ACM Programming Contest in countries that do not participate, start agreements with CS associations in the countries where they exist, and, more important, work on making it feasible to have free access to the ACM Digital Library for the ACM student members on these countries. All these actions are easier from Europe due to their cultural and geographical proximity.

candidates for

MEMBERS AT LARGE

(7/1/12–6/30/16)

FENG ZHAO Microsoft Research Asia, Beijing
China

Biography

Feng Zhao is an assistant managing director at Microsoft Research Asia, responsible for the hardware, mobile and sensing, software analytics, systems, and networking research areas. He is also an adjunct professor at Shanghai Jiaotong University, Hong Kong University of Science and Technology, and the University of Washington. Prior to joining MSR-Asia in 2009, he was a Principal Researcher at Microsoft Research Redmond (2004–2009), and founded the Networked Embedded Computing Group. His research has focused on wireless sensor networks, energy-efficient computing, and mobile systems. He has authored or co-authored over 100 technical papers and books, including a book, *Wireless Sensor Networks: An Information Processing Approach*, by Morgan Kaufmann.

An ACM member for over 25 years, Feng was the founding Editor-In-Chief of *ACM Transactions on Sensor Networks* (2003–2010), and founded the ACM/IEEE IPSN conference. Feng served on ACM SIGBED Executive Committee (2004–2010), as TPC Co-Chair for ACM Sensys'05, and on the Steering Committee for CPSWeek (2007–). In 2008, he worked with USENIX and ACM to help start a new workshop series, HotPower, focusing on the emerging topic of sustainable computing.

Feng received his BS from Shanghai Jiaotong University (1984), and MS and Ph.D. in Electrical Engineering and Computer Science from MIT (1988 and 1992, respectively). He taught at Ohio State University as a tenured Associate Professor in Computer Science 1992–1999, and at Stanford University as a Consulting Professor of Computer Science 1999–2006. He was a Principal Scientist at Xerox PARC 1997–2004.

An IEEE Fellow and ACM Distinguished Engineer, Feng received a Sloan Research Fellowship (1994) and NSF and ONR Young Investigator Awards (1994, 1997).

Statement

If elected, I will push to deepen the engagement of ACM with the Asia computing community, building on the momentum initiated by the Council.

In addition to expanding ACM membership, we need to focus on the quality of engagement, such as bringing leading ACM conferences to the region, establishing a regional version when needed, and ensuring an active and *sustained* participation by the local community. The ACM Programming Contest has had a great mindshare among aspiring students at Chinese universities, with a broad participation and success of these schools at the event. Can we learn from these, and expand to other activities?

As computing becomes increasingly central in addressing societal problems in energy, environment, and health that affect the region and the rest of the world, and as these problems increasingly demand more global, coordinated actions, ACM can be the thought leader in advocating a global, collaborative approach to addressing these problems.

Young students do look to role models when deciding what to study and making career choices. Microsoft has been sponsoring the Best Doctoral Dissertation Awards at the Chinese Computer Federation Annual Meeting. ACM can and should play a major role in similar activities, partnering with CCF and other organizations in the region.

Bringing leading lights in computing to Asia for public lectures has proven very successful in increasing public awareness of computing and inspiring young students. An example is the annual 21st Century Computing and TechVista Symposia organized by Microsoft Research together with universities across Asia. But it is equally important for the global community to hear the perspectives of leading researchers from Asia. ACM can help promote these researchers in the global community.

ERIC ALLMAN Sendmail, Inc.
Chief Science Officer
Emeryville, CA, USA

Biography

Eric Allman graduated from the University of California, Berkeley with a Bachelor's Degree in 1977 and a Master's Degree in 1980.

While at Berkeley he was Lead Programmer on the INGRES relational database management system as well as making significant contributions to the Berkeley Software Distribution, notably sendmail and syslog. Sendmail remains among the top MTAs on the Internet, and syslog is the standard logging mechanism used in nearly all open systems and peripherals.

After leaving Berkeley, Allman worked at Britton Lee (later Sharebase) on database interface software and the International Computer Science Institute on the Ring Array Processor project for neural-net-based speech recognition. He returned to U.C. Berkeley at the Mammoth project, building department-wide research infrastructure for the Computer Science Division. He then founded Sendmail, Inc., an email infrastructure company based on his work at Berkeley. He has played many roles at Sendmail and currently holds the title of Chief Scientist.

Allman has been a member of ACM since 1975, is a past board member and officer of USENIX Association, was on the board of Sendmail for several years, and is currently a Trustee of Cal Performances, a U.C. Berkeley-based arts organization. He has written for *TODS*, *TOCS*, *USENIX*, *UNIX Review* magazine, and *ACM Queue* magazine, among others. He also co-authored the C Advisor column for *UNIX Review* for several years.

Allman is a Distinguished Engineer at ACM and is a founding member of the *Queue* editorial review board, on which he continues to serve.

Statement

I have had the opportunity to watch ACM evolve over the last 40 years, starting from my introduction to computers in high school. I was given old copies of *Communications*, which I devoured, joining ACM as an undergraduate. In the 1960s and into the 1970s, CACM was both academic and pragmatic; for example, *Communications* had a Programming Techniques section as well as an Algorithms section that included descriptions of various algorithms (hundreds of them, including code!). As time went on ACM increasingly focused on academics and researchers to the detriment of practitioners such as myself, until 10 years ago when *Queue* magazine was started with practitioners as the express audience. I am proud of having been a founding member of the *Queue* board, and feel that I've been honored to help restore ACM's relevance to people such as myself.

One of the challenges is explaining to practitioners how the ACM is relevant to them. Much of this is just a matter of awareness. ACM already has *Queue*, Tech Packs, the Learning Center, Safari books and videos, to name just a few. While these resources are of immense relevance to practitioners, most of them are relatively unknown in that community.

Another area of importance is international participation. The once English-centric computing world has now expanded into many geographies and languages. ACM needs to broaden its international outreach or risk becoming marginalized. There is a huge amount to be done here, and it will be challenging, but it must proceed.

I have very much enjoyed working on the *Queue* board and with the Practitioner Board and with your vote, look forward to additional participation on the ACM Council.

candidates for

MEMBERS AT LARGE

(7/1/12–6/30/16)

MARY LOU SOFFA

Chair, Department of Computer Science
and the Owen R. Cheatham Professor
University of Virginia
Charlottesville, VA, USA

Biography

Mary Lou Soffa is the Chair of the Department of Computer Science and the Owen R. Cheatham Professor of Sciences at the University of Virginia. Prior to Virginia, she was a Professor at the University of Pittsburgh and also served as the Graduate Dean in Arts and Sciences. Her general research interests are in programming languages/compilers and software engineering. Her current focus is on resource management for multicores, program analysis, virtual execution environments, testing, and debugging.

In 1999, Soffa was selected as an ACM Fellow and received the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. She received the SIGPLAN Distinguished Service Award in 2003 and SIGSOFT Distinguished Service Award in 2010. She received the Nico Habermann Award from the Computer Research Association in 2006. In 2011, she was selected for the Anita Borg Technical Leadership Award.

Soffa has been active in ACM for many years. She currently serves on the Publications Board and is a member-at-large in ACM Council. She was the ACM SIG Board Council Representative from 2000–2002 and served as SIGPLAN Chair, Vice-Chair and Treasurer. She also served as member-at-large on the SIGSOFT executive committee.

She served on the CRA Board for 10 years and currently serves on CRA-W. She has worked to increase the participation of women and underrepresented minorities for many years. She co-founded the CRA-W Graduate Cohort Program and the CRA-W Cohort for Associate Professors. She has been a member of a number of editorial boards and has served as conference chair, program chair, and program committee member for numerous conferences in both software engineering and programming languages.

Statement

Through the more than 20 years that I have been involved with ACM, it has continually evolved, always striving to provide the services needed by its members as well as welcoming new members, both in the U.S. and internationally. I have been, and continue to be, committed in helping ACM address both new problems that are emerging as well as ongoing challenges.

Interdisciplinary research and development is a growing national trend in science, and it very much involves computing. With this important direction comes challenges that I believe ACM can help address. How do we properly educate students? How do we evaluate it? What type of journals and conferences are needed? These are some questions that we must start to address.

Another challenge that I would like to help address is the troubling lack of interest in computing shown by students. We need to help ongoing projects that are focused on demonstrating the excitement and opportunities that computing offers to them. Our science and profession depends on a robust pipeline of students engaged in computing and we must work toward that end.

An ongoing challenge is the lack of gender and minority diversity in our field in all levels. Although efforts have been ongoing for a number of years, there still remains much to be done. We need to develop new strategies and culture changes to attract diverse students. I look forward to continuing my work in this area with ACM.

Although there are many challenges to address, we must also maintain and enhance what is working right. Much of success of ACM has come from the SIGs, through their volunteers, high-quality journals and conferences and the digital library. We have to continue to ensure that the SIGs have the support and tools that they need to continue their important work.

P J NARAYANAN

Dean (R&D)
IIIT Hyderabad
Hyderabad, India

Biography

P J Narayanan is a Professor and Dean (R&D) at the International Institute of Information Technology, Hyderabad. His research interests include Computer Vision, Computer Graphics, and Parallel Computing. His Ph.D. thesis dealt with parallel processing for large computer vision problems. At CMU, he developed Virtualized Reality, the first system to capture dynamic action in 3D using 50 cameras. He played a key role in establishing a vibrant research programme at IIIT-H as the first Post-Graduate Coordinator and Dean (R&D). Nvidia recognized him as a CUDA Fellow in 2008 for the pioneering efforts in GPU computing. He has played a key role in making the Indian Conference on Computer Vision, Graphics, and Image Processing (ICVGIP) as a high-quality conference series and in bringing the Asian Conference on Computer Vision to India. He has been an Area Chair or Program Committee member of major conferences in Computer Vision and Computer Graphics as well as IJCAI in 2007. Narayanan has been the Co-Chair of ACM India Council from its inception in 2009. He serves on several committees of DST, MCIT, and CSIR in India, dealing with education and research.

Education:

B.Tech (1984) in CS from the IIT, Kharagpur; MS (1989) and Ph.D. (1992) in CS from the University of Maryland, College Park.

Work experience

- ▶ Associate Development Engineer, Lipi group, CMC R&D (1984–1986)
- ▶ Teaching and Research Assistant in University of Maryland (1986–1992)
- ▶ Research Faculty Member in Robotics Institute of Carnegie Mellon University (1992–1996)
- ▶ Scientist D/E and Head of Computer Vision and Virtual Reality group of the Centre for AI & Robotics (CAIR), DRDO, Bangalore (1996–2000)
- ▶ Faculty member of IIIT, Hyderabad (2000–)

Statement

Computing has touched every aspect of human life in a short period. Information is abundant today, resulting in fundamental changes in teaching, research, and how we work. Corporations have a truly global work force and are critically dependent on the information infrastructure. Research too has become increasingly global. Academia will also be required to make its teaching and research global.

Internationalization has already taken ACM to small places in India like Patiala and Anakapalle with its chapters. I have been a part of this as ACM India Co-Chair since its inception. We have already set up an award for the best dissertation from India. I am satisfied with the progress so far in India. I am amazed at the dedication and vision of the ACM Council in expanding the role of ACM everywhere. I think much more can be accomplished with communities from South America, the Middle East, and Africa, apart from India, China, and Europe, if ACM makes itself relevant and useful to them.

ACM can leverage its strengths and expand its services to be more attractive to its members. Broadcasting high-profile events like the Turing Award lectures, the Turing 100 celebrations, and events from SIGGRAPH, MultiMedia, and Supercomputing, exclusively to its members will make ACM more attractive. In the era of digital connectivity, ACM can have Distinguished Lectures that are delivered digitally. A periodic 2-hour slot with a Turing Award winner or an accomplished person exclusively for ACM chapters can and will be very popular in countries like India, but also to other places. ACM's DL is already attractive, but can be made more so by expanding its scope to its events and lectures. I would like to explore such ideas as a member of the council. I seek your votes to make this possible.

candidates for

MEMBERS AT LARGE

(7/1/12–6/30/16)

EUGENE H. SPAFFORD

Professor and Executive Director

Purdue University CERIAS

West Lafayette, IN, USA

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, 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 has 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)², 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. Air Force University, and the GAO.

Statement

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 policy. 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.

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 taskforces 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. These activities have provided me deep insight into both ACM and the role that we can play as informed professionals. I will bring this insight and leadership experience to my position on ACM Council.

As a member of the Council I will 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, publications, the Digital Library, and SIG activities—and of our increasingly global membership.