ACM 2016 FELLOWS RECOGNIZED FOR ADVANCES THAT ARE TRANSFORMING SCIENCE AND SOCIETY

Achievements of 2016 Fellows Include Advances in Human-Computer Interaction, Artificial Intelligence and Cryptography

NEW YORK, NY, December 8, 2016 – ACM, the world’s leading computing society, has named 53 of its members as ACM Fellows for major contributions in areas including artificial intelligence, cryptography, computer architecture, high performance computing and programming languages. The achievements of the 2016 ACM Fellows are accelerating the digital revolution, and affect almost every aspect of how we live and work today.

“As nearly 100,000 computing professionals are members of our association, to be selected to join the top one percent is truly an honor,” explains ACM President Vicki L. Hanson. “Fellows are chosen by their peers and hail from leading universities, corporations and research labs throughout the world. Their inspiration, insights and dedication bring immeasurable benefits that improve lives and help drive the global economy.”

Underscoring ACM’s global reach, 2016 Fellows hail from organizations in Australia, Austria, Canada, China, France, India, Israel, Italy, The Netherlands, Switzerland, the United Kingdom and the United States.

The 2016 Fellows have been cited for numerous contributions in areas including cloud computing, computer security, data science, Internet routing and security, large-scale distributed computing, mobile computing, spoken-language processing and theoretical computer science.

ACM will formally recognize its 2016 Fellows at the annual Awards Banquet, to be held in San Francisco on June 24, 2017. Additional information about the 2016 ACM Fellows, the awards event, as well as previous ACM Fellows and award winners is available at http://awards.acm.org/.
2016 ACM Fellows

Noga Alon
Tel Aviv University
For contributions in the study of expander graphs, derandomization and streaming algorithms.

Paul Barford
University of Wisconsin
For contributions to Internet measurement and analysis.

Luca Benini
Swiss Federal Institute of Technology, Zurich and Università di Bologna
For contributions to the design of low power multi-processor systems.

Ricardo Bianchini
Microsoft Research
For contributions to power, energy and thermal management of servers and datacenters.

Stephen Blackburn
Australian National University
For contributions to memory management in programming languages.

Dan Boneh
Stanford University
For contributions to cryptography and computer security.

Carla E. Brodley
Northeastern University
For applications of machine learning and for increasing participation of women in computer science.

Justine Cassell
Carnegie Mellon University
Language Technologies Institute
For contributions to human-computer interaction and advocacy for empowerment and voice through technology.

Erik Demaine
Massachusetts Institute of Technology
For contributions to geometric computing, data structures and graph algorithms.

Allison Druin
University of Maryland
For contributions to creating information and computing technologies with and for children.

Fredo Durand
Massachusetts Institute of Technology
For contributions to computational photography and computer graphics rendering.

Nick Feamster
Princeton University
For data-driven studies of Internet security and Internet censorship.

Jason Flinn
University of Michigan
For contributions to mobile computing and reliable distributed systems.

William Freeman
Massachusetts Institute of Technology
For contributions to low-level computer vision, machine learning and computer graphics.

Yolanda Gil
University of Southern California
For leadership in advancing the use of artificial intelligence in support of science, and for service to the community.

Robert L. Grossman
University of Chicago and Open Data Group
For contributions to data science, data intensive computing and data mining.

Rajesh K. Gupta
University of California, San Diego
For contributions in design of embedded systems and hardware-software codesign.

James Hendler
Rensselaer Polytechnic Institute
For contributions to artificial intelligence and the development of the semantic web.

Monika Henzinger
Universität Wien
For contributions to computer theory and its practical application.
Tony Hey  
The Science and Technology Facilities Council’s Rutherford Appleton Laboratories  
*For leadership in high performance computing and eScience.*

Xuedong Huang  
Microsoft AI and Research  
*For contributions to spoken language processing.*

Daniel Jackson  
Massachusetts Institute of Technology  
*For contributions to software modeling and the creation of the modeling language Alloy.*

Robert J.K. Jacob  
Tufts University  
*For contributions to human-computer interaction, particularly new interaction modes and novel user interface software formalisms.*

Somesh Jha  
University of Wisconsin  
*For contributions to verification, programming languages, and software engineering.*

Ravi Kannan  
Microsoft Research  
*For contributions to the field of theoretical computer science.*

Anne-Marie Kermarrec  
Mediego/Inria  
*For contributions to large-scale distributed computing.*

Martin Kersten  
Centrum Wiskunde & Informatica  
*For the design and implementation of column-store and main-memory database systems.*

Christoforos Kozyrakis  
Stanford University  
*For contributions to transactional memory and data center architecture.*

Marta Kwiatkowska  
University of Oxford  
*For contributions to the theory and practice of probabilistic verification.*

James Landay  
Stanford University  
*For contributions to human-computer interaction, with a focus on user interface design tools and ubiquitous computing.*

K. Rustan M. Leino  
Microsoft Research  
*For contributions to making program verification accessible and practical.*

J. Bryan Lyles  
Oak Ridge National Laboratory  
*For contributions to Internet infrastructure technology, measurement and research.*

Todd C. Mowry  
Carnegie Mellon University  
*For contributions to software prefetching and thread-level speculation.*

Trevor Mudge  
University of Michigan, Ann Arbor  
*For contributions to power aware computer architecture.*

Sharon Oviatt  
Inca Designs  
*For contributions to the empirical and theoretical foundations of multimodal systems, and to human-centered computer interfaces.*

Venkata N. Padmanabhan  
Microsoft Research India  
*For research contributions and professional leadership in networked and mobile computing systems.*

Shwetak Patel  
University of Washington  
*For contributions to sustainability sensing, low-power wireless sensing and mobile health.*

David Peleg  
The Weizmann Institute of Science  
*For contributions to distributed computing and graph algorithms.*

Radia Perlman  
Dell-EMC  
*For contributions to the theory and practice of Internet routing and bridging protocols.*
Adrian Perrig  
ETH Zurich  
For contributions in protocols for network and system security.

Sudipta Sengupta  
Microsoft Research  
For contributions to cloud networking, storage, and data management.

Ganesan Ramalingam  
Microsoft Research India  
For contributions to static program analysis.

Andre Seznec  
INRIA  
For contributions to branch prediction and cache memory design.

Louiqa Raschid  
University of Maryland  
For data management and integration in non-traditional domains including biomedicine, finance and humanitarian applications.

Valerie E. Taylor  
Texas A&M University  
For leadership in broadening participation in computing.

Holly Rushmeier  
Yale University  
For work on global illumination, material capture and display of high-dynamic-range images.

Carlo Tomasi  
Duke University  
For contributions in computer vision.

Michael Saks  
Rutgers, The State University of New Jersey  
For contributions to computational complexity, theory of distributed computing, and design & analysis of algorithms.

Paul Van Oorschot  
Carleton University  
For contributions to applied cryptography, authentication and computer security.

Sachin S. Sapatnekar  
University of Minnesota  
For contributions to the enhancement of performance and reliability in integrated circuits.

Manuela M. Veloso  
Carnegie Mellon University  
For contributions to the field of artificial intelligence, in particular in planning, learning, multi-agent systems, and robotics.

Abigail Sellen  
Microsoft Research  
For contributions to human-computer interaction and the design of human-centered technology.

Zhi-Hua Zhou  
Nanjing University  
For contributions to machine learning and data mining.

About ACM  
ACM, the Association for Computing Machinery (www.acm.org) is the world’s largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field’s challenges. ACM strengthens the computing profession’s collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

About the ACM Fellows Program  
The ACM Fellows Program, initiated in 1993, celebrates the exceptional contributions of the leading members in the computing field. These individuals have helped to enlighten researchers, developers, practitioners and end users of information technology throughout the world. The new ACM Fellows join a distinguished list of colleagues to whom ACM and its members look for guidance and leadership in computing and information technology.