



Association for
Computing Machinery

Advancing Computing as a Science & Profession

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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 Laboratory
*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

Incaa 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.***Ganesan Ramalingam**

Microsoft Research India

*For contributions to static program analysis.***Louiqa Raschid**

University of Maryland

*For data management and integration in non-traditional domains including biomedicine, finance and humanitarian applications.***Holly Rushmeier**

Yale University

*For work on global illumination, material capture and display of high-dynamic-range images.***Michael Saks**

Rutgers, The State University of New Jersey

*For contributions to computational complexity, theory of distributed computing, and design & analysis of algorithms***Sachin S. Sapatnekar**

University of Minnesota

*For contributions to the enhancement of performance and reliability in integrated circuits.***Abigail Sellen**

Microsoft Research

*For contributions to human-computer interaction and the design of human-centered technology.***Sudipta Sengupta**

Microsoft Research

*For contributions to cloud networking, storage, and data management.***Andre Sezneć**

INRIA

*For contributions to branch prediction and cache memory design.***Valerie E. Taylor**

Texas A&M University

*For leadership in broadening participation in computing.***Carlo Tomasi**

Duke University

*For contributions in computer vision.***Paul Van Oorschot**

Carleton University

*For contributions to applied cryptography, authentication and computer security.***Manuela M. Veloso**

Carnegie Mellon University

*For contributions to the field of artificial intelligence, in particular in planning, learning, multi-agent systems, and robotics.***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.

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