



Association for
Computing Machinery

Advancing Computing as a Science & Profession

NEWS RELEASE

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2018 ACM FELLOWS HONORED FOR PIVOTAL ACHIEVEMENTS THAT UNDERPIN THE DIGITAL AGE

Computing Professionals Recognized for Transformative Contributions in Areas Including Accessible Voting, Computer Animation, Machine Learning, Natural Language Processing, and Software

New York, NY, December 5, 2018 – ACM, the Association for Computing Machinery, has named 56 members ACM Fellows for significant contributions in areas including computer architecture, mobile networks, robotics, and systems security. The accomplishments of the 2018 ACM Fellows underpin the technologies that define the digital age and greatly impact our professional and personal lives. ACM Fellows are composed of an elite group that represents less than 1% of the Association’s global membership.

“In society, when we identify our tech leaders, we often think of men and women in industry who have made technologies pervasive while building major corporations,” said ACM President Cherri M. Pancake. “At the same time, the dedication, collaborative spirit and creativity of the computing professionals who initially conceived and developed these technologies goes unsung. The ACM Fellows program publicly recognizes the people who made key contributions to the technologies we enjoy. Even when their work did not directly result in a specific technology, they have made major theoretical contributions that have advanced the science of computing. We are honored to add a new class of Fellows to ACM’s ranks and we look forward to the guidance and counsel they will provide to our organization.”

Underscoring ACM’s global reach, the 2018 Fellows hail from universities, companies and research centers in Finland, Greece, Israel, Sweden, Switzerland, and the US.

The 2018 Fellows have been cited for numerous contributions in areas including accessibility,

augmented reality, algorithmic game theory, data mining, storage, software and the World Wide Web.

ACM will formally recognize its 2018 Fellows at the annual Awards Banquet, to be held in San Francisco on June 15, 2019. Additional information about the 2018 ACM Fellows, as well as previous ACM Fellows , is available through the [ACM Fellows site](#).

2018 ACM Fellows

Gul Agha

University of Illinois at Urbana-Champaign
For research in concurrent programming and formal methods, specifically the Actor Model

Krste Asanovic

University of California, Berkeley
For contributions to computer architecture, including the open RISC-V instruction set and Agile hardware

N Asokan

Aalto University
For contributions to systems security and privacy, especially of mobile systems

Paul Barham

Google Brain
For contributions to the design of operating systems and scalable distributed information processing systems

Peter L. Bartlett

University of California, Berkeley
For contributions to the theory of machine learning

David Basin

ETH Zurich
For contributions to Information Security and Formal Methods

Elizabeth M. Belding

University of California, Santa Barbara
For contributions to communication in mobile networks and their deployment in developing regions

Rastislav Bodik

University of Washington
For contributions to program synthesis

Katy Borner

Indiana University
For contributions to methods and tools that enable users to render data into actionable insights

Amy S. Bruckman

Georgia Institute of Technology
For contributions to collaborative computing and foundational work in Internet research ethics

Jan Camenisch

IBM Research/DFINITY Labs Zurich
For contributions to privacy-enhancing cryptographic protocols and leadership in their practical realization

Adnan Darwiche

University of California, Los Angeles
For contributions to the foundations and technology of automated reasoning

Andre M. Dehon

University of Pennsylvania
For contributions to architecture exploration and design automation of spatially programmable computing fabrics

Premkumar T. Devanbu

University of California, Davis
For contributions to using software data and meta-data to improve software tools and processes

Tamal Dey

Ohio State University

For contributions to computational geometry and computational topology

Sandhya Dwarkadas

University of Rochester

For contributions to shared memory and reconfigurability

Steven Feiner

Columbia University

For contributions to human-computer interaction, virtual and augmented reality, and 3D user interfaces

Tim Finin

University of Maryland, Baltimore County

For contributions to theory and practice of knowledge sharing in distributed systems and the World Wide Web

Thomas Funkhouser

Princeton University and Google

For research contributions in computer graphics

Minos Garofalakis

Athena Research Center and Technical

University of Crete

For contributions to data processing and analytics, particularly data streaming, approximation and uncertainty

Mario Gerla

University of California, Los Angeles

For contributions to design and analysis of mobile wireless protocols for vehicular safety and traffic applications

Juan E. Gilbert

University of Florida

For contributions to broadening participation in computing and to accessible voting technologies

Mohammad T. Hajiaghayi

University of Maryland, College Park

For contributions to the fields of algorithmic graph theory and algorithmic game theory

Dan Halperin

Tel Aviv University

For contributions to robust geometric computing and applications to robotics and automation

Johan Håstad

KTH Royal Institute of Technology, Stockholm

For contributions in circuit complexity, approximability and inapproximability, and foundations of pseudorandomness

Tian He

University of Minnesota, Twin Cities

For contributions to wireless networks, sensing systems, and Internet of things (IoT).

Wendi Beth Heinzelman

University of Rochester

For contributions to wireless communication systems and protocols and leadership in broadening participation in computing

Aaron Hertzmann

Adobe Research

For contributions to computer graphics, non-photo realistic rendering, computer animation and machine learning

Jessica K. Hodgins

Carnegie Mellon University

For contributions to character animation, human simulation, and humanoid robotics

John Hughes

Chalmers University

For contributions to software testing and functional programming

Charles Lee Isbell

Georgia Institute of Technology

For contributions to interactive machine learning; and for contributions to increasing access and diversity in computing

Kimberly Keeton

Hewlett Packard Laboratories

For contributions to improving the dependability, manageability, and usability of storage and novel memory systems

Sanjeev Khanna

University of Pennsylvania

For contributions to approximation algorithms, hardness of approximation, and sublinear algorithms

Lillian Lee

Cornell University

For contributions to natural language processing, sentiment analysis, and computational social science

Tom Leighton

Akamai Technologies

For his leadership in the establishment of content delivery networks, and his contributions to algorithm design

Fei-Fei Li

Stanford University

For contributions in building large knowledge bases for machine learning and visual understanding

Michael Littman

Brown University

For contributions to the design and analysis of sequential decision making algorithms in artificial intelligence

Huan Liu

Arizona State University

For contributions in feature selection for data mining and knowledge discovery and in social computing

Jiebo Luo

University of Rochester

For contributions to multimedia content analysis and social multimedia informatics

Bruce M. Maggs

Duke University

For contributions to the development of content distribution networks and the theory of computer networks

Bangalore S. Manjunath

University of California, Santa Barbara

For contributions to image search and retrieval with applications in digital libraries, marine sciences, and biology

Vishal Misra

Columbia University and Google

For contributions to network traffic modeling, congestion control and Internet economics

Frank Mueller

North Carolina State University

For contributions to the predictability of real-time systems, resilience in high-performance computing and multi-threading techniques

David Parkes

Harvard University

For contributions to computational markets, including novel mechanism design and incentive engineering methods

Gurudatta Parulkar

Open Networking Foundation (ONF)

For contributions to improving Internet architecture and open source software

Toniann Pitassi

University of Toronto

For contributions to research and education in the fields of computational and proof complexity

Lili Qiu

University of Texas at Austin

For contributions to the design and analysis of wireless network protocols and mobile systems

Matthew Roughan

University of Adelaide

For contributions to Internet measurement and analysis, with applications to network engineering

Amit Sahai

University of California, Los Angeles

For contributions to cryptography and to the development of indistinguishability obfuscation

Alex Snoeren

University of California, San Diego

For innovative approaches to measuring, managing and detecting network traffic

Gerald Tesaro

IBM Research, Yorktown

For contributions to reinforcement learning, neural networks, and intelligent autonomous agents

Bhavani Thuraisingham

University of Texas at Dallas

For contributions to methods, tools, and systems for security and privacy of data and applications

Salil Vadhan

Harvard University

For advancing computational complexity and cryptography, and for promoting public support for theoretical computer science

Ellen M. Voorhees

National Institute of Standards and Technology

For contributions in evaluation of information retrieval, question answering, and other language technologies

Avi Wigderson

Institute for Advanced Study

For contributions to theoretical computer science and mathematics

Alec Wolman

Microsoft Research

For contributions to trusted mobile systems and services

About ACM

[ACM, the Association for Computing Machinery](#) 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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