



**Association for
Computing Machinery**

NEWS RELEASE

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2023 ACM FELLOWS CELEBRATED FOR CONTRIBUTIONS TO COMPUTING THAT UNDERPIN OUR DAILY LIVES

Members of Global Society Hailed for Work Including Advances to AI Technologies, the World Wide Web, Graphics, Cybersecurity, Mobile Computing, and Software

New York, NY, January 24, 2024 – ACM, the Association for Computing Machinery, has named [68 Fellows](#) for transformative contributions to computing science and technology. All the 2023 inductees are longstanding ACM Members who were selected by their peers for groundbreaking innovations that have improved how we live, work, and play.

“The announcement each year that a new class of ACM Fellows has been selected is met with great excitement,” said ACM President Yannis Ioannidis. “ACM is proud to include nearly 110,000 computing professionals in our ranks and ACM Fellows represent just 1% of our entire global membership. This year’s inductees include the inventor of the World Wide Web, the ‘godfathers of AI,’ and other colleagues whose contributions have all been important building blocks in forming the digital society that shapes our modern world.”

In keeping with ACM’s global reach, the 2023 Fellows represent universities, corporations, and research centers in Canada, China, Germany, India, Israel, Norway, Singapore, the United Kingdom, and the United States. The contributions of the 2023 Fellows run the gamut of the computing field—including algorithm design, computer graphics, cybersecurity, energy-efficient computing, mobile computing, software analytics, and web search, to name a few.

Additional information about the 2023 ACM Fellows, as well as previously named ACM Fellows, is available through the [ACM Fellows website](#).

2023 ACM FELLOWS

Aditya Akella
University of Texas

For contributions that improve the performance, efficiency, and robustness of cluster computing

Michael Backes <i>CISPA</i>	For contributions to information security and privacy
Vineet Bafna <i>University of California, San Diego</i>	For contributions to the theory, design, and implementation of bioinformatics algorithms
Yoshua Bengio <i>Mila, Université de Montréal</i>	For conceptual and engineering breakthroughs that have made deep neural networks a critical component of computing
Maria-Florina Balcan <i>Carnegie Mellon University</i>	For contributions to the foundations of machine learning and its applications to algorithmic economics and algorithm design
Nikhil Bansal <i>University of Michigan</i>	For contributions to the foundations of approximate and online algorithms, and their connections to mathematics
Mikhail Belkin <i>University of California San Diego</i>	For contributions to modern machine learning theory and algorithms
Shai Ben-David <i>University of Waterloo</i>	For contributions to and research leadership in machine learning theory
Vaughn Timothy Betz <i>University of Toronto</i>	For contributions to the architecture and computer-aided design of field-programmable gate arrays (FPGAs)
Ramon Caceres <i>Google</i>	For contributions to mobile and edge computing
Chandra Chekuri <i>University of Illinois, Urbana-Champaign</i>	For contributions to approximation algorithms and submodular optimization
Haibo Chen <i>Shanghai Jiao Tong University</i>	For contributions to improving the scalability and security of operating systems and distributed systems
Yingying (Jennifer) Chen <i>Rutgers University</i>	For contributions to the design and application of mobile sensing and mobile security systems
Kenneth Ward Church <i>EAI, Northeastern University</i>	For contributions to empirical methods in natural language processing

Roger B. Dannenberg <i>Carnegie Mellon University</i>	For contributions to the field of computer science through innovative computer music systems
Xin Luna Dong <i>Meta</i>	For contributions to knowledge graph construction and data integration
Rolf Drechsler <i>University of Bremen</i>	For contributions to foundations and applications of formal proof techniques in synthesis, test, and verification
Wenliang Du <i>Syracuse University</i>	For contributions to cybersecurity education and research
Pradeep Dubey <i>Intel Corporation</i>	For contributions to emerging compute- and data-intensive applications and parallel processing computer architectures
Anja Feldmann <i>Max Planck Institute and TU Berlin</i>	For contributions to the data-driven analysis of operational networks
George Fitzmaurice <i>Autodesk Canada, Inc.</i>	For contributions to human-computer interaction and tangible user interfaces
Fedor Fomin <i>University of Bergen</i>	For contributions to the development of parameterized complexity and exact exponential algorithms
Jeffrey S. Foster <i>Tufts University</i>	For contributions to program analysis and techniques to build more reliable and secure software
Jianfeng Gao <i>Microsoft</i>	For contributions to machine learning for web search, natural language processing, and conversational systems
Ian Goldberg <i>University of Waterloo</i>	For contributions to the development and deployment of privacy enhancing technologies
Sumit Gulwani <i>Microsoft</i>	For contributions to AI-assisted programming for developers, data scientists, end users, and students
Zhu Han <i>University of Houston</i>	For contributions to distributed and autonomous management for large-scale communication networks

Geoffrey Hinton <i>University of Toronto</i>	For conceptual and engineering breakthroughs that have made deep neural networks a critical component of computing
Nicole Immorlica <i>Microsoft Research</i>	For contributions to economics and computation including market design, auctions, and social networks
Trent Jaeger <i>Pennsylvania State University</i>	For contributions to research and education for operating systems and software security
Kenneth Richard Koedinger <i>Carnegie Mellon University</i>	For the advancement of AI models of human learning and developing intelligent tutors to aid students
Andreas Krause <i>ETH Zurich</i>	For contributions to learning-based decision making under uncertainty
Christopher Ian Kruegel <i>University of California Santa Barbara</i>	For contributions to systems security, malware detection, and vulnerability analysis
H.T. Kung <i>Harvard University</i>	For contributions to computer architecture and concurrency control for parallel computation
Yann LeCun <i>New York University</i>	For conceptual and engineering breakthroughs that have made deep neural networks a critical component of computing
Tim Berners-Lee <i>WWW Consortium</i>	For inventing the World Wide Web, the first web browser, and the fundamental protocols and algorithms allowing the Web to scale
David Lo <i>Singapore Management University</i>	For contributions to synergizing artificial intelligence and software engineering for human-in-the-loop automation and software analytics
Wenjing Lou <i>Virginia Tech</i>	For contributions to information and network security
Kwan-Liu Ma <i>University of California, Davis</i>	For contributions to and leadership in large-scale data visualization research
Wei-Ying Ma <i>Tsinghua University</i>	For leadership and contributions to web search and data mining

Z. Morley Mao <i>University of Michigan</i>	For contributions to Internet security and performance
Deborah McGuinness <i>Rensselaer Polytechnic Institute</i>	For contributions to knowledge technologies including ontologies and knowledge graphs
Gerard G. Medioni <i>Amazon</i>	For contributions to computer vision and its consumer facing applications
Sharad Mehrotra <i>University of California, Irvine</i>	For contributions to the fields of data management, multimedia information retrieval, and emergency response
Seffi Naor <i>Technion—Israel Institute of Technology</i>	For contributions to online, randomized, and approximation algorithms
Shrikanth Narayanan <i>University of Southern California</i>	For contributions to speech, language, multimedia processing, affective computing, and their human-centered applications
Natasha Noy <i>Google Research</i>	For contributions to open data, data discovery, and Semantic Web
Corina S. Pasareanu <i>NASA Ames and Carnegie Mellon University</i>	For contributions to the development and application of symbolic execution and compositional verification
Massoud Pedram <i>University of Southern California</i>	For contributions to low power design of VLSI circuits and to energy efficient computing
Anand Raghunathan <i>Purdue University</i>	For contributions to the design of energy-efficient computing systems
Benjamin Raphael <i>Princeton University</i>	For contributions to computational biology including algorithms in cancer genomics/evolution and biological network analysis
Dana Ron <i>Tel Aviv University</i>	For contributions to sub-linear time approximation algorithms
Tim Roughgarden <i>Columbia University</i>	For contributions to algorithmic game theory
David Sankoff <i>University of Ottawa</i>	For contributions to research and leadership in computational biology and bioinformatics
Stefan Saroiu <i>Microsoft</i>	For contributions to memory security and trusted computing

Albrecht Schmidt <i>Ludwig Maximilian University of Munich</i>	For contributions to human-computer interaction, ubiquitous computing and implicit interaction, and leadership in ACM SIGCHI
Björn W. Schuller <i>Imperial College London, Technical University of Munich</i>	For empirical and theoretical contributions to the development of computer audition, affective computing, and health informatics
Phoebe Sengers <i>Cornell University</i>	For contributions to critically-informed human-computer interaction and design.
Elaine Shi <i>Carnegie Mellon University</i>	For contributions to the scientific foundation of oblivious computation and decentralized blockchains
Noah Snavely <i>Cornell Tech, Google</i>	For contributions to computer vision and computer graphics
Ram D. Sriram <i>NIST</i>	For contributions in building innovative computational tools and automation techniques in engineering and health care
Steffen Staab <i>University of Stuttgart, University of Southampton</i>	For contributions to semantic technologies and web science, and distinguished service to the ACM community
Alexander Szalay <i>The Johns Hopkins University</i>	For contributions in systems, big data, open data, and for service to the community
Manik Varma <i>Microsoft Research India</i>	For contributions to machine learning and its applications
XiaoFeng Wang <i>Indiana University at Bloomington</i>	For contributions to systems security and privacy
Kilian Weinberger <i>Cornell University</i>	For contribution to machine learning and deep learning research
Emmett Witchel <i>The University of Texas at Austin</i>	For contributions to high-performance, concurrent, and secure systems
Xing Xie <i>Microsoft Research Asia</i>	For contributions to spatial data mining and recommendation systems

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 Recognition Program

The [ACM Fellows](#) program, initiated in 1993, celebrates the exceptional contributions of the leading members in the computing field. To be selected as an ACM Fellow, a candidate's accomplishments are expected to place him or her among the top 1% of ACM members. These individuals have helped to enlighten researchers, developers, practitioners, and end users of information technology throughout the world. The [ACM Distinguished Member](#) program, initiated in 2006, recognizes those members with at least 15 years of professional experience who have made significant accomplishments or achieved a significant impact on the computing field. ACM Distinguished Membership recognizes up to 10% of ACM's top members. The [ACM Senior Member](#) program, also initiated in 2006, includes members with at least 10 years of professional experience who have demonstrated performance that sets them apart from their peers through technical leadership, technical contributions, and professional contributions. ACM Senior Member status recognizes the top 25% of ACM Professional Members. The new ACM Fellows, Distinguished Members, and Senior Members join a list of eminent colleagues to whom ACM and its members look for guidance and leadership in computing and information technology.

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