

# ACM

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Association for  
Computing Machinery

*Advancing Computing as a Science & Profession*

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# ACM Awards Reception & Banquet



*The Westin St. Francis  
San Francisco, California  
June 24, 2017*



2016 ACM A.M. Turing Award  
(left to right) Vicki L. Hanson, ACM President, Andrei Broder, Google Distinguished Scientist, and 2016 ACM A.M. Turing Award recipient, Sir Tim Berners-Lee.

2016 ACM Prize in Computing  
(left to right) Vicki L. Hanson, ACM President, Navin Budhiraja, Infosys Chief Technology Officer, and Alexei A. Efros, 2016 ACM Prize in Computing recipient



# ACM AWARDS



## *Introduction*

ACM, the Association for Computing Machinery, is the world's largest educational and scientific computing society. ACM's overarching goal is to advance computing as a science and a profession. A very important part of this goal is to recognize outstanding technical and professional achievements in computing and computer science through our series of awards.

ACM's awards celebrate our long tradition of honoring those whose contributions have impacted our world for the better in countless ways. These prestigious and internationally recognized honors are an integral part of ACM's mission to unite computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges.

ACM welcomes nominations for candidates whose work exemplifies the best and most influential contributions to our community, and society at large. More information on nominating candidates for future awards is available on page 29 in this booklet.

The awards included in this overview are being presented at the 2018 ACM Awards Banquet on June 23, 2018, at the Palace Hotel in San Francisco, California.

More information on ACM's Awards Programs can be found at <http://awards.acm.org>, including links to the full award citations and a downloadable version of this booklet.

## *A.M. Turing Award*



**John L. Hennessy**  
Stanford University



**David A. Patterson**  
University of California, Berkeley



The A.M. Turing Award is presented to John L. Hennessy and David A. Patterson for pioneering a systematic, quantitative approach to the design and evaluation of computer architectures with enduring impact on the microprocessor industry.

Hennessy and Patterson created a systematic and quantitative approach to designing faster, lower power, and reduced instruction set computer (RISC) microprocessors. Their approach led to lasting and repeatable principles that generations of architects have used for many projects in academia and industry. Today, 99% of the more than 16 billion microprocessors produced annually are RISC processors, and are found in nearly all smartphones, tablets, and the billions of embedded devices that comprise the Internet of Things (IoT).

Hennessy and Patterson codified their insights in a very influential book, *Computer Architecture: A Quantitative Approach*, now in its sixth edition, reaching generations of engineers and scientists who have adopted and further developed their ideas. Their work underpins our ability to model and analyze the architectures of new processors, greatly accelerating advances in microprocessor design.

This award celebrates the work of one of the founding fathers of modern computer science – Alan Mathison Turing (1912-1954). In a 1936 paper, Turing introduced a precise definition of a computational machine (now called a Turing Machine). He is perhaps best known for his contributions during World War II in cracking the Enigma code. After the war, he worked on early British computers at the National Physical Laboratory and Manchester University. He later studied problems key to Artificial Intelligence

Accompanied by a prize of \$1,000,000, ACM's most prestigious award is given to recognize contributions of a technical nature which are of lasting and major technical importance to the computing field. Financial support of the A.M. Turing Award is provided by Google Inc.

## *ACM Prize in Computing*



**Dina Katabi**  
Massachusetts Institute of Technology



The ACM Prize in Computing is presented to Dina Katabi for creative contributions to wireless networking. Recognized as one of the most innovative researchers in the field of networking, Katabi applies methods from communication theory, signal processing and machine learning to solve problems in wireless networking.

Among her contributions, she is cited for co-authoring several highly influential papers on overcoming interference in wireless networks to improve the flow of data traffic. And in inventing a device that seems to be lifted out of the pages of science fiction, she and her team pioneered the use of the wireless signals in the environment to sense humans behind walls, determine their movements and even surmise their emotional states. These trailblazing human-sensing technologies hold out promise for use in several applications of daily life including helping the house-bound elderly, and-perhaps determining survivors within buildings during search and rescue operations.

Katabi, along with MIT colleague Piotr Indyk and students, developed a new algorithm, the Sparse Fast Fourier Transform (SFFT) that processes data 10 to 100 times faster than previous methods.

The ACM Prize in Computing recognizes an early to mid-career fundamental innovative contribution in computing that, through its depth, impact and broad implications, exemplifies the greatest achievements in the discipline.

The award carries a prize of \$250,000. Financial support is provided by Infosys. The ACM Prize in Computing was previously known as the ACM-Infosys Foundation Award in the Computing Sciences from 2007 through 2015.

## ACM – AAAI Allen Newell Award



**Margaret A. Boden**  
University of Sussex



The ACM-AAAI Allen Newell Award is presented to Margaret A. Boden for contributions to the philosophy and historiography of cognitive science and artificial intelligence, particularly in the study of human creativity.

For four decades, Boden has been one of the world's premiere thought leaders on the intersection of artificial intelligence, cognitive science and the humanities. Through insightful analyses, she was often the first to reveal surprising connections among disciplines, which she then outlined in a series of highly influential books. In two classic books—*Artificial Intelligence and Natural Man* (1977) and *The Creative Mind* (1990)—she introduced the idea of creative cognition, which inspired a generation of researchers and laid the foundation of computational creativity as a new subfield of artificial intelligence.

Boden's two-volume *Mind as Machine: A History of Cognitive Science* (2006) is a comprehensive survey of interdisciplinary work at the intersection of cognitive science and computation that highlights work in neuroscience, philosophy, biology, psychology linguistics and computation. Her most recent book *AI, Its Nature and Future* (2016) was described by Nature magazine as "a masterclass."

The award is named for Allen Newell (1927-1992), a trailblazer in computer science research and education, and a founder of the artificial intelligence and cognitive science fields. A pivotal force in creating Carnegie Mellon's School of Computer Science, he co-authored *Human problem Solving* with Nobel Laureate Herbert Simon in 1972. Both were recipients of ACM's 1975 A.M. Turing Award.

The Newell Award is presented to individuals selected for career contributions that have breadth within computer science, or that bridge computer science and other disciplines. It is accompanied by a \$10,000 prize provided by ACM and the Association for the Advancement of Artificial Intelligence (AAAI), and by individual contributions.

## Software System Award

### Project Jupyter



**Fernando Pérez, Brian E. Granger, Min Ragan-Kelley, Paul Ivanov, Thomas Kluyver  
Jason Grout, Matthias Bussonier, Damián Avila, Steven Silvester, Jonathan Frederic  
Kyle Kelley, Jessica Hamrick, Carol Willing, Sylvain Corlay, Peter Parente**



The ACM Software System Award is presented to original members of the Project Jupyter Steering Council, for Project Jupyter, a broad collaboration that develops open source tools for interactive computing, with a language-agnostic design. These tools, which include IPython, the Jupyter Notebook and JupyterHub, have become a de facto standard for data analysis in research, education, journalism and industry. Jupyter has broad impact across domains and use cases. Today more than 2,000,000 Jupyter notebooks are on GitHub, each a distinct instance of a Jupyter application—covering a range of uses from technical documentation to course materials, books and academic publications.

Jupyter has also gained wide industry adoption. Since 2015, Jupyter-based products have been released by several companies including Google (Cloud DataLab), Microsoft (AzureML, HDInsight), Intel (Trusted Analytics Platform), and IBM (IBM Watson Studio). Bloomberg and Anaconda Inc. have partnered with Project Jupyter to develop the next-generation web interface, JupyterLab.

The Software System Award is presented to an institution or individuals recognized for developing a software system that has had a lasting influence, reflected in contributions to concepts, in commercial acceptance, or both. A prize of \$35,000 accompanies the award with financial support provided by IBM.

## Grace Murray Hopper Award



**Amanda Randles**  
Duke University



The Grace Murray Hopper Award is presented to Amanda Randles for developing HARVEY, a massively parallel circulatory simulation code capable of modeling the full human arterial system at subcellular resolution and fostering discoveries that will serve as a basis for improving the diagnosis, prevention, and treatment of human diseases.

A focus of Randles's research has been in developing and applying high performance computing to biomedical problems. With HARVEY, she combined her knowledge of applied physics, computational methods and parallel computing to develop a physiologically accurate model of the movement of red blood cells throughout the body. The simulation mapped 500 billion fluid points using a supercomputer with 1.6 million cores (individual processors). HARVEY marked the first time a researcher had been able to effectively model the flow of blood at the cellular level. Randles is presently working with collaborators at the Dana Farber Cancer Institute and Harvard Medical School to extend the use of HARVEY to cancer biology and cardiovascular treatment planning.

Randles's cross-disciplinary approach has helped to bridge the gap between the computer and the clinic—translating computational results into actionable data physicians can use to improve patient outcomes.

The award is named for Grace Murray Hopper (1906-1992), a pioneer in software development. Her work spanned programming languages, software development concepts, compiler validation, and data processing. Admiral Hopper's early recognition of the potential for commercial applications of computers, and her leadership in making this vision a reality paved the way for modern data processing.

The Grace Murray Hopper Award is presented to the outstanding young computer professional of the year, selected on the basis of a single recent major technical or service contribution. The candidate must have been 35 years of age or less at the time the qualifying contribution was made. A prize of \$35,000 accompanies the award. Financial support for the Grace Murray Hopper Award is provided by Microsoft.

## Paris Kanellakis Theory and Practice Award



**Scott Shenker**  
University of California, Berkeley



The Paris Kanellakis Theory and Practice Award is presented to Scott Shenker for pioneering contributions to fair queueing in packet-switching networks, which had a major impact on modern practice in computer communication.

Shenker's work was fundamental to helping the internet grow from a tool used by a small community of researchers, to a staple of daily life that is used by billions of people. Since the internet was introduced, demand has grown for the ability of computer networks to transmit voice and data simultaneously. Shenker was the first to develop the first practical fair queueing algorithm for packet-switching networks, which provided equitable access to transmission bandwidth for different grades of service quality. Many of the commercial routers that make up the internet today use Shenker's algorithms.

Shenker also developed a mathematical tool for rigorous network research, and introduced ideas for implementing "guaranteed" real-time services such as voice, video streaming and multicasts. Recently, Shenker has been involved in positing how to redesign the internet from the ground up. Software-defined networking (SDN) and software-defined internet architecture (SDIA) are key ideas he developed as part of these inquiries. Researchers consider SDN and SDIA invaluable concepts for mapping out how to most effectively maintain and expand the internet in the coming years.

The award is named for Paris Christos Kanellakis (1953-1995), who, as a distinguished computer science theoretician and esteemed faculty member of Brown University, focused much of his work in the area of theoretical computer science, particularly the principles of database systems and logic. His contributions were exceptional both in the breadth of his interests and his ability to carve out research programs in which his keen mathematical insight could be put at the service of practical issues.

The Paris Kanellakis Theory and Practice Award honors specific theoretical accomplishments that have had a significant and demonstrable effect on the practice of computing. This award is accompanied by a prize of \$10,000 and is endowed by contributions from the Kanellakis family, and financial support by ACM's SIGACT, SIGDA, SIGMOD, SIGPLAN, the ACM SIG Project Fund, and individual contributions.

## *Karl V. Karlstrom Outstanding Educator Award*



**Judith Gal-Ezer**  
The Open University of Israel



The Karl V. Karlstrom Award is presented to Judith Gal-Ezer for her central role in developing a groundbreaking high-school computer-science curriculum, her outstanding computer science education research, and her extensive service to the education community

In 1995 Gal-Ezer, who is currently a professor emerita at The Open University of Israel, led the development of a bold new CS curriculum for Israeli high school students. Her reimagined approach moved away from conventional pedagogies, which prioritized coding, to emphasizing the underlying ideas of computer science. Gal-Ezer's framework was such a success at engaging students that many other countries used it as a model as they revised or introduced their own CS curricula.

Her seminal works include her 1998 paper "What (Else) Should CS Educators Know," co-authored with David Harel. Gal-Ezer has also been active in developing curricula at the university level. From 1985 onward, she played a prominent role in setting up computer science programs at OUI.

Outside Israel, Gal-Ezer has been an indispensable collaborator for several major organizations that advance CS education. She has been a member of key CS education journal editorial boards, served on the Computer Science Teachers Association's (CSTA) Advisory Council, and more recently, joined the Committee on European Computing Education (CECE, a group consisting of members from the ACM Europe Council and Informatics Europe) and Google's education advisory council.

The Karlstrom Award is presented annually to an outstanding educator who is appointed to a recognized educational baccalaureate institution; recognized for advancing new teaching methodologies; effecting new curriculum development or expansion in computer science and engineering; or making a significant contribution to ACM's educational mission. Those teachers with ten years or less experience are given special consideration. The Karlstrom Award is accompanied by a prize of \$10,000. Financial support is provided by Pearson Education.

## *ACM Policy Award*



**William A. Wulf**  
University of Virginia



The ACM Policy Award is presented to William A. Wulf for broad contributions bringing computing into the national agenda, leading computer scientists into public policy where his inspirational leadership promoted key national priorities including diversity and ethics.

A highlight of Wulf's tenure as Director of the National Science Foundation (NSF) Computer & Information Science & Engineering (CISE) division (1988-1990) was overseeing the merger and conversion of the ARPANet, an early packet-switching network with/to NREN, an early network that supported the research and education communities. This merger, as well as efforts by Wulf and others to work with Congress to craft legislation, led to the publicly accessible internet.

As the Chair of National Research Council (NRC) Computer Science and Telecommunications Board (1992-96), Wulf managed the development of several landmark reports including "Computing the Future: A Broader Agenda for Computer Science and Engineering," and "Evolving the High Performance Computing and Communications Initiative," among many others.

While at the National Academy of Engineering (NAE), Wulf became known as the "Education President." He established NAE's first Standing Committee on Engineering Education and spearheaded NAE's technical literacy movement. Two reports: "The Engineer of 2020" and "Educating the Engineer of 2020" were especially well-received and fostered broad consensus among NAE's membership. Wulf was also recognized for his efforts in championing ethics and greater diversity in the engineering profession during his term at NAE.

The ACM Policy Award recognizes an individual or small group that had a significant positive impact on the formation or execution of public policy affecting computing or the computing community. This can be for education, service, or leadership in a technology position; for establishing an innovative program in policy education or advice; for building the community or community resources in technology policy; or other notable policy activity. The biennial award is accompanied by a \$10,000 prize.

## *Distinguished Service Award*



**Janice E. Cuny**  
National Science Foundation



The Distinguished Service Award is presented to Jan Cuny for the establishment and tireless promotion of projects and resulting organizations that have nationally transformed CS education by increasing and diversifying access to high quality CS education.

When she joined the US National Science Foundation (NSF) in 2004, Cuny initiated the Broadening Participation in Computing Program (BPC), which seeded a number of Alliances—large-scale efforts that are continuing to work at the national level to increase diversity in the computing field.

Cuny also worked with the College Board to develop AP CS Principles, a new national Advanced Placement (AP) computer science course and exam designed to attract traditionally underrepresented groups to computing. AP Computer Science Principles was launched in the 2016-2017 academic year. More than 2,500 schools offered the course and more than 50,000 students took the exam—the biggest launch in the AP's history.

To facilitate more computer science education throughout the US K-12 educational system, Cuny launched an effort to catalyze a movement to add 10,000 new well-trained CS teachers throughout the country in 10 years. This ambitious professional development effort was dubbed "CS10K."

The Distinguished Service Award is given on the basis of value and degree of service to the computing community. The contributions are not limited to service to the Association, and should include activities in other computer organizations and should emphasize contributions to the computing community at large.

## *ACM Athena Lecturer Award*



**Andrea Goldsmith**  
Stanford University



The ACM Athena Lecturer Award is presented to Andrea Goldsmith for contributions to the theory and practice of adaptive wireless communications and sustained translation of theoretic results into commercial technologies and industry standards.

Goldsmith introduced innovative approaches to the design, analysis and fundamental performance limits of wireless systems and networks. Her efforts helped develop technologies used in long-term evolution (LTE) cellular devices as well as the Wi-Fi standards that are used in wireless local area networks.

Beginning in the early 1990s, Goldsmith developed several fundamental capacity results for wireless systems. These contributions increased data rates and extended range while lessening the impact of ongoing challenges in wireless communications including co-channel interference, poor reception, and outages.

She also proposed techniques, including design of modulation and coding scheme (MCS) tables and quadrature amplitude modulation (MQAM and code) indexed by signal noise radio (SNR) bands, that are used in a variety of wireless systems including EDGE, Wi-Fi and 3GPP/LTE.

In 2008, as CTO of Quantenna Communications, Goldsmith led the development of the world's first 4x4 adaptive MIMO 802.11n Wi-Fi chipset. Compared with other Wi-Fi products on the market, the Quantenna chipset provided better data rates, coverage and reliability and was especially effective for wireless distribution of multiple HD video streams.

The ACM Athena Lecturer Award recognition celebrates women researchers who have made fundamental contributions to computer science. The ACM-W Council, which organized the Athena Lecturer project to honor a preeminent woman computer scientist, chose to identify the honoree with the Greek goddess of wisdom, who, with her sense of purpose and willingness to enter the fray, epitomizes the strength, determination, and intelligence of the Athena Lecturers. The award includes a \$25,000 honorarium provided by Google. From 2006 to 2016 this Award was known as the ACM-W Athena Lecturer Award.



## Outstanding Contribution to ACM Award



**Steve Bourne**  
Rally Ventures



The Outstanding Contribution to ACM Award is presented to Steve Bourne for significant contributions to ACM, particularly for reaching out to practitioners through the development of the Practitioner Board and *ACM Queue*, and for his support of students worldwide through his engagement with, and support of, the ACM International Collegiate Programming Contest.

During his tenure as President of ACM (2000-2002), Bourne instituted and fostered projects to interest and support practicing professionals, and his involvement in these programs continues to this day. A centerpiece of these efforts was the launch of *ACM Queue*, a first-of-its kind magazine for practicing software engineers. In enlisting and guiding the magazine's first editorial board, Bourne envisioned a publication that would not simply chronicle industry news, but rather provide software engineers with insights into coming challenges in the field and changes that lie just ahead. Fifteen years after its first issue, *ACM Queue* remains popular as an online magazine and mobile app.

Bourne also broadened ACM's appeal to professionals by initiating and developing the ACM Practitioners Board. The board meets regularly to ensure that ACM continues to offer products and services that support and enhance the professional and technical development of ACM members.

Another of Bourne's contributions to ACM has been his active participation since 2001 in the ACM-operated International Collegiate Programming Contest (ICPC). Now in its 42nd year, ICPC counts more than 320,000 alumni.

The Outstanding Contribution to ACM Award recognizes outstanding service contributions to the Association. Candidates are selected based on the value and degree of service overall, and up to three individuals may be awarded each year.

## ACM Presidential Award

The ACM Presidential Award is given to leaders in computing whose actions and achievements serve as paragons for the field. Recipients have demonstrated their exceptional abilities to advance the discipline of computing through generosity, creativity, and dedication to their respective missions.



**Donald Gotterbarn**  
East Tennessee State University



The ACM Presidential Award is presented to Donald Gotterbarn in grateful appreciation of 25 years of outstanding service as chief architect for ACM's Code of Professional Ethics, a living document adopted by the computing community worldwide as the blueprint for professional conduct in the field.

Gotterbarn has served to define what it means, ethically, to be a computing professional. He was a forerunner in recognizing the critical importance of professional ethics and has worked tirelessly, as an educator and practitioner, to advance this message to a global audience through the development of computer ethics curriculum, leading workshops, and serving as chair of ACM's Committee on Professional Ethics. Throughout the creation of the original code, and now its revision, Gotterbarn has insisted on engaging the computing community, seeking guidance and feedback in the code's design and direction, always appreciating that the cause—and the code—is only as strong as its supporters.

## *ACM Presidential Award*



**Andrew McGettrick**  
Strathclyde University



The ACM Presidential Award is presented to Andrew McGettrick in recognition of his unwavering commitment to computer science education—particularly in terms of its quality, breadth, and access—for generations of students worldwide.

McGettrick served as chair of ACM's Education Board and Education Council for over 15 years, leaving an indelible imprint as a passionate advocate for equipping computer science students with the knowledge, skills and tools to succeed in the field. During his tenure he steered the development of key curricula in computer science and software engineering.

In recent years, McGettrick has played an instrumental role in drawing European educational efforts and European professional societies to the table through his work with ACM's Europe Council and Informatics Europe. McGettrick was one of the leading forces behind the Informatics for All initiative, an acclaimed report that explores strategies for informatics education in Europe at all levels.

## *ACM Presidential Award*



**Fabrizio Gagliardi**  
Barcelona Supercomputing Center



The ACM Presidential Award is presented to Fabrizio Gagliardi in appreciation of his selfless dedication to ACM, ensuring the organization's activities, services, and influence extend throughout the European continent.

Gagliardi is honored here for his tireless efforts as the spirit behind ACM's public policy arm in Europe, EUACM, having served as its chair since 2013. Gagliardi is a practical visionary, who realized if ACM is to inform technology policy in Europe it must have a formidable, and local, presence. The work of EUACM under Gagliardi's leadership has made a lasting impression in short order, forging dialogues about computing with members of the European Commission as well as spearheading public policy statements on cybersecurity and CS education.

He was a guiding force behind two recent panels featuring ACM and EU Commission representatives, considering issues of computing instruction and automated decision making.

## Doctoral Dissertation Award



**Aviad Rubinstein**

Harvard Post-doc/Stanford University (Fall 2018)



The Doctoral Dissertation Award is presented to Aviad Rubinstein, Stanford University, for his dissertation, *Hardness of Approximation Between P and NP*, nominated by the University of California, Berkeley.



**Mohsen Ghaffari**

ETH Zurich



**Stefanie Mueller**

Massachusetts Institute of Technology

Honorable Mentions for the Doctoral Dissertation Award are presented to: Mohsen Ghaffari, ETH Zurich, for his dissertation, *Improved Distributed Algorithms for Fundamental Graph Problems*, nominated by the Massachusetts Institute of Technology; and Stefanie Mueller, Massachusetts Institute of Technology, for her dissertation, *Interacting with Personal Fabrication Devices*, nominated by the Hasso Plattner Institute.

The Doctoral Dissertation Award is presented annually to the author(s) of the best doctoral dissertation(s) in computer science and engineering. The Doctoral Dissertation Award is accompanied by a prize of \$20,000 and the Honorable Mention Award is accompanied by a prize totaling \$10,000. Financial sponsorship of the award is provided by Google, Inc. Winning dissertations will be published in the ACM Digital Library as part of the ACM Books Series.

## ACM Student Research Competition



The ACM Student Research Competition (SRC) represents a unique forum for ACM undergraduate and graduate student members to present their original research. Student winners from the SIGACCESS, SIGARCH, SIGCHI, SIGCOMM, SIGCSE, SIGDA, SIGDOC, SIGGRAPH, SIGHPC, SIGMOBILE, SIGMOD, SIGPLAN, SIGSAC, SIGSOFT, SIGSPATIAL Student Research Competitions held at these conferences advanced to compete in the Grand Finals where their research contributions were evaluated, via the web, by the ACM SRC committee members. Financial sponsorship of \$120,000 is provided by Microsoft per competition year for the ACM Student Research Competition. The finalists honored represent the best student research of the past year.

The recipients of the ACM Grand Finals are listed below.

### Undergraduate Category

1st Place: Tiancheng Sun  
University of California, San Diego  
GRAPH 17

2nd Place: Patrick Thier  
Institut fur Computersprachen Technische Universitat Wien  
CGO 18

3rd Place: Ayush Kohli  
Southern Illinois University  
FSE 17

### Graduate Category

1st Place: Meng Li  
University of Texas, Austin  
ICCAD 17

2nd Place: Jon Gjengset  
Massachusetts Institute of Technology  
SOSP 17

3rd Place: Daniel George  
University of Illinois  
SC 17

## ACM Fellows



The ACM Fellows Program was established by Council in 1993 to recognize and honor outstanding ACM members for their achievements in computer science and information technology and for their significant contributions to the mission of the ACM. The ACM Fellows serve as distinguished colleagues to whom the ACM and its members look for guidance and leadership as the world of information technology evolves. The 2017 Fellows are listed below. A complete listing is on pages 37-43, and [awards.acm.org/fellows](http://awards.acm.org/fellows).

**Lars Birkedal**, Aarhus University  
**Edouard Bugnion**, EPFL  
**Margaret Burnett**, Oregon State University  
**Shih-Fu Chang**, Columbia University  
**Edith Cohen**, Google Research  
**Dorin Comaniciu**, Siemens Healthcare  
**Susan M. Dray**, Dray & Associates  
**Edward A. Fox**, Virginia Tech  
**Richard M. Fujimoto**, Georgia Institute of Technology  
**Shafi Goldwasser**, Massachusetts Institute of Technology  
**Carla P. Gomes**, Cornell University  
**Martin Grohe**, RWTH Aachen University  
**Aarti Gupta**, Princeton University  
**Venkatesan Guruswami**, Carnegie Mellon University  
**Dan Gusfield**, University of California, Davis  
**Gregory D. Hager**, Johns Hopkins University  
**Steven Michael Hand**, Google  
**Mor Harchol-Balter**, Carnegie Mellon University  
**Laxmikant Kale**, University of Illinois at Urbana-Champaign  
**Michael Kass**, NVIDIA  
**Angelos Dennis Keromytis**, DARPA  
**Carl Kesselman**, University of Southern California  
**Edward Knightly**, Rice University  
**Craig Knoblock**, University of Southern California  
**Insup Lee**, University of Pennsylvania  
**Wenke Lee**, Georgia Institute of Technology  
**Li Erran Li**, Pony.ai  
**Gabriel H. Loh**, Advanced Micro Devices, Inc.  
**Tomás Lozano-Pérez**, Massachusetts Institute of Technology  
**Clifford A. Lynch**, Coalition for Networked Information  
**Yi Ma**, University of California, Berkeley

**Andrew K. McCallum**, University of Massachusetts, Amherst  
**Silvio Micali**, Massachusetts Institute of Technology  
**Andreas Moshovos**, University of Toronto  
**Gail C. Murphy**, The University of British Columbia  
**Onur Mutlu**, ETH Zurich  
**Nuria Oliver**, Vodaphone/Data-Pop Alliance  
**Balaji Prabhakar**, Stanford University  
**Tal Rabin**, IBM Research  
**K. K. Ramakrishnan**, University of California Riverside  
**Ravi Ramamoorthi**, University of California San Diego  
**Yvonne Rogers**, University College London  
**Yong Rui**, Lenovo Group  
**Bernhard Schölkopf**, Max Planck Institute for Intelligent Systems  
**Steven M. Seitz**, University of Washington, Seattle  
**Michael Sipser**, Massachusetts Institute of Technology  
**Anand Sivasubramaniam**, Penn State University  
**Mani B. Srivastava**, University of California, Los Angeles  
**Alexander Vardy**, University of California San Diego  
**Geoffrey M. Voelker**, University of California San Diego  
**Martin D. F. Wong**, University of Illinois at Urbana-Champaign  
**Qiang Yang**, Hong Kong University of Science and Technology  
**ChengXiang Zhai**, University of Illinois at Urbana-Champaign  
**Aidong Zhang**, State University of New York at Buffalo

## Additional ACM Awards

### *Eugene L. Lawler Award for Humanitarian Contributions within Computer Science and Informatics*



Eugene L. Lawler (1933-94), one of the founders of combinatorial optimization, also made significant contributions to algorithmic graph theory, complexity theory, and computational biology. In addition, he encouraged efforts at the University of California at Berkeley to establish the Reentry Program for Women and Minorities, and was the first faculty advisor and effective advocate of this program.

The Lawler Award recognizes an individual or a group who have made a significant humanitarian contribution through the use of computing technology. This biennial endowed award is accompanied by a prize of \$5,000 and will next be presented in 2019.

### *ACM Gordon Bell Prize*



A 12-member Chinese team received the 2017 ACM Gordon Bell Prize for their research project, "18.9-Pflops Nonlinear Earthquake Simulation on Sunway TaihuLight: Enabling Depiction of 18-Hz and 8-Meter Scenarios." Using the Sunway TaihuLight, which is ranked as the world's fastest supercomputer, the team developed software that was able to efficiently process 18.9 Pflops (or 18.9 quadrillion calculations per second) of data and create 3D visualizations relating to a devastating earthquake that occurred in Tangshan, China in 1976. The team's software included innovations that achieved greater efficiency than had been previously attained running similar programs on the Titan and TaihuLight supercomputers.

Winning team members include Haohuan Fu, Tsinghua University and National Supercomputing Center, Wuxi, China; Conghui He, Tsinghua University and National Supercomputing Center, Wuxi, China; Bingwei Chen, Tsinghua University and National Supercomputing Center, Wuxi, China; Zekun Yin, Shandong University; Zhenguo Zhang, Southern University of Science and Technology, China; Wenqiang Zhang, University of Science and Technology of China; Tingjian Zhang, Shandong University; Wei Xue, Tsinghua University and National Supercomputing Center, Wuxi, China; Weiguo Liu, Shandong University; Wanwang Yin, National Research Center of Parallel Computer Engineering and Technology, China; Guangwen Yang, Tsinghua University and National Supercomputing Center, Wuxi, China; and Xiaofei Chen, Southern University of Science and Technology, China.

The Gordon Bell Prizes recognize outstanding achievement in high-performance computing. The purpose is to track the progress of parallel computing, with particular emphasis on rewarding innovation in applying high-performance computing to applications in science. The awards, presented during SC, include \$10,000 in prize money. The prize is endowed by Gordon Bell, a pioneer in high-performance and parallel computing, and was presented at SC'17 in Denver, Colorado.

## *ACM – IEEE CS Eckert-Mauchly Award*



Susan Eggers, a Professor Emerita at the University of Washington, was presented with the 2018 ACM IEEE CS Eckert-Mauchly Award. She was selected for outstanding contributions to simultaneous multithreaded processor architectures and multiprocessor sharing and coherency.

The presentation took place at the 45th International Symposium on Computer Architecture (ISCA'18) June 2-6, 2018 in Los Angeles.

Administered jointly by ACM and IEEE Computer Society, an award of \$5,000 is given for contributions to computer and digital systems architecture, where the field of computer architecture encompasses hardware-software design and analysis of computing and digital systems.

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## *ACM – IEEE CS Ken Kennedy Award*



Jesús Labarta, Barcelona Supercomputing Center, received the 2017 ACM-IEEE CS Ken Kennedy Award for his contributions to programming models and performance analysis tools for High Performance Computing. The award was presented in November 2017 at SC17 in Denver, Colorado.

The award honors the substantial research, service, and mentoring contributions of Ken Kennedy (1945-2007), the founder of Rice University's computer science program who was one of the world's foremost experts on high-performance computing.

The Kennedy Award recognizes substantial contributions to programmability and productivity in computing and substantial community service or mentoring contributions and includes a \$5,000 honorarium. The recipient is invited to give a presentation at an ACM or IEEE conference of the winner's choosing in the year following the announcement.

## *ACM – IEEE CS George Michael Memorial HPC Fellowships*



The George Michael Memorial HPC Fellowships were presented to Shaden Smith, University of Minnesota, "for his work on efficient and parallel large-scale sparse tensor factorization for machine learning applications," and Yang You, University of California, Berkeley, "for his work on designing accurate, fast, and scalable machine learning algorithms on distributed systems."

Endowed in memory of George Michael, one of the founding fathers of the SC Conference series, the ACM – IEEE CS George Michael Memorial Fellowships honor exceptional Ph.D. students throughout the world whose research focus areas are in high-performance computing, networking, storage, and large-scale data analysis. ACM, the IEEE Computer Society, and the SC Conference support this award.

Fellowship recipients are selected each year based on overall potential for research excellence, the degree to which technical interests align with those of the HPC community, academic progress to date, recommendations by their advisor and others, and a demonstration of current and anticipated use of HPC resources. The Fellowship includes a \$5,000 honorarium, plus travel and registration to receive the award at the annual SC conference. Smith and You were formally recognized at SC'17 in Denver, Colorado in November 2017.

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## *The SIAM – ACM Prize in Computational Science and Engineering*



This biennial endowed award recognizes individuals for outstanding research contributions to the field of computational science and engineering. Their contributions must be publicly available and may belong to any aspect of computational science in its broadest sense. The award includes a certificate and \$5,000 prize. Financial sponsorship is provided by SIAM. The next award will be presented in 2019.

## ACM/CSTA Cutler Bell Prize in High School Computing

**Sreya Guha**

Castilleja School (CA)

**Amy Jin**

The Harker School (CA)

**Amir Helmy**

Eastside High School (FL)

**Benjamin Spector & Michael Truell**

Horace Mann School (NY)



This year's Cutler-Bell Prize recipients will be formally recognized at the Computer Science Teachers Association's annual conference which takes place July 7-10, 2018, in Omaha, Nebraska.

The Prize, bestowed by ACM and CSTA (Computer Science Teachers Association), recognizes computer science talent in high school students. The intent of the program is to promote the field of computer science as well as to empower young and aspiring learners to pursue computing challenges outside of the traditional classroom environment. The award was established by David Cutler and Gordon Bell and includes a \$10,000 scholarship for each selected student. The award is financially supported by an endowment from the Gordon Bell and David Cutler Endowment Fund.

## ACM India Doctoral Dissertation Award



**Palash Dey**  
IISc Bangalore



**Manoj Agarwal**  
IIT Bombay



**Swagato Sanyal**  
Tata Institute, Bombay



The ACM India Doctoral Dissertation Award is presented to Palash Dey, for his dissertation, *Resolving the Complexity of Some Fundamental Problems in Computational Social Choice*, nominated by the Indian Institute of Science (IISc), Bangalore.

Honorable Mention for the ACM India Doctoral Dissertation Award is presented to: Manoj Agarwal, for his dissertation, *Data as Graph: Discovery, Search, Retrieval*, nominated by the Indian Institute of Technology Bombay; and Swagato Sanyal, for his dissertation, *Complexity Measures of Boolean Functions: Fourier Sparsity, Fourier Dimension and Query Complexity*, nominated by the Tata Institute of Fundamental Research Mumbai.

The ACM India Doctoral Dissertation Award recognizes the best doctoral dissertation from a degree-awarding institution based in India, and is accompanied by a prize of ₹200,000. The winning dissertation will be published in the ACM Digital Library. This award is additionally supported by the Tata Consultancy Services.

## ACM China Doctoral Dissertation Award



**Chao Wu**  
Tsinghua University



**Xiaodan Liang**  
Sun Yat-Sen  
University

The ACM China Doctoral Dissertation Award is presented to Chao Wu and Xiaodan Liang.

The ACM China Doctoral Dissertation Award recognizes the best doctoral dissertation(s) in computer science and engineering from a degree-awarding institution based in China, for the purpose of encouraging dedicated research and academic achievement. The award, accompanied by a prize of ¥10,000, will be presented at the ACM China Annual Meeting, held each October.

## ACM China Rising Star Award



**Xiaohua Tian**  
Shanghai Jiaotong  
University



**Ju Fan**  
Renmin University  
of China

The ACM China Rising Star Award is presented to Xiaohua Tian and Ju Fan.

The China Rising Star Award is given annually to recognize rising stars in the Chinese computing community who demonstrate outstanding potential for research in the field of computing. The selection is based on the impact of the candidate's work in the field in creating promising new ideas, paradigms, and novel systems which are related to computer or communications systems, which may be analytical, empirical or experimental in nature. Winners will receive a prize of ¥10,000.

## IPSJ/ACM Award for Early Career Contributions to Global Research



**Yasuko Matsubara**  
Kumamoto University

The IPSJ/ACM Award for Early Career Contributions to Global Research is presented to Yasuko Matsubara, Kumamoto University, "for research on analysis of time-series data and nonlinear dynamic systems."

The IPSJ/ACM Award for Early Career Contributions to Global Research recognizes technical achievement by an early to mid-career researcher (10 years or less after receiving his/her doctoral degree). The contributions should be through an international collaboration or a collaboration for which there is reasonable expectation of future international collaboration.

## ACM Special Interest Group Awards



Additional information, including descriptions of the SIG Awards, nomination procedures, where the award is presented, and any prizes attached to the award, is available at [awards.acm.org/sig-awards](http://awards.acm.org/sig-awards).

### **SIGACCESS - Accessibility and Computers**

- ◆ ASSETS Paper Impact Award
- ◆ Best Paper Award
- ◆ Best Student Paper Award
- ◆ Outstanding Contributions to Computing and Accessibility

### **SIGACT - Algorithms and Computation Theory**

- ◆ Gödel Prize
- ◆ Knuth Prize for Outstanding Contributions to the Foundations of Computer Science Service Prize
- ◆ Danny Lewin Best Student Paper Award
- ◆ SIGACT/SIGOPS Edsger W. Dijkstra Prize in Distributed Computing
- ◆ Distinguished Service Award

### **SIGAda - Ada Programming Language**

- ◆ Robert Dewar Award for Outstanding Ada Community Contributions
- ◆ Distinguished Service Award

### **SIGAI - Artificial Intelligence**

- ◆ Annual Award for Excellence in Autonomous Agent Research
- ◆ Industry Award for Excellence in Artificial Intelligence

### **SIGAPP - Applied Computing**

- ◆ Distinguished Service Award
- ◆ Outstanding Service Award

### **SIGARCH - Computer Architecture**

- ◆ Maurice Wilkes Award
- ◆ ISCA Influential Paper Award
- ◆ Alan D. Berenbaum Distinguished Service Award
- ◆ SIGARCH/SIGPLAN/SIGOPS ASPLOS Influential Paper Award

### **SIGBED - Embedded Systems**

- ◆ SIGBED Paul Caspi Memorial Dissertation Award
- ◆ SIGBED – SIGSOFT Frank Anger Memorial Award
- ◆ SIGBED – EMSOFT Best Paper Award
- ◆ SIGBED Early Career Researcher Award

### **SIGBio - Bioinformatics, Computational Biology and Biomedical Informatics**

- ◆ Best Paper Award
- ◆ Best Student Paper Award

### **SIGCAS - Computers and Society**

- ◆ Outstanding Service Award
- ◆ Making a Difference Award

### **SIGCHI - Computer-Human Interaction**

- ◆ SIGCHI Academy
- ◆ Lifetime Achievement Award
- ◆ Lifetime Practice Award
- ◆ Lifetime Research Award
- ◆ Lifetime Service Award
- ◆ Social Impact Award

### **SIGCOMM - Data Communication**

- ◆ Award for Lifetime Achievement
- ◆ SIGCOMM Doctoral Dissertation Award for Outstanding Ph.D. Thesis in Computer Networking and Data Communication
- ◆ Networking System Award
- ◆ Rising Star Award
- ◆ Test of Time Paper Award

### **SIGCSE - Computer Science Education**

- ◆ Award for Outstanding Contributions to Computer Science Education
- ◆ Lifetime Service

### **SIGDA - Design Automation**

- ◆ Outstanding Ph.D. Dissertation Award in Electronic Design Automation
- ◆ SIGDA IEEE/ACM William J. McCalla ICCAD Best Paper Award
- ◆ Outstanding New Faculty Award
- ◆ ACM-IEEE A. Richard Newton Technical Impact Award in Electronic Design Automation

### **SIGDOC - Design of Communication**

- ◆ Joseph T. Rigo Award
- ◆ Diana Award

### **SIGecom - Electronic Commerce**

- ◆ Best Paper Award
- ◆ Best Full Paper Award with a Student Lead Author
- ◆ Doctoral Dissertation Award
- ◆ Test of Time Award

### **SIGEVO - Genetic and Evolutionary Computation**

- ◆ GECCO Impact Paper Award

### **SIGGRAPH - Computer Graphics**

- ◆ Steven A. Coons Award
- ◆ Computer Graphics Achievement Award
- ◆ Outstanding Service Award
- ◆ Significant New Researcher Award
- ◆ Distinguished Artist Award for Lifetime Achievement in Digital Art
- ◆ Practitioner Award
- ◆ SIGGRAPH Academy

### **SIGHPC- High Performance Computing**

- ◆ Emerging Woman Leader in Technical Computing

### **SIGIR - Information Retrieval**

- ◆ SIGWEB/SIGIR Vannevar Bush Award
- ◆ Gerard Salton Award
- ◆ Best Paper Award
- ◆ Best Student Paper Award
- ◆ Test of Time Paper Award

### **SIGKDD - Knowledge Discovery in Data**

- ◆ Innovation Award
- ◆ Service Award
- ◆ Doctoral Dissertation Award
- ◆ Test of Time Award

### **SIGLOG – Logic and Computation**

- ◆ Alonzo Church Award

### **SIGMETRICS - Measurement and Evaluation**

- ◆ Achievement Award
- ◆ Kenneth C. Sevcik Outstanding Student Paper Award
- ◆ Rising Star Researcher Award
- ◆ Test of Time Paper Award

### **SIGMICRO - Microarchitecture**

- ◆ Distinguished Service Award

### **SIGMIS - Management Information Systems**

- ◆ Magid Igbaria Outstanding Conference Paper of the Year Award

### **SIGMM - Multimedia**

- ◆ SIGMM Award for Outstanding Technical Contributions
- ◆ SIGMM Award for Outstanding Ph.D. Thesis in Multimedia Computing, Communications and Applications
- ◆ SIGMM Rising Star Award

### **SIGMOBILE - Mobility of Systems, Users, Data & Computing**

- ◆ Distinguished Service Award
- ◆ Doctoral Dissertation Award
- ◆ Outstanding Contributions Award to Research on Mobility of Systems, Users, Data and Computing
- ◆ Test of Time Paper Award
- ◆ RockStar Award

### **SIGMOD - Management of Data**

- ◆ Contribution Award
- ◆ Edgar F. Codd Innovations Award
- ◆ Test of Time Award
- ◆ Jim Gray Doctoral Dissertation Award
- ◆ PODS Alberto O. Mendelzon Test of Time Award
- ◆ SIGMOD Systems Award

### **SIGOPS - Operating Systems**

- ◆ SIGOPS Dennis Ritchie Doctoral Dissertation Award for Software Systems Research
- ◆ SIGACT/SIGOPS Edsger W. Dijkstra Prize in Distributed Computing

- ◆ SIGARCH/SIGPLAN/SIGOPS ASPLOS Influential Paper Award
- ◆ Mark Weiser Award
- ◆ Hall of Fame Award

### **SIGPLAN - Programming Languages**

- ◆ Distinguished Service Award
- ◆ Programming Languages Achievement Award
- ◆ Programming Languages Software Award
- ◆ Most Influential PLDI Paper Award
- ◆ Most Influential POPL Paper Award
- ◆ Most Influential OOPSLA Paper Award
- ◆ Most Influential ICFP Paper Award
- ◆ John C. Reynolds Doctoral Dissertation Award
- ◆ SIGARCH/SIGPLAN/SIGOPS ASPLOS Influential Paper Award
- ◆ SIGPLAN Robin Milner Young Researcher Award
- ◆ John Vlissides Award

### **SIGSAC - Security, Audit and Control**

- ◆ Outstanding Innovation Award
- ◆ Outstanding Contribution Award
- ◆ Doctoral Dissertation Award

### **SIGSAM - Symbolic and Algebraic Manipulation**

- ◆ Richard D. Jenks Memorial Prize

### **SIGSIM - Simulation and Modeling**

- ◆ Distinguished Contribution Award

### **SIGSOFT - Software Engineering**

- ◆ SIGBED – SIGSOFT Frank Anger Memorial Award
- ◆ Distinguished Service Award
- ◆ Influential Educator Award
- ◆ SIGSOFT Outstanding Doctoral Dissertation Award
- ◆ Outstanding Research Award
- ◆ SIGSOFT/IEEE TCSE ICSE Most Influential Paper Award
- ◆ SIGSOFT Impact Paper Award
- ◆ Early Career Researcher Award

### **SIGSPATIAL – Spatial Information**

- ◆ Best Paper
- ◆ Ten Year Impact Award

### **SIGUCCS - University and College Computing Services**

- ◆ Penny Crane Award for Distinguished Service

### **SIGWEB - Hypertext, Hypermedia and Web**

- ◆ Douglas Engelbart Best Paper Award
- ◆ SIGWEB/SIGIR Vannevar Bush Award
- ◆ Ted Nelson Newcomer Award
- ◆ DocEng Best Paper Award

### **SIG Governing Board**

- ◆ Kenneth E. Iverson Award for Outstanding Contributions in Array Languages

## 2017 ACM Award Subcommittee Chairs



### *A. M. Turing*

*Alfred Z. Spector, AZS Services*

### *ACM Prize in Computing*

*Kathleen McKeown, Columbia University*

### *Distinguished Service*

*Mukesh Mohania, IBM Research Australia*

### *ACM Athena Lecturer*

*Diane Souvaine, Tufts University*

### *Outstanding Contribution to ACM*

*P.J. Narayanan, IIT*

### *Software System*

*Edouard Bugnion, EPFL*

### *Grace Murray Hopper*

*Mary Czerwinski, Microsoft Research*

### *Doctoral Dissertation*

*Dieter Van Melkebeek, University of Wisconsin*

### *ACM - IEEE CS Eckert-Mauchly*

*Avi Mendelson, Technion – Israel Institute of Technology*

### *Karl V. Karlstrom Outstanding Educator*

*Hal Abelson, Massachusetts Institute of Technology*

### *ACM - AAAI Allen Newell*

*Francesca Rossi, University of Pisa*

### *Eugene L. Lawler Award for Contributions within Computer Science and Informatics*

*Dan Gusfield, University of California, Davis*

### *Paris Kanellakis Theory and Practice*

*Tandy Warnow, University of Illinois, Urbana–Champaign*

### *ACM - IEEE CS Ken Kennedy*

*Kathy Yelick, Lawrence Berkeley National Laboratory*

### *Intel International Science and Engineering Fair (ISEF)*

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### *Senior Members*

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### *Gordon Bell Prizes*

*Subhash Saini, NASA Ames Research Center*

### *SIAM – ACM Prize in Computational Science and Engineering*

*James Demmel, University of California, Berkeley*

### *ACM – IEEE CS George Michael Memorial HPC Fellowship Committee*

*Michela Taufer, University of Delaware*

## ACM Award Nomination Submission Procedures



Nominations for the awards presented at the June Awards Banquet are due **January 15, 2019**, but other awards are presented throughout the year.

For ACM Fellows, the deadline is **September 7, 2018**. For ACM Distinguished Members it is **August 1, 2018**. For Senior Members it is **September 3, 2018**. Nomination forms and guidelines will be found on the awards site under "Advanced Grades of Membership."  
<https://awards.acm.org/advanced-member-grades>



For information about the nomination process and the deadline for each award, please visit  
<https://awards.acm.org/award-nominations>

Please visit [awards.acm.org](https://awards.acm.org), for additional details about the ACM awards program, or contact:

### *Rosemary McGuinness*

ACM Awards Committee Liaison  
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### *Awards Committee Co-Chairs*

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## 2018 ACM Award Subcommittee Chairs and Members



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**Shafi Goldwasser**  
**David Heckerman**  
**Joseph Sifakis**  
**Olga Sorkine-Hornung**  
**Alfred Z. Spector**

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### *Grace Murray Hopper*

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**Tandy Warnow**

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### *Eugene L. Lawler (Biennial)*

**Maggie Johnson**  
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**Mukesh Mohania**  
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**Piotr Indyk**  
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## 2018 ACM Award Subcommittee Chairs and Members



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**Kunle Olukoton**  
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### *ACM Gordon Bell Prize*

**Satoshi Matsuoka**  
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**Andrew Sears**  
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### *Senior Members*

**Sathish Vadhiyar**  
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Members:  
**Ewa Deelman**  
**Philip Roth**  
**Michela Taufer**

### *Intel International Science and Engineering Fair*

**Wilfred Pinfold**  
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Members:  
**Fred Martin**  
**Jan Vahrenhold**  
**Barry Wittman**

### *SIAM – ACM Prize in Computational Science and Engineering*

**c/o Joanna Littleton**  
SIAM  
littleton@siam.org  
**Linda Petzold, Chair**  
University of California,  
Santa Barbara  
Petzold@cs.ucsb.edu

Members:  
**Geoffrey Fox**  
**David Keyes**

## Past Recipients



### *A.M. Turing Award*

1966 A. J. Perlis  
 1967 Maurice V. Wilkes  
 1968 Richard Hamming  
 1969 Marvin Minsky  
 1970 J.H. Wilkinson  
 1971 John McCarthy  
 1972 E.W. Dijkstra  
 1973 Charles W. Bachman  
 1974 Donald E. Knuth  
 1975 Allen Newell  
 1975 Herbert A. Simon  
 1976 Michael O. Rabin  
 1976 Dana S. Scott  
 1977 John Backus  
 1978 Robert W. Floyd  
 1979 Kenneth E. Iverson  
 1980 C. Antony R. Hoare  
 1981 Edgar F. Codd  
 1982 Stephen A. Cook  
 1983 Ken Thompson  
 1983 Dennis M. Ritchie  
 1984 Niklaus Wirth  
 1985 Richard M. Karp  
 1986 John Hopcroft  
 1986 Robert Tarjan  
 1987 John Cocke  
 1988 Ivan Sutherland  
 1989 William (Velvel) Kahan  
 1990 Fernando J. Corbató  
 1991 Robin Milner  
 1992 Butler Lampson  
 1993 Juris Hartmanis  
 1993 Richard E. Stearns  
 1994 Edward A. Feigenbaum  
 1994 Raj Reddy  
 1995 Manuel Blum  
 1996 Amir Pnueli  
 1997 Douglas Engelbart  
 1998 James N. Gray  
 1999 Frederick P. Brooks, Jr.  
 2000 Andrew C. Yao  
 2001 Ole-Johan Dahl  
 2001 Kristen Nygaard  
 2002 Leonard Adleman  
 2002 Ronald Rivest  
 2002 Adi Shamir  
 2003 Alan Kay  
 2004 Vinton G. Cerf  
 2004 Robert E. Kahn

2005 Peter Naur  
 2006 Frances E. Allen  
 2007 Edmund Clarke  
 2007 E. Allen Emerson  
 2007 Joseph Sifakis  
 2008 Barbara Liskov  
 2009 Charles Thacker  
 2010 Leslie G. Valiant  
 2011 Judea Pearl  
 2012 Shafi Goldwasser  
 2012 Silvio Micali  
 2013 Leslie Lamport  
 2014 Michael Stonebreaker  
 2015 Whitfield Diffie  
 2015 Martin E. Hellman  
 2016 Sir Tim Berners-Lee

### *ACM Prize in Computing\**

2007 Daphne Koller  
 2008 Jon Kleinberg  
 2009 Eric Brewer  
 2010 Frans Kaashoek  
 2011 Sanjeev Arora  
 2012 Jeffrey Dean  
 2012 Sanjay Ghemawat  
 2013 David Blei  
 2014 Dan Boneh  
 2015 Stefan Savage  
 2016 Alexei A. Efros  
*\*Formerly the ACM-Infosys Award In the Computing Sciences*

### *Software System Award*

1983 **UNIX**  
 Ken Thompson  
 Dennis M. Ritchie  
 1984 **Xerox Alto Systems**  
 Butler W. Lampson  
 Robert W. Taylor  
 Charles P. Thacker  
 1985 **VisiCalc**  
 Daniel Bricklin  
 Robert Frankston  
 1986 **TeX**  
 Donald E. Knuth  
 1987 **SMALLTALK**  
 Alan C. Kay  
 Daniel H.H. Ingalls, Jr.  
 Adele Goldberg

1988 **SystemR**  
 Donald Chamberlin  
 James N. Gray  
 Raymond Lorie  
 Gianfranco Putzolu  
 Patricia Selinger  
 Irving Traiger  
 1988 **INGRES**  
 Gerald Held  
 Michael Stonebraker  
 Eugene Wong  
 1989 **PostScript**  
 John E. Warnock  
 Charles M. Geschke  
 William H. Paxton  
 Douglas K. Brotz  
 Edward A. Taft  
 1990 **NLS**  
 Douglas C. Engelbart  
 William K. English  
 Johns F. Rulifson  
 1991 **TCP/IP**  
 Vinton G. Cerf  
 Robert E. Kahn  
 1992 **Interlisp**  
 Daniel G. Bobrow  
 Richard R. Burton  
 L. Peter Deutsch  
 Ronald M. Kaplan  
 Larry Masinter  
 Warren Teitelman  
 1993 **Sketchpad**  
 Ivan Sutherland  
 1994 **Remote Procedure Call**  
 Andrew Birrell  
 Bruce Nelson  
 1995 **World-Wide Web**  
 Tim Berners-Lee  
 Robert Cailliau  
 1995 **NCSA Mosaic**  
 Marc Andreessen  
 Eric Bina  
 1996 no award given  
 1997 **Tcl/tk**  
 John Ousterhout  
 1998 **S System**  
 John M. Chambers  
 1999 **Apache**  
 Brian Behlendorf  
 Roy T. Fielding

## Past Recipients



Rob Hartill  
 David Robinson  
 Cliff Skolnick  
 Randy Terbush  
 Robert S. Thau  
 Andrew Wilson  
 2000 no award given  
 2001 **SPIN Verification System**  
 Gerard Holzmann  
 2002 **Java**  
 James A. Gosling  
 2002 **Make**  
 Stuart Feldman  
 2004 **SNP**  
 Raghuram Bindignavle  
 Simon S. Lam  
 Shaowen Su  
 Thomas Y. C. Woo  
 2005 **Boyer-Moore Theorem Prover**  
 Robert S. Boyer  
 Matt Kaufmann  
 J Strother Moore  
 2006 **Eiffel**  
 Bertrand Meyer  
 2007 **Statemate**  
 David Harel  
 Hagi Lachover  
 Amnon Naamad  
 Amir Pnueli  
 Michal Politi  
 Rivi Sherman  
 Mark Trakhtenbrot  
 Aron Trauring  
 2008 **Gamma Parallel Database System**  
 David J. DeWitt  
 Robert Gerber  
 Shahram  
 Ghandeharizadeh  
 Goetz Graefe  
 Michael Heytens  
 Hui-I Hsiao  
 Murali M. Krishna  
 Jeffrey F. Naughton  
 Donovan A. Schneider  
 Anoop Sharma

2009 **VMware Workstation 1.0**  
 Edouard Bugnion  
 Scott Devine  
 Mendel Rosenblum  
 Jeremy Sugarman  
 Edward Wang  
 2010 **GroupLens Collaborative Filtering Recommender Systems**  
 Peter Bergstrom  
 Lee Gordon  
 Jonathan Herlocker  
 Neophytos Iacovou  
 Joseph A. Konstan  
 Shyong (Tony) Lam  
 David Maltz  
 Sean McNee  
 Bradley Miller  
 Paul Resnick  
 John Riedl  
 Mitesh Suchak  
 2011 **Eclipse**  
 Gregory Adams  
 John Duimovich  
 Erich Gamma  
 Kevin Haaland  
 Julian Jones  
 Philippe Mulet  
 Steve Northover  
 Dave Thomson  
 John Wiegand  
 2012 **LLVM**  
 Vikram Adve  
 Evan Cheng  
 Chris Lattner  
 2013 **Coq**  
 Bruno Barras  
 Yves Bertot  
 Pierre Castéran  
 Thierry Coquand  
 Jean-Christophe Filliâtre  
 Hugo Herbelin  
 Gerard P. Huet  
 Chetan Murthy  
 Christine Paulin-Mohring  
 2014 **MACH**  
 Rick Rashid  
 Avadis (Avie) Tevanian

2015 **GCC (GNU Compiler Collection)**  
 Richard Stallman  
 2016 **Andrew File System (AFS)**  
 John H. Howard  
 Michael L. Kazar  
 David A. Nichols  
 Sherri M. Nichols  
 Mahadev Satyanarayanan  
 Robert N. Sidebotham  
 Alfred Z. Spector  
 Michael J. West  
 (posthumously)

### *Programming Systems and Languages Paper Award\**

1971 Peter Lucas  
 Kurt Walk  
 1971 Peter J. Denning  
 1971 Edsger W. Dijkstra  
 1971 Jan Gecsei  
 Richard L. Mattson  
 Donald R. Slutz  
 Irving Traiger  
 1971 John C. Reynolds  
 1972 no award given  
 1973 C.A.R. Hoare  
 1974 Zohar Manna  
 Stephen Ness  
 Jean Vuillemin  
 1975 Daniel G. Bobrow  
 Ben Wegbreit  
 1975 Dennis Ritchie  
 Kenneth Thompson  
 1976 John Cocke  
 Frances E. Allen  
 1977 David Gries  
 Susan Owicki  
 1978 Niklaus Wirth  
 1979 David L. Parnas  
 1980 no award given  
 1981 no award given  
 1982 James N. Gray  
 Paul McJones  
 Michael Blasgen  
 Bruce Lindsay  
 Raymond Lorie  
 Thomas Price

## Past Recipients



Gianfranco Putzolu  
Irving Traiger

\* This award was replaced in  
1983 by the Software System  
Award

### Grace Murray Hopper Award

1971 Donald E. Knuth  
1972 Paul E. Dirksen  
1972 Paul H. Cress  
1973 Lawrence Breed  
1973 Richard Lathwell  
1973 Roger Moore  
1974 George N. Baird  
1975 Allen L. Scherr  
1976 Edward H. Shortliffe  
1977 no award given  
1978 Raymond Kurzweil  
1979 Stephen Wozniak  
1980 Robert M. Metcalfe  
1981 Daniel S. Bricklin  
1982 Brian K. Reid  
1984 Daniel H.H. Ingalls, Jr.  
1985 Cordell Green  
1986 William N. Joy  
1987 John K. Ousterhout  
1988 Guy L. Steele  
1989 W. Daniel Hillis  
1990 Richard Stallman  
1991 Feng-hsiung Hsu  
1992 no award given  
1993 Bjarne Stroustrup  
1994 no award given  
1995 no award given  
1996 Shafira Goldwasser  
1997 no award given  
1998 no award given  
1999 Wen-mei Hwu  
2000 Lydia Kavradi  
2001 George Necula  
2002 Ramakrishnan Srikant  
2003 Stephen W. Keckler  
2004 Jennifer Rexford  
2005 Omer Reingold  
2006 Daniel Klein  
2007 Vern Paxson  
2008 Dawson Engler  
2009 Tim Roughgarden  
2010 Craig Gentry

2011 Luis von Ahn  
2012 Martin Casado  
2012 Dina Katabi  
2013 Pedro Felzenszwalb  
2014 Sylvia Ratnasamy  
2015 Brent Waters  
2016 Jeffrey Heer

### Allen Newell Award

1994 Frederick P. Brooks, Jr.  
1995 Joshua Lederberg  
1996 no award given  
1997 Carver Mead  
1998 Saul Amarel  
1999 Nancy Leveson  
2000 Lotfi Zadeh  
2001 Ruzena Bajcsy  
2002 Peter Chen  
2003 David Haussler  
2003 Judea Pearl  
2004 Richard P. Gabriel  
2005 Jack Minker  
2006 Karen Spärck Jones  
2007 Leonidas Guibas  
2008 Joseph Y. Halpern  
2008 Barbara J. Grosz  
2009 Michael I. Jordan  
2010 Takeo Kanade  
2011 Stephanie Forrest  
2012 Yoav Shoham  
2012 Moshe Tennenholtz  
2013 no award given  
2014 Jon Kleinberg  
2015 Eric Horvitz  
2016 Jitendra Malik

### Paris Kanellakis Theory and Practice Award

1996 Leonard Adleman  
1996 Whitfield Diffie  
1996 Martin Hellman  
1996 Ralph Merkle  
1996 Ronald Rivest  
1996 Adi Shamir  
1997 Abraham Lempel  
1997 Jacob Ziv  
1998 Randal Bryant  
1998 Edmund M. Clarke, Jr.  
1998 E. Allen Emerson  
1998 Kenneth McMillan

1999 Daniel Sleator  
1999 Robert Tarjan  
2000 Narendra Karmarkar  
2001 Gene Myers  
2002 Peter A. Franaszek  
2003 Gary Miller  
2003 Michael Rabin  
2003 Robert Solovay  
2003 Volker Strassen  
2004 Yoav Freund  
2004 Robert Schapire  
2005 Gerard Holzmann  
2005 Robert Kurshan  
2005 Moshe Vardi  
2005 Pierre Wolper  
2006 Robert K. Brayton  
2007 Bruno Buchberger  
2008 Corinna Cortes  
2008 Vladimir Vapnik  
2009 Mihir Bellare  
2009 Phillip Rogaway  
2010 Kurt Mehlhorn  
2011 Hanan Samet  
2012 Andrei Broder  
2012 Moses Charikar  
2012 Piotr Indyk  
2013 Robert Blumofe  
2013 Charles Leiserson  
2014 James Demmel  
2015 Michael G. Luby  
2016 Amos Fiat  
2016 Moni Naor

### Karl V. Karlstrom Outstanding Educator Award

1989 C.L. Liu  
1990 Gerald Jay Sussman  
1991 David A. Patterson  
1992 David Harel  
1993 Andries van Dam  
1994 Andrew Tanenbaum  
1995 David Gries  
1996 Peter Denning  
1997 Jeffrey Ullman  
1998 Avi Silberschatz  
1999 Randy H. Katz  
2000 Yale Patt  
2001 Nell B. Dale  
2002 John T. Gorgone

## Past Recipients



1983 Grace Murray Hopper  
1984 Saul Rosen  
1985 Jean Sammet  
1986 Clair Maple  
(posthumously)  
1987 Frederick P. Brooks, Jr.  
1988 Charles L. Bradshaw  
1989 Peter J. Denning  
1990 Walter M. Carlson  
1991 Gerald L. Engel  
1992 Joyce Currie Little  
1993 J.A.N. Lee  
1994 no award given  
1995 Doris Lidtke  
1996 Hal Berghel  
1997 David H. Brandin  
1998 no award given  
1999 Anita Borg  
2000 Peter Wegner  
2001 Won Kim  
2002 Raymond E. Miller  
2003 Ruzena Bajcsy  
2004 E. G. Coffman  
2005 Mary Jane Irwin  
2006 Susan L. Graham  
2007 David A. Patterson  
2008 Telle Whitney  
2009 Edward Lazowska  
2010 Reinhard Wilhelm  
2011 William A. Wulf  
2012 Mateo Valero  
2013 Gerhard Goos  
2013 Juris Hartmanis  
2013 Jan van Leeuwen  
2014 Dame Wendy Hall  
2015 Ron Perrott  
2016 Leonard J. Shustek

### Eugene L. Lawler Award for Humanitarian Contributions within Computer Science and Informatics

1999 Antonia Stone  
2001 John Blitch  
2003 Patrick Ball  
2005 Albrecht Ehrensperger  
2005 Solomon Mbuguah  
2005 Ernest Siva  
2007 Randolph Y. Wang  
2009 Gregory Abowd  
2012 Thomas Bartoschek  
2012 Johannes Schöning  
2014 Robin Roberson Murphy  
2016 Ken Banks

### Distinguished Service Award

1970 Franz L. Alt  
1971 J. Don Madden  
1972 George E. Forsythe  
(posthumously)  
1973 William Atchison  
1974 Saul Gorn  
1975 John W. Carr III  
1976 Richard G. Canning  
1977 Thomas B. Steel, Jr.  
1978 Eric A. Weiss  
1979 Carl Hammer  
1980 Bernard Galler  
1981 Aaron Finerman  
1982 Anthony Ralston

### Doctoral Dissertation Award

1982 Charles E. Leiserson  
1983 Thomas W. Reps  
1984 Manolis G.H. Katevenis  
1985 John R. Ellis  
1986 Johan Torkel Hastad  
1986 Ketan D. Mulmuley  
1987 John Canny  
1988 Mauricio Karchmer  
1989 Vijay Saraswat  
1990 Hector Geffner

1990 David Heckerman  
1991 Robert Schapire  
1992 Kenneth McMillan  
1992 Mendel Rosenblum  
1993 Madhu Sudan  
1994 David Karger  
1994 T. V. Raman  
1995 Sanjeev Arora  
1995 Daniel A. Spielman  
1996 Xiaoyuan Tu  
1996 Carl Waldspurger  
1997 Steven McCanne  
1998 Hari Balakrishnan  
1999 Dieter van Melkebeek  
2000 Salil Vadhan  
2001 Ion Stoica  
2002 Venkatesan Guruswami  
2003 AnHai Doan  
2004 Boaz Barak  
2005 Ben Liblit  
2006 Yi-Ren Ng  
2007 Sergey Yekhanin  
2008 Constantinos Daskalakis  
2009 Craig Gentry  
2010 Bryan Parno  
2011 Seth Cooper  
2012 Shyamnath Gollakota  
2013 Sanjam Garg  
2014 Matej Zaharia  
2015 Julian Shun  
2016 Haitham Hassanieh

### Outstanding Contribution to ACM Award

1976 W. Smith Dorsey  
1976 Bruce W. Van Atta  
1978 Kathleen A. Wagner  
1979 M. Stuart Lynn  
1981 J.A.N. Lee  
1982 Fred H. Harris  
1983 Richard Austing  
1983 Seymour J. Wolfson  
1984 Orrin E. Taulbee  
1985 Jack Minker  
1985 Thomas A. D'Auria  
1986 Herbert Maisel  
1987 Edward G. Coffmann, Jr.  
1988 Thomas A. DeFanti  
1989 Monroe (Monty)  
Newborn

## Past Recipients



1990 William Poucher  
 1991 Allen Tucker  
 1992 James M. Adams  
 1992 Lorraine Borman  
 1992 Peter Neumann  
 1993 John H. Esbin  
 1993 Frank L. Friedman  
 1994 John R. White  
 1994 A. Joseph Turner  
 1995 Robert Aiken  
 1996 Stuart H. Zweben  
 1997 Robert L. Ashenurst  
 1998 Peter J. Denning  
 1999 Ronald Boisvert  
 2000 Hal Berghel  
 2001 Barbara Simons  
 2002 Patricia M. Ryan  
 2003 Mark Scott Johnson  
 2004 Richard T. Snodgrass  
 2005 Don Gotterbarn  
 2006 David S. Wise  
 2007 Robert A. Walker  
 2008 Wayne Graves  
 2008 Bernard Rous  
 2009 Moshe Y. Vardi  
 2010 Joseph S. DeBlasi  
 2011 Calvin C. (Kelly) Gotlieb  
 2012 Zvi Kedem  
 2013 Donna Cappel  
 2013 Russell Harris  
 2014 Dame Wendy Hall  
 2015 No award given  
 2016 Valerie Barr

### ACM-IEEE CS Eckert-Mauchly Award

1979 Robert S. Barton  
 1980 Maurice V. Wilkes  
 1981 Wesley A. Clark  
 1982 C. Gordon Bell  
 1983 Tom Kilburn  
 1984 Jack B. Dennis  
 1985 John Cocke  
 1986 Harvey G. Cragon  
 1987 Gene M. Amdahl  
 1988 Daniel P. Siewiorek  
 1989 Seymour Cray  
 1990 Kenneth E. Batchner  
 1991 Burton J. Smith

1992 Michael J. Flynn  
 1993 David J. Kuck  
 1994 James E. Thornton  
 1995 John Crawford  
 1996 Yale Patt  
 1997 Robert Tomasulo  
 1998 Tadashi Watanabe  
 1999 James E. Smith  
 2000 Edward Davidson  
 2001 John Hennessy  
 2002 B. Ramakrishna (Bob) Rau  
 2003 Joseph A. (Josh) Fisher  
 2004 Frederick P. Brooks, Jr.  
 2005 Robert P. Colwell  
 2006 James Pomerene  
 2007 Mateo Valero  
 2008 David A. Patterson  
 2009 Joel Emer  
 2010 William Dally  
 2011 Gurindar Sohi  
 2012 Algirdas Avizienis  
 2013 James Goodman  
 2014 Trevor Mudge  
 2015 Norman Jouppi  
 2016 Uri Weiser  
 2017 Charles P. Thacker

### ACM-IEEE CS

#### Ken Kennedy Award

2009 Francine Berman  
 2010 David J. Kuck  
 2011 Susan L. Graham  
 2012 Mary Lou Soffa  
 2013 Jack Dongarra  
 2014 Charles Leiserson  
 2015 Katherine Yelick  
 2016 William D. Gropp

### SIAM-ACM Award in Computational Science and Engineering

2003 John B. Bell  
 2003 Phillip Colella  
 2004 Achi Brandt  
 2007 Chi-Wang Shu  
 2009 Cleve Moler  
 2011 J. Tinsley Oden  
 2013 Linda Petzold

2015 Sataish Balay  
 2015 Jed Brown  
 2015 William Gropp  
 2015 Matthew Knepley  
 2015 Lois Curfman McInnes  
 2015 Barry Smith  
 2015 Hong Zhang  
 2017 Thomas J. R. Hughes

### ACM Presidential Award

1985 Robert E. Kahn  
 1987 Kent Curtis  
 1998 John Gage  
 2002 Calvin C. Gotlieb  
 2006 Andreas Bechtolsheim  
 2006 Janice E. Cunny  
 2006 Edward Lazowska  
 2007 Eugene Spafford  
 2008 Stephen R. Bourne  
 2008 Patricia M. Ryan  
 2008 Barbara Ryder  
 2008 Moshe Vardi  
 2010 Mathai Joseph  
 2010 Elaine Weyuker  
 2013 Fabrizio Gagliardi  
 2013 Yunhao Liu  
 2013 P.J. Narayanan  
 2014 Mehran Sahami  
 2015 John R. White  
 2016 Gerhard Schimpf  
 2016 Chris Stephenson  
 2017 Moshe Y. Vardi

### ACM Athena Lecturer Award

2006 Deborah Estrin  
 2007 Karen Spärck Jones  
 2008 Shafrira Goldwasser  
 2009 Susan Eggers  
 2010 Mary Jane Irwin  
 2011 Judith S. Olson  
 2012 Nancy Lynch  
 2013 Katherine Yelick  
 2014 Susan Dumais  
 2015 Jennifer Widom  
 2016 Jennifer Rexford  
 2017 Lydia E. Kavradi  
 \*Formerly the ACM-W Athena Lecturer Award

## ACM Fellows



Martín Abadi  
 Serge Abiteboul  
 Gregory D. Abowd  
 Jacob Abraham  
 Paul Abrahams  
 Samson Abramsky  
 David Abramson  
 Mark S. Ackerman  
 William Richards Adrion  
 Sarita Adve  
 Vikram Adve  
 Foto Afrati  
 Anant Agarwal  
 Pankaj Agarwal  
 Charu Aggarwal  
 Dharma Agrawal  
 Divyakant Agrawal  
 Rakesh Agrawal  
 Vishwani Agrawal  
 Alfred V. Aho  
 Narendra Ahuja  
 Alexander S. Aiken  
 Robert Aiken  
 Anastasia Ailamaki  
 Kurt Akeley  
 Ian Akyildiz  
 Frances E. Allen  
 Eric Allender  
 Noga Alon  
 Gustavo Alonso  
 Rajeev Alur  
 Lorenzo Alvisi  
 Nancy M. Amato  
 Mostafa Ammar  
 James H. Anderson  
 Thomas E. Anderson  
 Gregory Andrews  
 Andrew Appel  
 Lars Arge  
 Sanjeev Arora  
 Arvind  
 Tetsuo Asano  
 Mikhail Atallah  
 Hagit Attiya  
 Marc Auslander  
 Richard H. Austing  
 Ozalp Babaoglu  
 Charles Bachman  
 David F. Bacon

Ronald M. Baecker  
 Jean-Loup Baer  
 Ricardo Baeza-Yates  
 Victor Bahl  
 Chandrajit L. Baja  
 Ruzena Bajcsy  
 Hari Balakrishnan  
 Pierre Baldi  
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 Prithviraj Banerjee  
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 Victor Basili  
 Kenneth E. Batchner  
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 C. Gordon Bell  
 Mihir Bellare  
 Luca Benini  
 Bonnie Berger  
 Hal Berghel  
 Francine Berman  
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 Phil Bernstein  
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 Alan W. Biermann  
 Lars Birkedal \*  
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 Joel Birnbaum  
 Dines Bjørner  
 Stephen Blackburn  
 José Blakeley  
 Michael W. Blasgen  
 David M. Blei  
 Guy Blelloch  
 Avrim Blum  
 Daniel G. Bobrow  
 Gregor Bochmann  
 Barry Boehm  
 Hans-J. Boehm  
 David R. Boggs  
 Shahid H. Bokhari  
 Dan Boneh  
 Grady Booch  
 Christine Borgman

Lorraine Borman  
 Alan Borning  
 Alan Borodin  
 Bella Bose  
 Stephen R. Bourne  
 Craig Boutilier  
 Ronald J. Brachman  
 Robert Braden  
 Charles L. Bradshaw  
 David Brandin  
 Yuri Breitbart  
 Richard Brent  
 Eric A. Brewer  
 Daniel S. Bricklin  
 Andrei Z. Broder  
 Carla E. Brodley  
 Frederick P. Brooks  
 Rodney Brooks  
 Douglas K. Brotz  
 James Browne  
 Randal E. Bryant  
 Janis A. Bubenko, Jr.  
 Edouard Bugnion \*  
 Alan Bundy  
 Peter Buneman  
 Doug Burger  
 Margaret Burnett \*  
 Richard R. Burton  
 William Buxton  
 Jin-Yi Cai  
 Tracy K. Camp  
 Richard G. Canning  
 Stuart K. Card  
 Luca Cardelli  
 Michael J. Carey  
 Loren Carpenter  
 John Carroll  
 Robert Cartwright  
 Justine Cassell  
 Edwin Catmull  
 Rick Cattell  
 Vinton G. Cerf  
 Stefano Ceri  
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 Krishnendu Chakrabarty  
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 Shih-Fu Chang \*  
 Surajit Chaudhuri

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Ming-Syan Chen  
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Imrich Chlamtac  
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David D. Clark  
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Lori Clarke  
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Edward G. Coffman, Jr.  
Edith Cohen \*  
Michael F. Cohen  
Richard Cole  
George E. Collins  
Douglas E. Comer  
Anne Condon  
Jason (Jingsheng) Cong  
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Larry L. Constantine  
Perry R. Cook  
Robert Cook  
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Keith D. Cooper  
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Ron K. Cytron  
David Culler  
Mary Czerwinski  
Michael Dahlin  
Nell B. Dale  
William J. Dally  
Thomas A. D'Auria  
Jack W. Davidson  
Susan Davidson  
Bruce S. Davie  
Gordon Davis  
Larry S. Davis  
Timothy A. Davis

Umeshwar Dayal  
Jeffrey A. Dean  
Thomas L. Dean  
Joseph S. DeBlasi  
Rina Dechter  
Thomas A. DeFanti  
Giuseppe De Giacomo  
Johan de Kleer  
Carlos J.P. De Lucena  
Erik Demaine  
Giovanni De Micheli  
Richard DeMillo  
James Demmel  
Xiaotie Deng  
Dorothy Denning  
Peter J. Denning  
Jack B. Dennis  
Narsingh Deo  
L. Peter Deutsch  
Srinivas Devadas  
David DeWitt  
Inderjit Dhillon  
Thomas G. Dietterich  
David L. Dill  
Christophe Diot  
David Dobkin  
George G. Dodd  
Danny Dolev  
Bruce Donald  
Jack Dongarra  
Paul Dourish  
Rodney Graham Downey  
Susan M. Dray \*  
Larry E. Druffel  
Allison Druin  
Michel Dubois  
Susan Dumais  
Karen A. Duncan  
Fredo Durand  
Nikil D. Dutt  
Cynthia Dwork  
Carl Ebeling  
Susan J. Eggers  
Amr El Abbadi  
Faith Ellen  
Chip Elliott  
Carla Ellis  
Clarence Ellis  
Ahmed Elmagarmid

Joel S. Emer  
Jose Encarnacao  
Gerald L. Engel  
Erwin Engeler  
David Eppstein  
Thomas Erickson  
Michael D. Ernst  
Deborah Estrin  
Ronald Fagin  
Kevin Fall  
Christos Faloutsos  
Babak Falsafi  
Wenfei Fan  
David Farber  
Richard Fateman  
Usama Fayyad  
Nick Feamster  
Edward Feigenbaum  
Joan Feigenbaum  
Stuart Feldman  
Matthias Felleisen  
EdwardW. Felten  
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Domenico Ferrari  
Adam Finkelstein  
Gerhard Fischer  
Michael J. Fischer  
Kathleen Fisher  
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Sally Floyd  
Michael J. Flynn  
James Foley  
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Ian T. Foster  
Edward A. Fox \*  
Geoffrey C. Fox  
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Robert M. Frankston  
Michael Franz  
Herbert Freeman  
Peter A. Freeman  
William Freeman  
Juliana Freire  
Ophir Frieder  
Frank L. Friedman

Henry Fuchs  
W. Kent Fuchs  
Richard M. Fujimoto \*  
George W. Furnas  
Harold N. Gabow  
Richard Gabriel  
Zvi Galil  
Guang R. Gao  
Lixin Gao  
Wen Gao  
Jose J. Garcia-Luna-Aceves  
Hector Garcia-Molina  
Michael Garey  
Simson Garkinkel  
David Garlan  
Charles W. Gear  
Erol Gelenbe  
Johannes Gehrke  
Charles Geschke  
Carlo Ghezzi  
Philip Gibbons  
Garth A. Gibson  
David K. Gifford  
Yolanda Gil  
C. Lee Giles  
Myron Ginsberg  
Robert Glass  
Michel X. Goemans  
Adele J. Goldberg  
Andrew V. Goldberg  
Shafi Goldwasser \*  
Carla P. Gomes \*  
John Goodenough  
James Goodman  
Michael T. Goodrich  
James Gosling  
Calvin C. Gotlieb  
Allan J. Gottlieb  
Georg Gottlob  
Ramesh Govindan  
Venugopal Govindaraju  
Ambuj Goyal  
Robert M. Graham  
Ronald Graham  
Susan L. Graham  
Cordell Green  
Albert Greenberg  
Donald P. Greenberg  
Saul Greenberg

## ACM Fellows



Irene Greif  
David J. Gries  
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Ramanathan Guha  
Leonidas Guibas  
Baining Guo  
Aarti Gupta \*  
Gopal Gupta  
Manish Gupta  
Rajesh Gupta  
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Yuri Gurevich  
Venkatesan Guruswami \*  
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Mor Harchol-Balter \*  
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Michael A. Harrison  
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Juris Hartmanis  
John P. Hayes  
Anthony Hearn  
Marti Hearst  
Michael T. Heath

David Heckerman  
Philip Heidelberger  
Gernot Heiser  
Joseph M. Hellerstein  
James Hendler  
Laurie Hendren  
John Hennessy  
Monika Henzinger  
Thomas Henzinger  
Maurice Herlihy  
Tony Hey  
Mark D. Hill  
W. Daniel Hillis  
Julia Hirschberg  
Urs Hoelzle  
Lance Hoffman  
Gerard J. Holzmann  
John E. Hopcroft  
Hugues Hoppe  
Mark Horowitz  
Eric Horvitz  
Charles H. House  
Xuedong Huang  
Jean-Pierre Hubaux  
Paul Hudak  
Richard Hull  
Harry D. Huskey  
Daniel P. Huttenlocher  
Wen-mei W. Hwu  
Toshihide Ibaraki  
Oscar Ibarra  
Neil Immerman  
Piotr Indyk  
Yannis Ioannidis  
Mary Jane Irwin  
Sitharama Iyengar  
Ravishankar Iyer  
Daniel Jackson  
Robert J.K. Jacob  
Jeffrey M. Jaffe  
H.V. Jagadish  
Farnam Jahanian  
Anil Jain  
Raj Jain  
Ramesh Jain  
Joseph JaJa  
Matthias Jarke  
Christian S. Jensen  
Niraj Jha

## ACM Fellows



Somesh Jha  
Tao Jiang  
Thorsten Joachims  
Anita K. Jones  
Clifford B. Jones  
Neil D. Jones  
Michael I. Jordan  
Aravind Joshi  
Norman Jouppi  
M. Frans Kaashoek  
William M. Kahan  
Robert E. Kahn  
Laxmikant Kale \*  
Erich L. Kaltofen  
Takeo Kanade  
Abraham Kandel  
Sung Mo Kang  
Ravi Kannan  
Sampath K. Kannan  
Ronald M. Kaplan  
David Karger  
Sidney Karin  
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