

# ACM

A·W·A·R·D·S



Association for  
Computing Machinery

*Advancing Computing as a Science & Profession*



Association for Computing Machinery  
2 Penn Plaza, Suite 701, New York, NY 10121-0701 USA

+1-212-869-7440  
[www.acm.org](http://www.acm.org)



Association for  
Computing Machinery

*Advancing Computing as a Science & Profession*

# Contents



ACM Awards Reception and Banquet, June 2008 .....	2
Introduction .....	3
A.M. Turing Award .....	4
ACM – Infosys Foundation Award in the Computing Sciences .....	5
ACM – AAAI Allen Newell Award .....	5
Software System Award .....	6
Grace Murray Hopper Award .....	7
Paris Kanellakis Theory and Practice Award .....	7
Karl V. Karlstrom Outstanding Educator Award .....	8
Distinguished Service Award .....	8
ACM-W Athena Lecturer Award .....	9
Outstanding Contribution to ACM Award .....	9
Doctoral Dissertation Award .....	10
ACM – IEEE CS Eckert-Mauchly Award .....	11
Eugene L. Lawler Award for Humanitarian Contributions within Computer Science and Informatics .....	11
The SIAM/ACM Award in Computational Science and Engineering ....	11
ACM Gordon Bell Prize .....	12
ACM - IEEE CS Ken Kennedy Award .....	12
ACM International Collegiate Programming Contest .....	13
ACM Student Research Competition .....	13
Computing Research Association Award .....	13
Intel International Science and Engineering Fair .....	13
ACM Fellows .....	14
ACM Award Nomination Submission Procedures .....	15
ACM Special Interest Group Awards .....	16
2008 ACM Award Subcommittee Chairs .....	18
2009 ACM Award Subcommittee Chairs and Members .....	19
Past Recipients .....	21
ACM Fellows .....	24
In Memoriam, ACM Fellows .....	28

# ACM Awards Reception & Banquet



*Palace Hotel  
San Francisco, California  
June 21, 2008*



2007 ACM A.M. Turing Award Recipients (left to right) Edmund M. Clarke, E. Allen Emerson, and Joseph Sifakis

2007 ACM - Infosys Foundation Award in the Computing Sciences Recipient Daphne Koller with (left to right) Stuart Feldman, Narayana Murthy of Infosys, and ACM CEO John R. White



# 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 15 in this booklet.

The awards included in this overview were presented at the 2009 ACM Awards Banquet on June 27, 2009, at the US Grant Hotel in San Diego, California.

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

## A.M. Turing Award



**Barbara H. Liskov**  
Massachusetts Institute of Technology



The A.M. Turing Award is presented to Barbara Liskov for her contributions to practical and theoretical foundations of programming language and system design, especially related to data abstraction, fault tolerance, and distributed computing.

Barbara Liskov has led important developments in computing by creating and implementing programming languages, operating systems, and innovative systems designs that have advanced the state of the art of data abstraction, modularity, fault tolerance, persistence, and distributed computing systems. Her contributions have been incorporated into the practice of programming, thereby influencing many of the most important systems used today for programming, specification, systems design, and distributed architectures.

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 German 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. In his 1950 paper, *Computing Machinery and Intelligence*, he proposed the "Turing Test," which is still applied in attempting to determine whether a computer is intelligent.

Accompanied by a prize of \$250,000, 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 the Intel Corporation and Google Inc.

## ACM – Infosys Foundation Award in the Computing Sciences



**Jon Kleinberg**  
Cornell University



The ACM - Infosys Foundation Award in the Computing Sciences is presented to Jon Kleinberg for his contributions to the science of networks and the World Wide Web, which include a deep combination of social insights and mathematical reasoning.

Jon Kleinberg's work on the use of link analysis led to the design of vastly improved algorithms for Web search. His connection between network structure and information was a fundamental breakthrough that has transformed the way that information is retrieved on the Web. His work on the small world phenomenon provides deep insight into the structure of networks and helps explain the social phenomenon of "six degrees of separation."

The ACM - Infosys Foundation Award in the Computing Sciences recognizes personal contributions by young scientists and system developers to a contemporary innovation that, through its depth, fundamental impact and broad implications, exemplifies the greatest achievements in the discipline.

The award carries a prize of \$150,000. Financial support for the award is provided by an endowment from the Infosys Foundation.

## ACM – AAAI Allen Newell Award



The ACM - AAAI Allen Newell Award is presented to individuals selected for career contributions that have breadth within computer science, or that bridge computer science and other disciplines.

The 2008 ACM – AAAI Allen Newell Awards are presented to:



**Barbara J. Grosz**  
Harvard University

Barbara J. Grosz for fundamental contributions to research in natural language processing and in multi-agent systems, for her leadership in the field of artificial intelligence, and for her role in the establishment and leadership of interdisciplinary institutions.



**Joseph Y. Halpern**  
Cornell University

Joseph Y. Halpern for fundamental advances in reasoning about knowledge, belief, and uncertainty and their groundbreaking applications in artificial intelligence, computer science, game theory, economics, and the philosophy of science.

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

The award is accompanied by a prize of \$10,000, which is provided by ACM and the Association for the Advancement of Artificial Intelligence (AAAI), and by individual contributions.

## Software System Award



**David J. DeWitt**

Microsoft/University of Wisconsin-Madison (Emeritus)



**Robert Gerber**

Microsoft



**Shahram Ghandeharizadeh**

University of Southern California



**Goetz Graefe**

Hewlett Packard



**Michael Heytens**

RGM Advisors



**Hui-I Hsiao**

IBM



**Murali M. Krishna**

Hewlett Packard



**Jeffrey F. Naughton**

University of Wisconsin-Madison



**Donovan A. Schneider**

Yahoo!



**Anoop Sharma**

Hewlett Packard



The Software System Award is presented for the Gamma Parallel Database System, the first embodiment of a parallel, "shared nothing" database system running on a cluster of commodity computers, using data partitioning and innovative parallel query execution strategies.

The Gamma Database Machine Project built a prototype parallel relational database system from 1984 to 1992 at the University of Wisconsin-Madison. Gamma ran on a cluster of commodity computers connected using standard networking technology. The main contributions of Gamma include the design and implementation of multiple partitioning techniques (round-robin, range, and hash) for distributing the tuples of each relation across multiple machines and disks, along with parallel and pipelined algorithms for executing relational queries in such an environment.

The Software System Award is presented to an institution or individual(s) 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. IBM provides financial support for the Software System Award.

This year's recipients have donated the prize money to the Jim Gray Chair in Engineering at the University of California at Berkeley.

## Grace Murray Hopper Award



**Dawson Engler**

Stanford University



The Grace Murray Hopper Award is presented to Dawson Engler for his groundbreaking work on automated program checking and bug-finding.

In his papers on automated program checking, Dawson Engler introduces and develops powerful techniques and tools for practical program analysis for finding errors in code. Dr. Engler's work leverages domain and application specific checks, model-checking infrastructures applicable to large pieces of code, and execution of generated test cases. These methods have been used to check substantial software systems, uncovering many hidden bugs.

The award is named for Grace Murray Hopper (1906-1992), a pioneer in the field of 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 and perseverance 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 Google, Inc.

## Paris Kanellakis Theory and Practice Award



**Corinna Cortes**

Google Research



**Vladimir Vapnik**

Fellow of NEC Laboratories/  
Columbia University



The Paris Kanellakis Theory and Practice Award is presented to Corinna Cortes and Vladimir Vapnik for the development of Support Vector Machines, a highly effective algorithm for classification and related machine learning problems.

In their 1995 paper titled "Support vector networks," Cortes and Vapnik introduced Support vector machines (SVMs). The paper revolutionized the field by providing for the first time an accurate algorithm that converges in polynomial time even when the training data is not separable by a hyperplane. The theoretical foundations articulated in this paper have inspired extensive research making SVM one of the most frequently used algorithms in the machine learning literature.

A distinguished computer science theoretician and esteemed faculty member of Brown University, Paris Christos Kanellakis (1953-1995) 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



**John E. Hopcroft**  
Cornell University



The Karlstrom Award is presented to John E. Hopcroft for his vision of, and impact on, computer science, including co-authoring field-defining texts on theory and algorithms, which continue to influence students 40 years later, advising PhD students who themselves are now contributing greatly to computer science, and providing influential leadership in computer science research and education at the national and international level.

This award is named after a pioneer in the field of computer science publications. Karl V. Karlstrom (1921-1988) was the senior editor in computer science for the Prentice Hall College Technical + Reference Division, responsible for acquiring over 500 computer-related titles for the book publisher, many of which are recognized in the field as landmark editions.

The Karlstrom Award is presented annually to an outstanding educator who: is appointed to a recognized educational baccalaureate institution; is recognized for advancing new teaching methodologies, or effecting new curriculum development or expansion in computer science and engineering; or who is making a significant contribution to the educational mission of the ACM. Those who have been teaching for ten years or less will be given special consideration.

The award is accompanied by a prize of \$5,000. Financial support for the Karl V. Karlstrom Outstanding educator Award is provided by the Pearson Prentice-Hall Publishing Company.

## Distinguished Service Award



**Telle Whitney**  
ABI



The Distinguished Service Award is presented to Telle Whitney for significant service to the computing community by founding and leading initiatives and institutes that have positively impacted the professional careers of women in computing.

Telle Whitney has had a profound impact on the participation and success of women in computing. Through her roles in the Grace Hopper Celebration of Women in Computing (Hopper) conference series, her leadership of the Anita Borg Institute for Women and Technology (ABI), and her co-founding of the National Center for Women in Information Technology among other activities, Telle Whitney has made an impact on the entire computing community.

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-W Athena Lecturer Award



**Susan Eggers**  
University of Washington

The 2009-2010 Athena Lecturer Award is presented to Susan Eggers of the University of Washington. The Athena Lecturer Award celebrates women researchers who have made fundamental contributions to Computer Science. ACM-W, organizers of the Athena Lecturer project, honors a preeminent woman computer scientist each year. ACM-W chose to identify the honoree with the Greek goddess of wisdom, who, with her wisdom and sense of purpose and willingness to enter the fray, epitomizes the strength, determination, and intelligence of the Athena Lecturers. The Athena Lecture is scheduled to take place at PLDI in June 2010. The award includes a \$10,000 honorarium, provided by Google, Inc.

## Outstanding Contribution to ACM Award



**Wayne Graves**  
ACM



**Bernard Rous**  
ACM



The Outstanding Contribution to ACM Award is presented to: Wayne Graves for outstanding leadership in the design, implementation, and evolution of the ACM Digital Library and Guide; Bernard Rous for outstanding leadership in initiating the development of the ACM Digital Library and Guide and curation of their content.

The ACM's Digital Library (DL) and its associated Guide to Computing Literature are among the most complete and reliable sources of information on computing research today. They have become ACM's crown jewels. Over the past 10 years, the DL has constantly evolved to reflect the very best thinking of what a digital collection of the research literature for the computing community should be.

Wayne Graves is ACM Director of Information Systems, and Bernard Rous is ACM Deputy Director of Publications and Electronic Publishing Program Director.

This Outstanding Contribution to ACM Award is given to individuals who are selected on the value and degree of service to ACM.

## Doctoral Dissertation Award



**Constantinos Daskalakis**

Microsoft Research Lab (MIT, Fall 2009)

The Doctoral Dissertation Award is presented to Constantinos Daskalakis for his dissertation *The Complexity of Nash Equilibria*, which was nominated by the University of California at Berkeley.

## Honorable Mention



**Derek Hoiem**

University of Illinois at Urbana-Champaign

For his dissertation *Seeing the World behind the Image: Spatial Layout for 3D Scene Understanding*. Dissertation nominated by Carnegie Mellon University.



**Sachin Katti**

MIT

For his dissertation *Network Coded Wireless Architecture* nominated by the Massachusetts Institute of Technology.

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. The winning dissertation is published by Springer.

## Additional ACM AWARDS

### ACM – IEEE CS Eckert-Mauchly Award

Joel Emer, Intel Fellow, is the recipient of the 2009 ACM – IEEE CS Eckert-Mauchly Award, which was presented at ISCA 2009, the 36th Annual International Symposium on Computer Architecture in Austin, Texas.

The award recognizes Dr. Emer for pioneering contributions to performance analysis and modeling methodologies; for design innovations in several significant industry micro-processors; and for deftly bridging research and development, academia and industry.

Administered jointly by ACM and IEEE Computer Society, the award is given for contributions to computer and digital systems architecture, where the field of computer architecture is considered at present to encompass the combined hardware-software design and analysis of computing and digital systems. The award is accompanied by a prize of \$5,000.

### 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 with the 2009 awards.

### The SIAM/ACM Award in Computational Science and Engineering

The 2009 SIAM/ACM Award in Computational Science and Engineering was presented to Cleve Moler at the 2009 SIAM Conference on Computational Science and Engineering in Miami, Florida. Dr. Moler is recognized for his individual research in numerical analysis and the efficacy of his invention, MATLAB.

The biennial endowed award recognizes an individual(s) for outstanding research contributions to the field of computational science and engineering. The contribution(s) for which the award is made must be publicly available and may belong to any aspect of computational science in its broadest sense.

The award is accompanied by a prize of \$5,000, with financial sponsorship provided by SIAM.

## ACM Gordon Bell Prize



The 2008 winners of the ACM Gordon Bell Prize Peak Performance Category are Thomas C. Schulthess, Gonzalo Alvarez, Michael S. Summers, Don E. Maxwell, Markus Eisenbach, Jeremy S. Meredith, Thomas A. Maier, Paul Kent, and Eduardo D'Azevedo, from the Oak Ridge National Laboratory (ORNL), and John M. Levesque and Jeffrey M. Larkin of Cray, Inc., for *Multi-terafllops Simulations of Disorder Effects on the Transition Temperature of the High Tc Superconducting Cuprates*.

The 2008 ACM Gordon Bell Prize for the Special Category in Algorithm Innovation went to Lin-Wang Wang, Byounggak Lee, Hongzhang Shan, Zhengji Zhao, Juan Meza, Erich Strohmaier, and David Bailey, Lawrence Berkeley Lab, for *Linearly Scaling 3D Fragment Method for Large-Scale Electronic Structure Calculations*.

The ACM Gordon Bell Prizes are awarded each year to recognize outstanding achievement in high-performance computing. The purpose of the award is to track the progress over time of parallel computing, with particular emphasis on rewarding innovation in applying high-performance computing to applications in science. Prizes are awarded for peak performance, special achievements in scalability, and time-to-solution on important science and engineering problems and low price/performance.

The awards are presented during the SC Conference and include a total of \$10,000 in prize money. The award has been endowed by Gordon Bell, a pioneer in high-performance and parallel computing.

## ACM- IEEE CS Ken Kennedy Award



The ACM - IEEE CS Ken Kennedy Award is awarded annually and recognizes substantial contributions to programmability and productivity in computing and substantial community service or mentoring contributions. The award includes a \$5,000 honorarium and the award recipient will be announced at the ACM - IEEE SC Conference. The recipient will give a presentation, normally technical, at the SC conference at which it is announced, or at an ACM or IEEE conference of the winner's choosing during the year following the announcement. The first presentation of this award will be in November 2009.

## ACM International Collegiate Programming Contest



The 2009 ACM International Collegiate Programming Contest (ICPC) competition, which is sponsored by IBM, drew from a record 7,109 teams from 1,838 universities in 88 countries who competed in regional contests worldwide for a spot at the 33rd World Finals. The World Finals took place April 22, 2009, at the Royal Institute of Technology, in Stockholm, Sweden.

The 2009 winning team was from the St. Petersburg State University of IT, Mechanics and Optics. The members of the 2009 winning team are: Vladislav Isenbaev, Maxim Buzdalov, and Eugeniy Kapun. Their Advisors are Vladimir Parfenov and Roman Elizarov, their Assistant Coach is Pavel Mavrin, and their Coach is Andrey Stankevich.

## 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 OOPSLA, SIGGRAPH, and SIGCSE SRCs advanced to compete in the Grand Finals where their research contributions were evaluated, via the web, by the ACM SRC committee members. Financial sponsorship for the ACM Student Research Competition is provided by Microsoft Research. The finalists represent the best student research of the past year. The winners of the ACM Grand Finals are listed below in alphabetical order:

### Graduate Category

Stratis Ioannidis, University of Toronto  
Xu Liu, University of Maryland, College Park  
Ye Kyaw Thu, Waseda University

### Undergraduate Category

Sarah Loos, Indiana University  
Neha Singh, IIT Bombay  
Alice Zhu, Harvey Mudd College

## Computing Research Association Award



The 2009 Computing Research Association Distinguished Service Award is presented to Eugene Spafford of Purdue University.

The Computing Research Association Distinguished Service Award recognizes service in the areas of government affairs, professional societies, publications, or conferences, and leadership that has a major impact on computing research.

## Intel International Science and Engineering Fair



The Intel International Science and Engineering Fair (ISEF) is held annually each May, and has been administered since 1950 by Society for Science & the Public. Over 1,600 ninth through twelfth grade student winners from over 50 nations are among those who have earned the right to compete by winning top prize at a local, regional, state or national science fair. Special Awards are presented by scientific, professional and educational organizations and include scholarships, summer internships, book and equipment grants and scientific field trips. ACM presents awards of \$1,000 for first place, \$500 for second place, \$300 for third place and \$200 for honorable mention winners, and all receive complimentary Student Memberships for the duration of their undergraduate education. The 60th Intel ISEF was held May 10-15, 2009 in Reno, NV. ACM winners for 2009 were:

### First Place:

Xiaowei Zhu, Shanghai, China

### Second Place:

Vojtech Vit and Stepan Sindelar,  
Prague, Czech Republic

### Third Place:

Nelson Zhang, Shanghai, China

### The Honorable Mention Winners

Matt Vitelli, Salt Lake City, Utah  
Vedant Kumar, Louisville, Kentucky  
Yi-Ping Shih, Taipei, Taiwan (R.O.C.),  
Chinese Taipei

## ACM Fellows



The Fellows Program was established by the ACM 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 2008 Fellows are listed below, and a complete listing of the ACM Fellows can be found on pages 24-27 in this booklet, and on the ACM website: <http://fellows.acm.org/>

*Martín Abadi*, Microsoft/UC Santa Cruz; Microsoft Research Silicon Valley  
*Gregory Abowd*, Georgia Institute of Technology  
*Alexander Aiken*, Stanford University  
*Sanjeev Arora*, Princeton University  
*Hari Balakrishnan*, Massachusetts Institute of Technology  
*William Buxton*, Microsoft Research  
*Kenneth L. Clarkson*, IBM Almaden Research Center  
*Jason (Jingsheng) Cong*, University of California at Los Angeles  
*Perry R. Cook*, Princeton University  
*Stephen A. Cook*, University of Toronto  
*Jack W. Davidson*, University of Virginia  
*Umeshwar Dayal*, Hewlett-Packard Laboratories  
*Xiaotie Deng*, City University of Hong Kong  
*José J. Garcia-Luna-Aceves*, University of California Santa Cruz; Palo Alto Research Center  
*Michel X. Goemans*, Massachusetts Institute of Technology  
*Patrick Hanrahan*, Stanford University  
*Charles H. House*, Stanford University MediaX Program  
*Watts S. Humphrey*, Carnegie Mellon University (SEI)  
*Alan C. Kay*, Viewpoints Research Institute  
*Joseph A. Konstan*, University of Minnesota  
*Roy Levin*, Microsoft Research Silicon Valley  
*P. Geoffrey Lowney*, Intel Corporation  
*Jitendra Malik*, University of California, Berkeley  
*Kathryn S. McKinley*, The University of Texas at Austin  
*Bertrand Meyer*, ETH Zurich  
*John C. Mitchell*, Stanford University  
*Joel Moses*, Massachusetts Institute of Technology  
*J. Ian Munro*, University of Waterloo  
*Judith S. Olson*, University of California at Irvine  
*Lawrence C. Paulson*, University of Cambridge Computer Laboratory  
*Hamid Pirahesh*, IBM Almaden Research Center  
*Brian Randell*, Newcastle University  
*Michael K. Reiter*, University of North Carolina at Chapel Hill  
*Jennifer Rexford*, Princeton University  
*Jonathan S. Rose*, University of Toronto  
*Mendel Rosenblum*, Stanford University  
*Rob A. Rutenbar*, Carnegie Mellon University  
*Tuomas Sandholm*, Carnegie Mellon University  
*Vivek Sarkar*, Rice University  
*Mark S. Squillante*, IBM Thomas J. Watson Research Center  
*Per Stenström*, Chalmers University of Technology  
*Madhu Sudan*, Massachusetts Institute of Technology  
*Richard Szeliski*, Microsoft Research  
*Douglas Terry*, Microsoft Research Silicon Valley

## ACM Award Nomination Submission Procedures



Nominations for ACM awards should be submitted electronically by **September 30, 2009** for the Doctoral Dissertation Award, and by **November 30, 2009** for all other ACM awards, to the respective subcommittee chair listed on pages 19 & 20, or to Rosemary McGuinness at [mcguinness@acm.org](mailto:mcguinness@acm.org).

For ACM Fellow, the deadline is **September 1, 2009**. For ACM Distinguished Member it is **July 31, 2009**. For Senior Member it is **August 31, 2009**.

As a general rule, each nomination submitted should consist of at least the following items:

1. Name, address, phone number and email address of the person making the nomination.
2. Name, address, and email address of the candidate for whom an award is recommended.
3. A statement (between 200 and 500 words long) as to why the candidate deserves the particular award.
4. Supporting letters from a minimum of two endorsers.
5. For the A.M. Turing Award, a minimum of 3 endorsements should be provided. A.M. Turing Award nominations usually include substantive letters of support from a group of prominent individuals broadly representative of the candidate's field.

For the Karl V. Karlstrom Outstanding Educator Award, a CV and listing of the candidate's Ph.D. students and their current positions are requested. It would be helpful to include the candidate's CV for all other award nominations.



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

Rosemary McGuinness  
 ACM Awards Committee Liaison  
 ACM  
 2 Penn Plaza, Suite 701  
 New York, NY 10121-0701, USA  
 +1-212-626-0561  
 or  
[mcguinness@acm.org](mailto:mcguinness@acm.org)

### Awards Committee Co-Chairs

*Calvin C. Gotlieb*  
 Professor Emeritus  
 Department of  
 Computer Science  
 University of Toronto  
 Toronto, Ontario  
 Canada M5S 1A4  
 +1-416-978-2986 – office  
[cgg@cs.toronto.edu](mailto:cgg@cs.toronto.edu)

*James J. Horning*  
 Cobham Analytic Solutions  
 710 Lakeway Drive, Suite 195  
 Sunnyvale, CA 94085-4013  
 +1-408-774-1111, x102 - office  
[horning@acm.org](mailto:horning@acm.org)



*Robert A. Walker*, SGB Awards Committee Liaison  
 See contact information on page 20

## 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: [www.acm.org/sigs/sig-awards](http://www.acm.org/sigs/sig-awards)

**SIGACCESS** - Special Interest Group on Accessible Computing

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

**SIGACT** - Special Interest Group on 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

**SIGAda** - Special Interest Group on Ada Programming Language

- ◆ Outstanding Ada Community Contribution
- ◆ Distinguished Service Award

**SIGAPP** - Special Interest Group on Applied Computing

- ◆ Distinguished Service Award
- ◆ Outstanding Service Award

**SIGARCH** - Special Interest Group on Computer Architecture

- ◆ Maurice Wilkes Award
- ◆ ISCA Influential Paper Award
- ◆ Distinguished Service Award

**SIGART** - Special Interest Group on Artificial Intelligence

- ◆ Annual Award for Excellence in Autonomous Agent Research

**SIGBED** - Special Interest Group on Embedded Systems

- ◆ SIGBED/SIGSOFT Frank Anger Memorial Award
- ◆ SIGBED-EMSOFT Best Paper Award

**SIGCAS** - Special Interest Group on Computers and Society

- ◆ Outstanding Service Award
- ◆ Making a Difference Award

**SIGCHI** - Special Interest Group on Computer-Human Interaction

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

**SIGCOMM** - Special Interest Group on Data Communication

- ◆ Award for Lifetime Achievement
- ◆ Rising Star Award
- ◆ Test of Time Paper Award

**SIGCSE** - Special Interest Group on Computer Science Education

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

**SIGDA** - Special Interest Group on 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** - Special Interest Group on Design of Communication

- ◆ Joseph T. Rigo Award
- ◆ Diana Award

**SIGGRAPH** - Special Interest Group on Computer Graphics and Interactive Techniques

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

## ACM's Special Interest Group Awards



**SIGIR** - Special Interest Group on Information Retrieval

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

**SIGKDD** - Special Interest Group on Knowledge Discovery in Data

- ◆ Innovation Award
- ◆ Service Award
- ◆ Doctoral Dissertation Award

**SIGMETRICS** - Special Interest Group on Measurement and Evaluation

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

**SIGMIS** - Special Interest Group on Management Information Systems

- ◆ Magid Igbaria Outstanding Conference Paper of the Year Award

**SIGMOBILE** - Special Interest Group on Mobility of Systems, Users, Data & Computing

- ◆ Distinguished Service Award
- ◆ Outstanding Contributions to Research on Mobility of Systems, Users, Data and Computing Award

**SIGMOD** - Special Interest Group on 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

**SIGMM** - Special Interest Group on Multimedia

- ◆ Award for Outstanding Technical Contributions
- ◆ Award for Outstanding PhD Thesis in Multimedia Computing, Communications and Applications

**SIGOPS** - Special Interest Group on Operating Systems

- ◆ Mark Weiser Award
- ◆ Hall of Fame Award
- ◆ SIGACT/SIGOPS Edsger W. Dijkstra Prize in Distributed Computing

**SIGPLAN** - Special Interest Group on Programming Languages

- ◆ Distinguished Service Award
- ◆ Programming Languages Achievement Award
- ◆ Most Influential PLDI Paper Award
- ◆ Most Influential POPL Paper Award
- ◆ Most Influential OOPSLA Paper Award
- ◆ Most Influential ICFP Paper Award
- ◆ Doctoral Dissertation Award
- ◆ Kenneth E. Iverson Award for Outstanding Contributions in Array Languages
- ◆ John Vlissides Award

**SIGSAC** - Special Interest Group on Security, Audit and Control

- ◆ Outstanding Innovation Award
- ◆ Outstanding Contribution Award

**SIGSAM** - Special Interest Group on Symbolic and Algebraic Manipulation

- ◆ Richard D. Jenks Memorial Prize

**SIGSIM** - Simulation and Modeling

- ◆ Distinguished Contribution Award

**SIGSOFT** - Special Interest Group on Software Engineering

- ◆ Distinguished Service Award
- ◆ Outstanding Research Award
- ◆ SIGBED/SIGSOFT Frank Anger Memorial Award
- ◆ SIGSOFT/IEEE TCSE ICSE Most Influential Paper Award
- ◆ Influential Educator Award
- ◆ Impact Paper Award

**SIGUCCS** - Special Interest Group on University and College Computing Services

- ◆ Penny Crane Award

**SIGWEB** - Special Interest Group on Hypertext, Hypermedia and the Web

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

## 2008 ACM Award Subcommittee Chairs



### *A. M. Turing*

*Brian Randell*, Newcastle University

### *ACM – Infosys Foundation Award in the Computing Sciences*

*Juris Hartmanis*, Cornell University

### *Distinguished Service*

*Gurindar Sohi*, University of Wisconsin

### *Outstanding Contribution to ACM*

*Diana Marculescu*, Carnegie Mellon University

### *Software System*

*Michael Stonebraker*, MIT, CSAIL

### *Grace Murray Hopper*

*Jennifer Rexford*, Princeton University

### *Doctoral Dissertation*

*Richard Karp*, International Computer Science Institute, Berkeley (ICSI)

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

*Ronny Ronen*, Intel

### *Karl V. Karlstrom Outstanding Educator*

*David Gries*, Cornell University

### *ACM - AAAI Allen Newell*

*Kathy McKeown*, Columbia University

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

*Nina Bhatti*, Hewlett Packard Laboratories

### *Paris Kanellakis Theory and Practice*

*Rajeev Alur*, University of Pennsylvania

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

*David S. Wise*, Indiana University

### *Fellows*

*Cherri Pancake*, Oregon State University

### *Distinguished Members*

*Marc Snir*, University of Illinois, Urbana-Champaign  
*Telle Whitney*, Anita Borg Institute

### *Senior Members*

*Robert A. Walker*, Kent State University

### *Gordon Bell Prize*

*James Demmel*, University of California, Berkeley

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

*Mary F. Wheeler*

## 2009 ACM Award Subcommittee Chairs and Members



### *A.M. Turing*

#### *Alan Kay*

Viewpoints Research Institute  
*turing-award@vpri.org*

Members:

#### *Alan Kay*

#### *Vint Cerf*

#### *Jennifer Chayes*

#### *Brian Randell*

#### *Ravi Sethi*

### *ACM-Infosys Foundation Award*

#### *Juris Hartmanis*

Cornell University  
Dept. of Computer Science  
5149 Upson Hall  
Ithaca, NY 14853  
+1-607-255-9208 – office  
*jh@cs.cornell.edu*

Members:

#### *Susan L. Graham*

#### *Butler Lampson*

#### *Kurt Mehlhorn*

#### *John C. Mitchell*

#### *Amit Singhal*

#### *Andrew C. Yao*

### *Distinguished Service*

#### *Marc Shapiro*

INRIA  
Laboratoire LIP6, bureau 825  
104, Avenue du Président  
Kennedy  
75016, Paris, France  
+011-33 1 44-27-70-93 -office  
+011-33 1 44-27-74-95 – fax  
*marc.shapiro@acm.org*

Members:

#### *Gurindar Sohi*

#### *Bryant York*

### *Outstanding Contribution to ACM*

#### *Vicki Hanson*

School of Computing  
University of Dundee  
Dundee DD1 4HN  
Scotland  
+44 (0)1382 386510 - office  
+44 (0)1382 385509 - fax  
*vlh@computing.dundee.ac.uk*

Members:

#### *Diana Marculescu*

#### *Pat Ryan*

#### *Richard Snodgrass*

### *Software System*

#### *Alexander Wolf*

Imperial College London  
Department of Computing  
180 Queen's Gate  
London SW7 2AZ, UK  
+44-0-207-594-8355 – office  
+44-0-207-594-8282 – fax  
*a.wolf@imperial.ac.uk*  
*stonebraker@lcs.mit.edu*

Members:

#### *P. Anandan*

#### *Michael Stonebraker*

### *Grace Murray Hopper*

#### *Kelly Lyons*

Associate Professor  
Faculty of Information Studies  
University of Toronto  
45 Willcocks Street, Rm. 314  
Toronto, Ont., M5S 1C7, Canada  
+1-416-946-3839 – office  
*kelly.lyons@acm.org*  
*kelly.lyons@utoronto.ca*

Members:

#### *Martin Abadi*

#### *Jennifer Rexford*

### *Doctoral Dissertation*

#### *Bart Selman*

Dept. of Computer Science  
4148 Upson Hall  
Cornell University  
Ithaca, NY 14853-7501  
+1-607-255-5643 – office

+1-607-255-4428 – fax  
*Selman@cs.cornell.edu*

Members:

#### *Richard Karp*

#### *Brian Bershad*

#### *Martin Rinard*

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

#### *Jean-Loup Baer*

University of Washington  
P.O. Box 352350  
Seattle, WA 98195-2350  
+1-206-685-1376  
*baer@cs.washington.edu*

ACM Representatives:  
*Charles Moore*

### *Karl V. Karlstrom*

#### *Outstanding Educator*

#### *Nancy Leveson*

MIT - Room 33-334  
Aero/Astro Department  
77 Massachusetts Avenue  
Cambridge, MA 02139-4301  
+1-617-258-0505  
*leveson@mit.edu*

Members:

#### *David Gries*

#### *Andries van Dam*

### *ACM-IEEE CS Ken*

#### *Kennedy Award*

#### *Rob Schreiber*

HP Labs  
1501 Page Mill Road  
MS 1177  
Palo Alto, CA 94304  
+1-650-857-8156 – office  
*rob.schreiber@hp.com*

ACM Representatives:

#### *William Griswold*

#### *Kathryn McKinley*

## 2009 ACM Award Subcommittee Chairs and Members

### ACM-AAAI Allen Newell Daniel P. Huttenlocher

Dept. of Computer Science  
Cornell University  
Ithaca, NY 14853-7501  
+1-607-255-1974  
dph@cs.cornell.edu

Members:  
**Kathleen McKeown**  
**Fernando Pereira**

### Eugene L. Lawler (Biennial)

**Nina Bhatti**  
Hewlett Packard Laboratories  
1501 Page Mill Road  
Palo Alto, CA 94304  
+1-650-857-3390 – office  
+1-650-852-3791 – fax  
nina.bhatti@hpl.hp.com

Members:  
**Eric Brewer**  
**Christian Freksa**  
**David Shmoys**  
**Barbara Simons**  
**Michael Ubell**  
**Sabine Susstrunk**

### Fellows

**Stephen R. Bourne**  
El Dorado Ventures  
srb@acm.org

Members:  
**Stuart I. Feldman**  
**Mary Jane Irwin**  
**Cherri Pancake**  
**Ron Perrott**  
**Avi Silberschatz**  
**Andrew C. Yao**

### Distinguished Member

**Marc Snir**, Co-Chair  
Department of Computer  
Science  
University of Illinois at  
Urbana-Champaign  
2248 Siebel Center for  
Computer Science  
MC 258  
201 North Goodwin  
Urbana, IL 61801

+1-217-333-3373 – office  
snir@cs.uiuc.edu

**Telle Whitney**, Co-Chair  
President  
Anita Borg Institute  
for Women and Technology  
1501 Page Mill Rd. ms 1105  
Palo Alto, CA 94304  
+1-650-236-4758 – office  
Tellew@anitaborg.org

Members:  
**Adele Goldberg**  
**Robert M. Lefkowitz**  
**John F. Nolan**  
**David A. Thomas**  
**Robert A. Walker**

### Senior Members

**Robert A. Walker**  
Department of Computer  
Science  
223 Math and CS Bldg. (MSB)  
Kent State University  
Kent, OH 44242  
+1-330-672-9055 – office  
walker@cs.kent.edu  
senior@acm.org

Members:  
**Reinaldo Bergamaschi**  
**Susan Rodger**  
**John Yen**  
**Marc Snir**  
**Telle Whitney**

### Intel International Science and Engineering Fair

**Cynthia Brown**  
Portland State University  
CMPS  
PO Box 751  
Portland, OR 97207  
+1-503-725-8251 – office  
+1-503-725-3211 – fax  
cbrown@cs.pdx.edu

Members:  
**Stephen Ibaraki**

### Paris Kanellakis Theory and Practice Award Yossi Matias

Head, Google R&D Center  
23 Menachem Begin Road  
Tel Aviv, Israel 66183  
+972-3-7617354  
yossi.matias@gmail.com

Members:  
**Rajeev Alur**  
**Edmund M. Clarke**  
**Peter Wegner**

### SIAM/ACM Prize in Computational Science and Engineering

c/o Joanna Littleton  
SIAM  
+1-215-382-9800, ext. 303  
littleton@siam.org

Members:  
**Richard J. Hanson**  
**Mac Hyman**  
**Mary F. Wheeler**

### ACM Gordon Bell Prize Mateo Valero

Computer Architecture  
Department  
Technical University of  
Catalonia  
DAC - UPC  
Campus Nord, D6  
Jordi Girona, 1-3  
08034 Barcelona, Spain  
+011-34-93 401 69 79 – office  
mateo@ac.upc.edu

Members:  
**Jack Dongarra**  
**Christian Bischof**  
**James W. Demmel**  
**Doug Kothe**

## Past Recipients

### ACM - Infosys Foundation Award in the Computing Sciences

2007 Daphne Koller

### 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 **System R**  
Donald Chamberlin  
James 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  
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**  
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

## Past Recipients



### *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 Gray  
Paul McJones  
Michael Blasgen  
Bruce Lindsay  
Raymond Lorie  
Thomas Price  
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  
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

### *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

### *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. Franzaszek  
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

### *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  
2003 Sartaj Sahni  
2004 no award given  
2005 Stuart J. Russell  
2006 no award given  
2007 Randy Pausch

### *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

### *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  
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

### *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

## Past Recipients



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

### *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  
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

### *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

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

2003 John B. Bell  
2003 Phillip Colella  
2004 Achi Brandt  
2007 Chi-Wang Shu

### *ACM Presidential Award*

1985 Robert E. Kahn  
1987 Kent Curtis  
1998 John Gage  
2002 Calvin C. Gotlieb  
2006 Andreas Bechtolsheim  
2006 Janice E. Cuny  
2006 Edward Lazowska  
2007 Eugene Spafford  
2008 Stephen R. Bourne  
2008 Patricia M. Ryan  
2008 Barbara Ryder  
2008 Moshe Vardi

## ACM Fellows



Martín Abadi\*  
 Gregory D. Abowd\*  
 Jacob Abraham  
 Paul Abrahams  
 James M. Adams  
 William Richards Adrion  
 Anant Agarwal  
 Pankaj Agarwal  
 Dharma Agrawal  
 Rakesh Agrawal  
 Vishwani Agrawal  
 Alfred V. Aho  
 Narendra Ahuja  
 Alexander S. Aiken\*  
 Robert Aiken  
 Kurt Akeley  
 Ian Akyildiz  
 Frances E. Allen  
 Eric Allender  
 Franz L. Alt  
 Rajeev Alur  
 Mostafa Ammar  
 Thomas E. Anderson  
 Gregory Andrews  
 Andrew Appel  
 Sanjeev Arora\*  
 Arvind  
 Tetsuo Asano  
 Robert L. Ashenurst  
 William F. Atchison  
 Mikhail Atallah  
 Marc Auslander  
 Richard H. Austing  
 Ozalp Babaoglu  
 Jean-Loup Baer  
 Victor Bahl  
 Ruzena Bajcsy  
 Hari Balakrishnan\*  
 Prithviraj Banerjee  
 Utpal Banerjee  
 Alan H. Barr  
 Victor Basili  
 Kenneth E. Batchner  
 Robert Bate  
 Catriel Beer  
 C. Gordon Bell  
 Bonnie Berger  
 Hal Berghel  
 Francine Berman  
 Lawrence Bernstein  
 Phil Bernstein  
 Elisa Bertino  
 Laxmi N. Bhuyan  
 Alan W. Biermann

Kenneth Birman  
 Joel Birnbaum  
 Dines Bjørner  
 Michael W. Blasgen  
 Avrim Blum  
 Daniel G. Bobrow  
 Gregor Bochmann  
 Barry Boehm  
 David R. Boggs  
 Shahid H. Bokhari  
 Grady Booch  
 Lorraine Borman  
 Alan Borning  
 Bella Bose  
 Stephen R. Bourne  
 Ronald J. Brachman  
 Robert Braden  
 Charles L. Bradshaw  
 David Brandin  
 Yuri Breitbart  
 Rajeev Alur  
 Eric A. Brewer  
 Daniel S. Bricklin  
 Andrei Z. Broder  
 Frederick P. Brooks  
 Rodney Brooks  
 Douglas K. Brotz  
 James Browne  
 Randal E. Bryant  
 Janis A. Bubenko, Jr.  
 Peter Buneman  
 Richard R. Burton  
 William Buxton\*  
 Jin-Yi Cai  
 Richard G. Canning  
 Stuart K. Card  
 Luca Cardelli  
 Michael J. Carey  
 Walter M. Carlson  
 Loren Carpenter  
 John Carroll  
 Robert Cartwright  
 Edwin Catmull  
 Roger Bate  
 Donald D. Chamberlin  
 Balakrishnan Chandrasekaran  
 Surajit Chaudhuri  
 Bernard Chazelle  
 Ming-Syan Chen  
 Peter Chen  
 Andrew A. Chien  
 Imrich Chlamtac  
 David D. Clark  
 Edmund Clarke

Lori Clarke  
 Kenneth L. Clarkson\*  
 Edward G. Coffman, Jr.  
 Michael F. Cohen  
 Richard Cole  
 George E. Collins  
 Douglas E. Comer  
 Jason (Jingsheng) Cong\*  
 Robert Constable  
 Larry L. Constantine  
 Perry R. Cook\*  
 Robert Cook  
 Stephen A. Cook\*  
 Keith D. Cooper  
 Fernando J. Corbató  
 Harvey G. Cragon  
 W. Bruce Croft  
 Jonathon Crowcroft  
 David Culler  
 William J. Dally  
 Thomas A. D'Auria  
 Jack W. Davidson\*  
 Susan Davidson  
 Gordon Davis  
 Umeshwar Dayal\*  
 Joseph S. DeBlasi  
 Thomas A. DeFanti  
 Johan de Kleer  
 Giovanni De Micheli  
 Richard DeMillo  
 James Demmel  
 Xiaotie Deng\*  
 Dorothy Denning  
 Peter J. Denning  
 Jack B. Dennis  
 Narsingh Deo  
 L. Peter Deutsch  
 David DeWitt  
 Thomas G. Dietterich  
 David L. Dill  
 Christophe Diot  
 David Dobkin  
 George G. Dodd  
 Danny Dolev  
 Jack Dongarra  
 Rodney Graham Downey  
 Larry E. Druffel  
 Michel Dubois  
 Susan Dumais  
 Karen A. Duncan  
 Susan J. Eggers  
 Clarence Ellis  
 Joel S. Emer  
 José Encarnacao

Gerald L. Engel  
 Erwin Engeler  
 John H. Esbin  
 Deborah Estrin  
 Ronald Fagin  
 David Farber  
 Richard Fateman  
 Usama Fayyad  
 Edward Feigenbaum  
 Joan Feigenbaum  
 Stuart Feldman  
 Matthias Felleisen  
 Edward W. Felten  
 Tse-Yun Feng  
 Jeanne Ferrante  
 Domenico Ferrari  
 Michael J. Fischer  
 Sally Floyd  
 Michael J. Flynn  
 James Foley  
 Kenneth Forbus  
 Lance J. Fortnow  
 Dennis J. Frailey  
 Michael J. Franklin  
 Robert M. Frankston  
 Herbert Freeman  
 Peter A. Freeman  
 Ophir Frieder  
 Frank L. Friedman  
 Henry Fuchs  
 W. Kent Fuchs  
 Harold N. Gabow  
 Richard Gabriel  
 Zvi Galil  
 Guang R. Gao  
 Jose J. Garcia-Luna-Aceves\*  
 Hector Garcia-Molina  
 Michael Garey  
 Charles W. Gear  
 Erol Gelenbe  
 Charles Geschke  
 Carlo Ghezzi  
 Philip Gibbons  
 Myron Ginsberg  
 Robert Glass  
 Michel X. Goemans\*  
 Adele J. Goldberg  
 John Goodenough  
 Calvin C. Gottlieb  
 Allan J. Gottlieb  
 Georg Gottlob  
 Ambuj Goyal  
 Robert M. Graham  
 Ronald Graham

## ACM Fellows



Susan L. Graham  
 James N. Gray  
 Cordell Green  
 Albert Greenberg  
 Donald P. Greenberg  
 Irene Greif  
 David J. Gries  
 William Gropp  
 Herbert R.J. Grosch  
 Barbara J. Grosz  
 Roch Guerin  
 Leonidas Guibas  
 Gopal Gupta  
 Yuri Gurevich  
 John Guttag  
 Adolfo Guzman-Arenas  
 Laura Haas  
 Donald J. Haderle  
 Brent Hailpern  
 Alon Halevy  
 Joseph Y. Halpern  
 Carl Hammer  
 Jiawei Han  
 Patrick Hanrahan\*  
 Vicki Hanson  
 David Harel  
 Robert Harper  
 Michael A. Harrison  
 Mary Jean Harrold  
 Peter E. Hart  
 Juris Hartmanis  
 John P. Hayes  
 Anthony Hearn  
 Michael T. Heath  
 Philip Heidelberger  
 John Hennessy  
 Thomas Henzinger  
 Maurice Herlihy  
 Bertram Herzog  
 Mark D. Hill  
 W. Daniel Hillis  
 Lance Hoffman  
 John E. Hopcroft  
 James Horning  
 Mark Horowitz  
 Charles H. House\*  
 Paul Hudak  
 Richard Hull  
 J.N.P. Hume  
 Watts S. Humphrey\*  
 Harry D. Huskey  
 Daniel P. Huttenlocher  
 Wen-mei W. Hwu  
 Toshihide Ibaraki

Oscar Ibarra  
 Neil Immerman  
 Yannis Ioannidis  
 Mary Jane Irwin  
 Sitharama Iyengar  
 Ravishankar Iyer  
 Jeffrey M. Jaffe  
 H.V. Jagadish  
 Anil Jain  
 Raj Jain  
 Ramesh Jain  
 Joseph JaJa  
 Niraj Jha  
 Tao Jiang  
 David S. Johnson  
 Anita K. Jones  
 Clifford B. Jones  
 Neil D. Jones  
 Aravind Joshi  
 Norman Jouppi  
 M. Frans Kaashoek  
 William M. Kahan  
 Robert E. Kahn  
 Takeo Kanade  
 Abraham Kandel  
 Sung Mo Kang  
 Ronald M. Kaplan  
 Sidney Karin  
 Richard M. Karp  
 Randy H. Katz  
 Alan C. Kay\*  
 Zvi M. Kedem  
 Wendy A. Kellogg  
 Richard Kemmerer  
 Stephen Kent  
 Richard Kieburtz  
 Won Kim  
 Maria M. Klawe  
 Leonard Kleinrock  
 John C. Klensin  
 Donald E. Knuth  
 Phokion G. Kolaitis  
 Joseph A. Konstan\*  
 Henry F. Korth  
 S. Rao Kosaraju  
 Robert A. Kowalski  
 Dexter Kozen  
 Jeffrey Kramer  
 David J. Kuck  
 Vipin Kumar  
 James Kurose  
 Thomas E. Kurtz  
 Ray Kurzweil  
 Richard Ladner

## ACM Fellows



John Laird  
T.V. Lakshman  
S. Lakshmirarahan  
Monica Lam  
Simon Lam  
Butler W. Lampson  
Lawrence H. Landweber  
Per-Åke Larson  
James Larus  
Stephen S. Lavenberg  
Harold Lawson  
Edward Lazowska  
Der-Tsai Lee  
J.A.N. Lee  
Peter Lee  
Ruby Lee  
Meir M. Lehman  
Charles Leiserson  
Michael E. Lesk  
Nancy Leveson  
Roy Levin\*  
Marc Levoy  
Henry M. Levy  
Philip M. Lewis II  
Kai Li  
Ming Li  
Yi-bing Lin  
Bruce G. Lindsay  
Richard Lipton  
Barbara H. Liskov  
Joyce Currie Little  
Witold Litwin  
C.L. Liu  
David B. Lomet  
Raymond A. Lorie  
Donald W. Loveland  
P. Geoffrey Lowney\*  
Nancy Lynch  
M. Stuart Lynn  
David MacQueen  
David Maier  
Herbert Maisel  
Jitendra Malik\*  
Zohar Manna  
C. Dianne Martin  
Larry Masinter  
John McCarthy  
Edward J. McCluskey  
Daniel D. McCracken  
Paul R. McJones  
Kathleen McKeown  
Nick McKeown  
Kathryn McKinley\*  
Kurt Mehlhorn

Daniel Menacsé  
Albert R. Meyer  
Bertrand Meyer\*  
Barton Miller  
Gary Miller  
Raymond Miller  
David Mills  
A.J.R.G. Milner  
Jack Minker  
Bhubaneswar Mishra  
Jayadev Misra  
John C. Mitchell\*  
Paul Mockapetris  
Jeffrey Mogul  
C. Mohan  
J. Strother Moore  
Thomas P. Moran  
James H. Morris  
Joel Moses\*  
J. Eliot B. Moss  
Rajeev Motwani  
J. Ian Munro\*  
Richard R. Muntz  
Brad A. Myers  
Eugene W. Myers  
Richard E. Nance  
Jeffrey F. Naughton  
Peter G. Neumann  
Monroe M. Newborn  
Alan Newell  
David M. Nicol  
Jurg Nievergelt  
Takao Nishizeki  
Donald Norman  
Peter Norvig  
David Notkin  
Susan Nycum  
Martin Odersky  
Anthony Oettinger  
Dianne P. O'Leary  
Dan R. Olsen, Jr.  
Gary M. Olson  
Judith S. Olson\*  
Kunle Olukotun  
Leon Osterweil  
John K. Ousterhout  
Susan S. Owicki  
M. Tamer Özsu  
Krishna V. Palem  
Cherri Pancake  
Christos Papadimitriou  
Donn Parker  
David L. Parnas  
Craig Partridge

Janak Patel  
Yale Patt  
David Patterson  
Lawrence C. Paulson\*  
Vern Paxson  
Larry L. Peterson  
Ron Perrott  
Simon Peyton-Jones  
Nicholas Pippenger  
Hamid Pirahesh\*  
Ira Pohl  
William B. Poucher  
Amir Pnueli  
Dhiraj Pradhan  
Viktor K. Prasanna  
Vaughan Pratt  
Bryan Preas  
Franco Preparata  
J. Mark Pullen  
Roy Rada  
Prabhakar Raghavan  
Anthony Ralston  
Raghu Ramakrishnan  
Krithi Ramamritham  
Brian Randell\*  
Venkat Rangan  
T.R.N. Rao  
Daniel A. Reed  
John Reif  
Edward M. Reingold  
Michael K. Reiter\*  
Thomas Reps  
Aristides A.G. Requicha  
Jennifer Rexford\*  
John C. Reynolds  
John R. Rice  
John T. Richards  
Ronald L. Rivest  
Eric S. Roberts  
George Robertson  
Jonathan S. Rose\*  
Arnold L. Rosenberg  
Mendel Rosenblum\*  
Daniel Rosenkrantz  
Nicholas Roussopoulos  
Lawrence A. Rowe  
Johns F. Rulifson  
Stuart J. Russell  
Rob A. Rutenbar\*  
Barbara Ryder  
Krishnan Sabnani  
Sartaj Sahni  
David H. Salesin  
Ahmed H. Sameh

Hanan Samet  
Jean E. Sammet  
Pamela Samuelson  
William H. Sanders  
Tuomas Sandholm\*  
Ravi Sandhu  
Vivek Sarkar\*  
Mahadev Satyanarayanan  
John E. Savage  
Richard E. Schantz  
Hans J. Schek  
Richard Schlichting  
Paul Schneck  
Fred Schneider  
Michael D. Schroeder  
Dana S. Scott  
Michael Scott  
Robert Sedgewick  
Alan Selman  
Carlo Sequin  
Ravi Sethi  
Lui Sha  
Micha Sharir  
Alan C. Shaw  
Mary Shaw  
Scott Shenker  
Kang G. Shin  
David Shmoys  
Ben Shneiderman  
Heung-Yeung Shum  
Howard Jay Siegel  
Daniel Siewiorek  
Abraham Silberschatz  
Barbara Simons  
Martha A. Sloan  
Donald R. Slutz  
Alan Smith  
Burton J. Smith  
Marc Snir  
Richard Snodgrass  
Lawrence Snyder  
Mary Lou Soffa  
Gurindar Sohi  
Eugene Spafford  
Alfred Spector  
Mark S. Squillante\*  
John A. Stankovic  
Richard E. Stearns  
Thomas B. Steel, Jr.  
Guy L. Steele, Jr.  
Kenneth Steiglitz  
Ralf Steinmetz  
Per Stenström\*  
Harold S. Stone

## ACM Fellows



Michael Stonebraker  
William D. Strecker  
Bjarne Stroustrup  
Madhu Sudan\*  
Patrick Suppes  
Gerald J. Sussman  
Ivan Sutherland  
Norihisa Suzuki  
Richard Szeliski\*  
Edward A. Taft  
C.J. Tan  
Andrew S. Tanenbaum  
Eva Tardos  
Robert E. Tarjan  
Richard Taylor  
Robert W. Taylor  
Douglas Terry\*  
Demetri Terzopoulos  
Charles P. Thacker  
Donald E. Thomas  
Mikkel Thorup  
Koji Torii  
Donald Towsley  
Irving L. Traiger  
Joseph Traub  
Allen B. Tucker  
A. Joseph Turner  
Jonathan Turner  
Jeffrey Ullman  
Eli Upfal  
Andries van Dam  
Axel van Lamsweerde  
Cornelis van Rijsbergen  
Mateo Valero  
Moshe Y. Vardi  
George Varghese  
Umesh Vazirani  
Vijay V. Vazirani  
Mary K. Vernon  
Victor Vianu  
Uzi Vishkin  
Jeffrey S. Vitter  
Philip Wadler  
Benjamin W. Wah  
David Waltz  
Mitchell Wand  
Roy Want  
Willis H. Ware  
John Warnock  
David S. Warren  
Anthony Wasserman  
Stuart Wecker  
Ben Wegbreit  
Mark Wegman

Peter Wegner  
Gerhard Weikum  
Fred W. Weingarten  
Uri C. Weiser  
Eric A. Weiss  
Daniel S. Weld  
Michael P. Wellman  
Emo Welzl  
Elaine Weyuker  
David J. Wheeler  
John R. White  
J. Turner Whitted  
Peter Widmayer  
Jennifer Widom  
Gio Wiederhold  
Robert Wilensky  
Reinhard Wilhelm  
John Wilkes  
Maurice V. Wilkes  
Robin Williams  
Walter Willinger  
Jeannette Wing  
Shmuel Winograd  
Marianne Winslett  
Niklaus E. Wirth  
David S. Wise  
Ian H. Witten  
Alexander Wolf  
Wayne Wolf  
Ouri Wolfson  
Seymour J. Wolfson  
Chak-Kuen Wong  
David A. Wood  
William A. Wulf  
Mihalis Yannakakis  
Andrew C. Yao  
Akinori Yonezawa  
Bryant York  
Paul R. Young  
Marshall Yovits  
Philip S. Yu  
L.A. Zadeh  
Paolo Zanella  
Pamela Zave  
Stanley Zdonik  
HongJiang Zhang  
Hui Zhang  
Lixia Zhang  
Willy Zwaenepoel  
Stuart Zweben

\*2008 inductees

*In Memoriam*  
*ACM Fellows*



Anita Borg	Harold Highland
Edgar Codd	Thomas E. Hull
Daniel Couger	Joshua Lederberg
Edsger Dijkstra	Kenneth W. Kennedy
Stephen Dunwell	Roger Needham
J. Presper Eckert	Randy Pausch
Peter Elias	Bob Rau (B. Ramakrishna Rau)
Bob O. Evans	Raymond Reiter
Aaron Finerman	Azriel Rosenfeld
Robert Floyd	Gerard Salton
John Gannon	Ken Sevcik
Bernard Galler	Herbert Simon
Richard Hamming	Larry Stockmeyer
Fred Harris	Stamatis Vassiliadis
Bertram Herzog	Chris S. Wallace



Association for  
Computing Machinery