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The Association for Computing Machinery Advancing Computing as a Science & Profession

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ACM NAMES 38 FELLOWS FOR COMPUTING AND IT INNOVATIONS IN INDUSTRY, EDUCATION, ENTERTAINMENT

New York, NY, December 3, 2007 -- ACM has recognized 38 of its members for their contributions to computing technology that have brought advances in the way people live and work throughout the world. The 2007 ACM Fellows, from the world's leading universities, industries, and research labs, created innovations in a range of computing disciplines that affect theory and practice, education and entertainment, industry and commerce.

"These men and women are the inventors of technology that impacts our society in profound and tangible ways every day," said ACM President Stuart Feldman. They have pushed the boundaries of their respective computing disciplines to create remarkable achievements that have the potential to make our world more accessible, more secure, and more advanced. Their selection as 2007 ACM Fellows offers us an opportunity to recognize their dedicated leadership in this dynamic field, and to honor their contributions to solving complex problems, expanding the impact of technology, and advancing the quality of life for people everywhere."

Within the corporate sector, the 2007 Fellows named from **Microsoft Research**, including one from Microsoft China, were cited for contributions ranging from computer graphics to video and image content analysis and retrieval. Other corporate entities with 2007 Fellows were **Intel Corp.**, **Yahoo!**, and **Bell Labs Research**, **Alcatel-Lucent**. Their respective contributions include mathematical foundations for optimizing compilers, algorithms and Web technology, and data semantics for Web services.

Among the list of universities with 2007 ACM Fellows was **Stanford University**, whose five fellows were respectively recognized for achievements in artificial intelligence, compilers and program analysis, computational biology, complexity theory, and computer science education. **Carnegie Mellon University**'s three Fellows were honored for learning theory and algorithms, using programming environments in education and entertainment, and computer-aided design of integrated circuits and systems. **The Hebrew University** in Jerusalem, Israel had two Fellows, who were cited for database theory and fault-tolerant distributed computing. **New York University**'s Courant Institute of Mathematical Sciences two recipients were recognized for symbolic computer graphics and system

verification. The **University of Southern California**'s two ACM Fellows were honored for advances in parallel, distributed and reconfigurable computing, and modeling and nanorobotics.

Other U.S. universities with 2007 ACM Fellows include: the University of Chicago; Cornell University; Delaware University; the University of Illinois at Urbana -Champaign; Northeastern University; the University of Pennsylvania; Princeton University; the University of Michigan Ann Arbor; the University of Massachusetts Amherst; Massachusetts Institute of Technology; and the University of California at Berkeley, Los Angeles and Riverside. ACM Fellows from these institutions were cited for achievements in parallel and reconfigurable computing; verification of reactive and hybrid systems; design of scalable, reliable Internet services; security and public policy of information technology; complexity theory; multiprocessor computers and compiler optimization techniques; computer vision; computational biology; memory management; computer-supported collaborative work; parallel computing; computer graphics; and type theory and program analysis.

Outside of North America, the universities with 2007 ACM Fellows include Victoria University in Melbourne, Australia; Oxford University in England; and University of Edinburgh in Scotland. Fellows from these universities were recognized for contributions to software design; compatibility and complexity theory; artificial intelligence theory and database systems; and programming languages theory. In addition, ACM named a Fellow from École Polytechnique Fédérale de Lausanne (EPFL) in Switzerland for excellence in functional and object-oriented programming languages; and an independent consultant was named for his contributions to networking standards and Internet applications. Finally, one 2007 ACM Fellow had a dual affiliation with the University of Madeira in Funchal, Portugal and Constantine & Lockwood, Ltd., an international design consulting firm in Massachusetts.

ACM will formally recognize the 2007 Fellows at its annual Awards Banquet on June 21, 2008, in San Francisco, CA. Additional information about the ACM 2007 Fellows, the awards event, as well as previous ACM Fellows and award winners is available at <u>www.acm.org/awards</u>.

2007 ACM Fellows

Anant Agarwal, Massachusetts Institute of Technology For contributions to parallel and reconfigurable computing

Rajeev Alur, University of Pennsylvania For contributions to specification and verification of reactive and hybrid systems

Utpal Banerjee, Intel Corp. For contributions to mathematical foundations of optimizing parallelizing compilers **Catriel Beeri**, The Hebrew University For contributions to database theory

Avrim Blum, Carnegie Mellon University For contributions to learning theory and algorithms

Eric A. Brewer, University of California, Berkeley For contributions to design of scalable, reliable Internet services

Andrei Z. Broder, Yahoo! Research For contributions to algorithms and web technology **Michael F. Cohen,** Microsoft Research For contributions to computer graphics and computer vision

Larry L. Constantine, University of Madeira, Constantine & Lockwood, Ltd. For contributions to software design

Danny Dolev, The Hebrew University For contributions to fault-tolerant distributed computing

Rodney Graham Downey, Victoria University For contributions to computability and complexity theory

Edward Feigenbaum, Stanford University For contributions to artificial intelligence

Edward W. Felten, Princeton University For contributions to security and the public policy of information technology

Lance J. Fortnow, University of Chicago -For contributions to complexity theory

Guang R. Gao, University of Delaware For contributions to multiprocessor computers and compiler optimization techniques

Georg Gottlob, Oxford University For contributions to theory of artificial intelligence and database systems

Richard Hull, Bell Labs Research, Alcatel-Lucent For contributions to data semantics and web services

Daniel P. Huttenlocher, Cornell University For contributions to computer vision

Tao Jiang, University of California, Riverside For contributions to computational biology and computational complexity

John C. Klensin, Consultant For contributions to networking standards and internet applications

Monica S. Lam, Stanford University For contributions to compilers and program analysis

Marc Levoy, Stanford University For contributions to computer graphics

Bhubaneswar Mishra, Courant Institute of Mathematical Sciences For contributions to symbolic computation and computational biology **J. Eliot B. Moss,** University of Massachusetts, Amherst For contributions to transactions and memory management

Rajeev Motwani, Stanford University For contributions to algorithms and complexity theory

Martin Odersky, Ecole Polytechnique Federale de Lausanne For contributions to functional and object-oriented programming languages

Gary M. Olson, University of Michigan, Ann Arbor For contributions to computer-supported collaborative work

David Padua, University of Illinois at Urbana-Champaign For contributions to compiler support for parallel computing

Randy Pausch, Carnegie Mellon University For contributions to use of programming environments in education and entertainment

Amir Pnueli, New York University For contributions to program and system verification

Viktor K. Prasanna, University of Southern California For contributions to parallel, distributed and reconfigurable computing

Aristides A. G. Requicha, University of Southern California For contributions to solid modeling and nanorobotics

Eric S. Roberts, Stanford University For contributions to computer science education

Demetri Terzopoulos, University of California, Los Angeles

For contributions to computer graphics and vision

Donald E Thomas, Carnegie Mellon University For contributions to computer-aided design of integrated circuits and systems

Philip Wadler, Edinburgh University For contributions to theory of programming languages

Mitchell Wand, Northeastern University For contributions to type theory and program analysis **HongJiang Zhang,** Microsoft - Advanced Technology Center, Beijing For contributions to content-based analysis and retrieval of multimedia

About ACM

ACM, the Association for Computing Machinery <u>http://www.acm.org</u>, is an educational and scientific society uniting the world's computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

About the ACM Fellows Program

The ACM Fellows Program, initiated in 1993, celebrates the exceptional contributions of the leading members in the computing field. These individuals have helped to enlighten researchers, developers, practitioners and end-users of information technology throughout the world. The new ACM Fellows join a distinguished list of colleagues to whom ACM and its members look for guidance and leadership in computing and information technology.

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