

# ACM Annual Report for FY06

**A**CM is about to turn 60. We witnessed the birth of computing, ushered in the dawn of the information age, and reported the first voyages through cyberspace. And while an annual report is typically an exercise in reflection, ACM is always focused on tomorrow and the pivotal role it plays in sharing the kind of scientific information that steers the future of technology.

The report here highlights some of ACM's major initiatives and accomplishments over the last 12 months; they are but a sampling of the efforts and dedication by the volunteers that pilot ACM's boards, publications, and committees every day. The ACM Job Migration Task Force, one of the most ambitious initiatives the Association has undertaken, released its highly anticipated report *Globalization and Offshoring of Software* last February. The report generated unprecedented media coverage worldwide and became part of the dialogue about the role of computer science in sustaining innovation and global competitiveness. In addition, efforts to strengthen ACM's flagship publication moved forward with the first meeting of the CACM Task Force charged with creating an editorial vision to reflect the diverse professional needs of its international audience.

Many of the ventures this past year reflect ACM's pledge to share our wealth of CS educational information with a broader audience. The Computer Science Teachers Association is one such vehicle, launched in FY05 as an educational resource for K–12 teachers and students. By the end of its first fiscal year of operation, CSTA realized tremendous membership growth as well as media interest for its contribution to prepar-

ing students for the effects of globalization. ACM also began working with a number of organizations—including CRA, NCWIT, and Microsoft—on the issues surrounding the image and health of the computing discipline and profession.

ARFY06 also marked the Association's fourth consecutive year of robust performance and accomplishment. Professional membership grew 3%, making for an overall increase of 18.3% since FY02. It is a testament to the expanding global awareness of ACM's commitment to support the professional growth of its members that this increase would occur at a time when most professional societies are experiencing no growth.

In the coming months, as ACM prepares to mark its 60th anniversary, we will celebrate how far we've come but never settle for how far we can go. We move forward with focus and a solid foundation to build our membership, striving to better address their professional needs, and to strengthen members' international partnerships. Two task forces have been established to look at ways to better engage computing professionals from China and India. We will also continue to raise the awareness and visibility of ACM on a global scale, cultivating more computing professionals into the fold. And, as always, we count on the generous support of ACM volunteers, members, and industry partnerships to keep us moving in the right direction.

It has been an honor to serve as president during the last two years and to play a hands-on role in helping to position ACM to meet the challenges—and countless opportunities—of the future. Ever forward.

**DAVID A. PATTERSON**  
*ACM President*

*ACM, the Association for Computing Machinery, is an international scientific and educational organization dedicated to advancing the art, science, engineering, and application of information technology.*

### **PUBLICATIONS**

ACM's stellar online service—the Digital Library/Guide—continues to flourish in content, usage, and prestige, and remains in great demand worldwide. The number of full-text articles in the DL grew to 183,000 from 158,000 and the *Guide to Computing Literature* bibliographic database increased to over 942,000 entries last year. Moreover, the first phase of a branding system that identifies and highlights ACM contents versus non-ACM contents in the DL was completed.

The Publications Board produced a formal plagiarism policy that identifies various types of plagiarism and levels of severity of infractions as well as prescribes procedures for investigation and punishment of offenders. The “ACM Policy and Procedures on Plagiarism” also defines self-plagiarism and well as pledges the highest respect for maintaining intellectual property rights and confidentiality.

Two new publications were launched in FY06: *Transactions on the Web* (TWeb); and *Transactions on Knowledge Discovery and Data Mining* (TKDD).

*ACM Queue* introduced podcasting to its monthly editorial fare with the launch of *Queuecasts* featuring audio interviews made available on the *Queue* Web site via downloadable files to listen to online or upload to an MP3 player. The 15-minute conversations typically feature experts expounding on topics relevant to the corresponding print issue.

ACM members responded enthusiastically to a request to share their favorite (out-of-print) computer science texts and later voted

for those they consider classics. Over 300 books were nominated and ACM is now working to secure copyright permissions to make the top 20 classics available to members both online and via print-on-demand.

ACM's Committee on Women in Computing (ACM-W) spearheaded a Digital Library project collecting over 600 articles related to women in computing published between 1980 and 2003, which were incorporated into the National Engineering Education Delivery Systems ([www.needs.org](http://www.needs.org)).

### **EDUCATION**

The Computer Science Teachers Association (CSTA) continues to support and promote opportunities for K–12 teachers and students to better understand the computing disciplines. As a result of their efforts, membership in CSTA increased from 2,500 in FY05 to 4,367. In addition, the organization worked with IBM to develop three new downloadable CS curriculum resources for high schools and launched the Teacher Engagement for CS workshops designed to meet the professional development needs of middle- and high-school educators.

The ACM Java Task Force, convened by the Education Board, concluded its reign with a comprehensive report reviewing the Java language, APIs, and tools from the perspective of introductory computing education. A Web site ([jtf.acm.org](http://jtf.acm.org)) now provides the full report along with five packages that offer solutions to the problems identified as the most significant barriers to teaching introductory Java.

The Education Board also published three volumes in the computing curriculum series: software engineering, computer engineering, and an overview report that considers educational issues as they relate to the computing field.

SIGARCH pledged to return a significant portion of SC'XY conference profits to the supercomputing community in the form of a series of project-oriented grants (to be matched by the conference's other sponsor—IEEE Computer Society). In FY06 the grants provided funds for mentoring and education programs.

#### **PROFESSIONAL DEVELOPMENT**

The highly anticipated report from the ACM Job Migration Task Force drew global recognition and response. *Globalization and Offshoring of Software* noted that globalization trends in the software industry have been fueled by rapid advances in IT as well as by government action and economic factors, and concluded the future depends on the nation's commitment to acknowledging the challenges of the global environment.

The diverse offerings available from the Professional Development Centre were enhanced dramatically last year with the addition of 500 selections from the Safari Enterprise Library to the online books program. The new online books, from leading publishers including O'Reilly, Addison-Wesley, and Cisco Press, bring the total number of freely available volumes to over 900. The site also hosts 1,200 online PD course from Thompson-NETg.

The ACM Professions Board developed a roadmap outlining the group's priorities, including plans to develop a Best Practices community Web site as a forum where IT professionals can discuss qualified solutions to real-world problems as they pertain to technologies, approaches, tools, and processes.

#### **PUBLIC POLICY**

ACM's U.S. Public Policy Committee (USACM) remains a valuable resource for the media, public, and legislators on key technology policy issues. Its members have been widely quoted in the press and have testified before Congress. The committee's work is organized around four themes: advancing the computing discipline; seeking balance between innovation and IP protection; protecting privacy; and advocating for secure and reliable computing systems. USACM saw several successes as a result of this focus, including a new Presidential initiative on expanding IT R&D. Outreach to state and local election officials remained a priority with the release of its report on technical issues associated with voter registration databases. USACM also released guidelines for policies on the collection, use, or storage of personal information as well as a set of new principles for ensuring balanced digital rights management; [www.acm.org/usacm](http://www.acm.org/usacm).

The Committee on Computers and Public Policy (CCPP) continues to serve ACM in an advisory capacity on computer policy issues, offering global online forums to share and discuss public policy concerns. The ACM

Forum on Risks to the Public in Computers, the Privacy Forum, the “Inside Risks” column in *Communications of the ACM*, and other related services virtually intersect every aspect of our lives and reflect CCPP’s long-standing dedication to policy issues.

CSTA created and distributed guidelines to key legislators working on education issues at the state and federal level. The informative “CSTA Guide for Policy Makers” alerts legislators that CS education in the U.S. is in critical need of attention.

#### **STUDENTS**

The 30th Annual ACM International Collegiate Programming Contest drew 5,600 teams from 84 countries vying for a spot at the World Finals last April. Team participation in the contest has increased sevenfold since IBM began its sponsorship in 1997. Moreover, at the opening ceremonies of this year’s finals, ACM and IBM announced they will continue their partnership, cultivating the next generation of technology talent through 2012.

In an effort to learn more about how ACM member benefits are perceived by students, a landmark meeting was convened to solicit feedback on the Association’s current fare and hear suggestions for new products and services. The global gathering of students represented Canada, China, India, Mexico, Spain, U.K., and the U.S. at both the undergraduate and graduate level.

The ACM Student Research Competition offers a unique opportunity for ACM student members at both the undergraduate and grad-

uate level to present their original research before a panel of judges as well as before conference attendees. First-round presentations took place at a series of competitions held at selected SIG conferences throughout the year. Among the conferences hosting SRC this year were SIGCSE, SIGGRAPH, MOBICOM, and the Grace Hopper Conference.

#### **CONFERENCES**

Supercomputing ‘05 attracted a record number of participants with over 10,000 computer scientists, software engineers, researchers, practitioners, and educators in attendance. The conference featured 276 global exhibitors and Bill Gates as the keynote speaker.

The annual SIGGRAPH conference once again exceeded expectations with an overall 4% increase in attendance over the previous year and a 3% increase in technical program attendance. The conference drew 29,122 professionals from 90 countries to Los Angeles and over 5,000 attended the keynote address by filmmaker George Lucas.

#### **LOCAL ACTIVITIES**

The Membership Services Board chartered 34 new chapters in FY06, five of which were international professional chapters. Of the 29 new student chapters, 11 were internationally based.

#### **INTERNATIONAL**

ACM-W’s Foreign Ambassadors project—to encourage and support women computer scientists worldwide—continues to flourish.

The committee now counts “ambassadors” representing Australia, Canada, Germany, India, Pakistan, South Africa, Turkey, New Zealand, and the U.K.

SIGSOFT held ICSE 2006 in Shanghai, allowing a global community to appreciate the monumental changes taking place in the emerging economy and high-tech industry in China and throughout Asia.

SIGSAC launched a third major conference—ACM Symposium on Information, Computer, and Communications Security—in Taipei, Taiwan. The conference received 186 submissions from 26 countries, suggesting a mounting interest in information security outside North America.

SIGART co-sponsored a summer school program on agents in Porto Alegre, Brazil, as part of an effort to broaden the community in underdeveloped areas.

#### **ELECTRONIC COMMUNITY**

The History Committee, Awards Committee, and Publications Board have joined forces to revamp and update the Turing Award Web site. A prototype is available at [devwin.acm.org/awards/homepage.cfm?srt=all&awd=140](http://devwin.acm.org/awards/homepage.cfm?srt=all&awd=140).

ACM-W’s Computer Girl Web site provides high-school girls with information about the benefits of studying computer science at the university level. Great progress was made this year in gaining awareness for this site thanks to connections with CSTA to further the cause of education and equity in computing and by increasing the number of resource lists that now include the Computer Girl site.

The Membership Services Board’s Digital Media Committee captured a significant number of talks given at the OOPSLA, ASSETS, and Supercomputing conferences and made the audio/video available on the ACM Web site.

#### **RECOGNITION**

The ACM Fellows Program, established in 1993 to honor outstanding ACM members for their achievements in computer science and IT, inducted 34 new fellows in FY06, bringing the total count to 553.

ACM’s commitment to recognizing excellence in the computing field was enhanced by the creation of two new member grades complementing the existing ACM Fellows program. A Distinguished Engineer, Scientist, or Member recognizes ACM members with at least 15 years of professional experience who have demonstrated significant accomplishments or made a significant impact on the computing field. A Senior Member recognizes ACM members with at least 10 years of professional experience who have demonstrated performance and accomplishment that set them apart from their peers. Five years of continuous ACM professional membership is required for all three advanced grade levels.

ACM-W awarded its first Athena Lecture Award this year. The award is given to a pre-eminent woman computer scientist for outstanding research accomplishments. The Athena Lecture will honor women who have made fundamental contributions to computer science research.

## BALANCE SHEET

JUNE 30, 2006 (IN THOUSANDS)

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### ASSETS:

CASH AND CASH EQUIVALENTS	\$19,415
INVESTMENTS	38,917
ACCOUNTS RECEIVABLE AND OTHER CURRENT ASSETS	5,352
DEFERRED CONFERENCE EXPENSES AND OTHER ASSETS	6,248
PROPERTY AND EQUIPMENT, NET	692
CONSTRUCTION IN PROGRESS	412
<b>TOTAL ASSETS</b>	<b>\$71,036</b>

### LIABILITIES AND NET ASSETS:

#### LIABILITIES:

ACCOUNTS PAYABLE, ACCRUED EXPENSES, AND OTHER LIABILITIES	\$ 8,330
UNEARNED CONFERENCE, MEMBERSHIP, AND SUBSCRIPTION REVENUE	20,487
<b>TOTAL LIABILITIES</b>	<b>28,817</b>

#### NET ASSETS:

UNRESTRICTED	41,185
TEMPORARILY RESTRICTED	1,034
<b>TOTAL NET ASSETS</b>	<b>42,219</b>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>\$71,036</b>

### OPTIONAL CONTRIBUTIONS FUND—PROGRAM EXPENSES (\$000)

EDUCATION BOARD ACCREDITATION	\$50
USACM COMMITTEE	20
<b>TOTAL EXPENSES</b>	<b>\$70</b>

## STATEMENT OF ACTIVITIES

YEAR ENDED JUNE 30, 2006 (IN THOUSANDS)

	UNRESTRICTED NET ASSETS	TEMPORARILY RESTRICTED NET ASSETS	TOTAL
<b>REVENUE:</b>			
MEMBERSHIP DUES	\$5,281		\$ 5,281
PUBLICATIONS	17,907		17,907
CONFERENCES AND OTHER MEETINGS	20,441		20,441
INTEREST AND DIVIDENDS	1,692		1,692
NET APPRECIATION OF INVESTMENTS	1,965		1,965
CONTRIBUTIONS AND GRANTS	2,836	783	3,619
OTHER REVENUE	381		381
NET ASSETS RELEASED FROM RESTRICTIONS	107	(107)	----
<b>TOTAL REVENUE</b>	<b>\$50,610</b>	<b>676</b>	<b>\$51,286</b>
<b>EXPENSES:</b>			
<b>PROGRAM:</b>			
MEMBERSHIP PROCESSING AND SERVICES	\$1,078		\$1,078
PUBLICATIONS	10,634		10,634
CONFERENCES AND OTHER MEETINGS	17,451		17,451
VOLUNTEER ACTIVITIES	1,543		1,543
PROGRAM SUPPORT AND OTHER	4,193		4,193
<b>TOTAL PROGRAM EXPENSES</b>	<b>\$34,899</b>		<b>\$34,899</b>
<b>SUPPORTING SERVICES:</b>			
GENERAL ADMINISTRATION	\$8,096		8,096
MARKETING	1,461		1,461
<b>TOTAL EXPENSES</b>	<b>\$44,456</b>		<b>44,456</b>
INCREASE (DECREASE) IN NET ASSETS	6,154	676	6,830
NET ASSETS AT THE BEGINNING OF THE YEAR	35,031	358	35,389
NET ASSETS AT END OF YEAR	\$41,185*	\$1,034	\$42,219*

\*INCLUDES SIG FUND BALANCE OF \$21,186

## ACM COUNCIL

PRESIDENT	<i>David A. Patterson</i>
VICE PRESIDENT	<i>Stuart Feldman</i>
SECRETARY/TREASURER	<i>Laura Hill</i>
PAST PRESIDENT	<i>Maria Klawe</i>
SIG GOVERNING BOARD CHAIR	<i>Robert Walker</i>
PUBLICATIONS BOARD CO-CHAIRS	<i>Ronald Boisvert, Mary Jane Irwin</i>
MEMBERS-AT-LARGE	<i>Roscoe Giles, Wendy Hall, Michel Beaudouin-Lafon, John "Scooter" Morris, Barbara Ryder, Gabriel Silberman, David S. Wise</i>
SGB COUNCIL REPRESENTATIVES	<i>Alain Chesnais, Jennifer Rexford, Alexander Wolf</i>
ACM HEADQUARTERS	
Executive Director/CEO	<i>John R. White</i>
Deputy Executive Director/COO	<i>Patricia M. Ryan</i>

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## 2005 ACM AWARD RECIPIENTS

A.M. TURING AWARD	<i>Peter Naur</i>
ACM/AAAI ALLEN NEWELL AWARD	<i>Jack Minker</i>
GRACE MURRAY HOPPER AWARD	<i>Omer Reingold</i>
ACM-IEEE CS ECKERT-MAUCHLY AWARD-2006	<i>James H. Pomerene</i>
OUTSTANDING CONTRIBUTION TO ACM AWARD	<i>Don Gotterbarn</i>
DISTINGUISHED SERVICE AWARD	<i>Mary Jane Irwin</i>
PARIS KANELLAKIS THEORY AND PRACTICE AWARD	<i>Gerard J. Holzmann, Robert P. Kurshan, Moshe Vardi, and Pierre Wolper</i>
KARL V. KARLSTROM OUTSTANDING EDUCATOR AWARD	<i>Stuart J. Russell</i>
EUGENE L. LAWLER AWARD	<i>Nakuru Local Urban Observatory Project: Albrecht Ehrensperger Solomon Mbuguah Ernest Siva</i>
ACM PRESIDENT AWARDS	<i>Andreas Bechtolsheim Janice Cuny Edward Lazowska</i>
SOFTWARE SYSTEM AWARD:	<i>The Boyer-Moore Theorem Project: Robert S. Boyer Matt Kaufmann J. Strother Moore</i>
SIAM/ACM AWARD IN COMPUTATIONAL SCIENCE AND ENGINEERING	<i>Achi Brandt</i>
DOCTORAL DISSERTATION AWARD	<i>Benjamin Liblit Honorable Mention: Olivier Dousse</i>