"*From its inception, ACM has nurtured information technology as a science and a profession.*

Computer pioneer John Mauchly helped found ACM the year after announcing ENIAC, the world's first general-purpose electronic digital computer.

Today ACM serves its members and the computing profession with the field's premier Digital Library, leading-edge publications, conferences, and career resources.

As we face the challenges that lie ahead, we will continue to develop new directions that promise a bright future for our members, the computing profession, and the global community."

David Patterson
ACM President (2004-2006)

Association for Computing Machinery

Advancing Computing as a Science & Profession

ACM
KNOWLEDGE,
COLLABORATION
& INNOVATION
IN COMPUTING

**Association for
Computing Machinery**

Advancing Computing as a Science & Profession

Association for Computing Machinery

Advancing Computing as a Science & Profession

ACM 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.

ACM, ADVANCING COMPUTING:

AS A SCIENCE

- Disseminating computing research.
- Recognizing technical excellence.
- Providing forums for the exchange of ideas.

AND A PROFESSION

- Providing life-long learning opportunities.
- Facilitating professional networking.
- Fostering collaboration among computing professionals.
- Defining professional and ethical standards of practice.

ACM International Collegiate
Programming Contest (ICPC)

ACM strives to raise awareness of the innovations achieved by computing professionals that enrich our lives and advance our society.

ACM SIGGRAPH
Conference

CHARTING THE COURSE OF COMPUTING

ACM was established in 1947 by the inventors of ENIAC, the first electronic, stored program, digital computer. As an educational and scientific society, ACM was founded to promote the exchange of ideas and the dissemination of knowledge among the initially small but influential research community. These early pioneers recognized the impact computing technology could have on the world and wanted to harness the power of computation for social benefit. As predicted, computing has become fundamental to everyday life, and a chief enabler for innovation.

For six decades, ACM has remained true to its mission — uniting the world's computing educators, researchers, and professionals to inspire dialogue, share ideas, and address the field's most pressing challenges. ACM plays a central role in the unfolding story of computing through the common interest of its members to advance computing as a science and a profession.

The robust exchange and vigorous debate of ideas constitute the lifeblood of the technical community. ACM facilitates both by publishing over 50 journals, organizing more than 120 conferences annually, offering over 34 Special Interest Groups (SIGs), overseeing hundreds of local chapters, and providing the computing field's premier Digital Library. Through a variety of special projects, ACM encourages computing professionals to work side-by-side on efforts that promise to advance computing and benefit the world.

ACM strives to raise awareness of the innovations achieved by computing professionals that enrich our lives and advance our society.

Within the computing community, ACM promotes high standards of professional conduct and recognizes exceptional achievement. The Association is known for the technical excellence awards it bestows each year—notably the A.M. Turing Award, widely regarded as "The Nobel Prize in Computing."

ACM provides opportunities to challenge established assumptions, present new concepts, defend complex ideas, and debate competing theories.
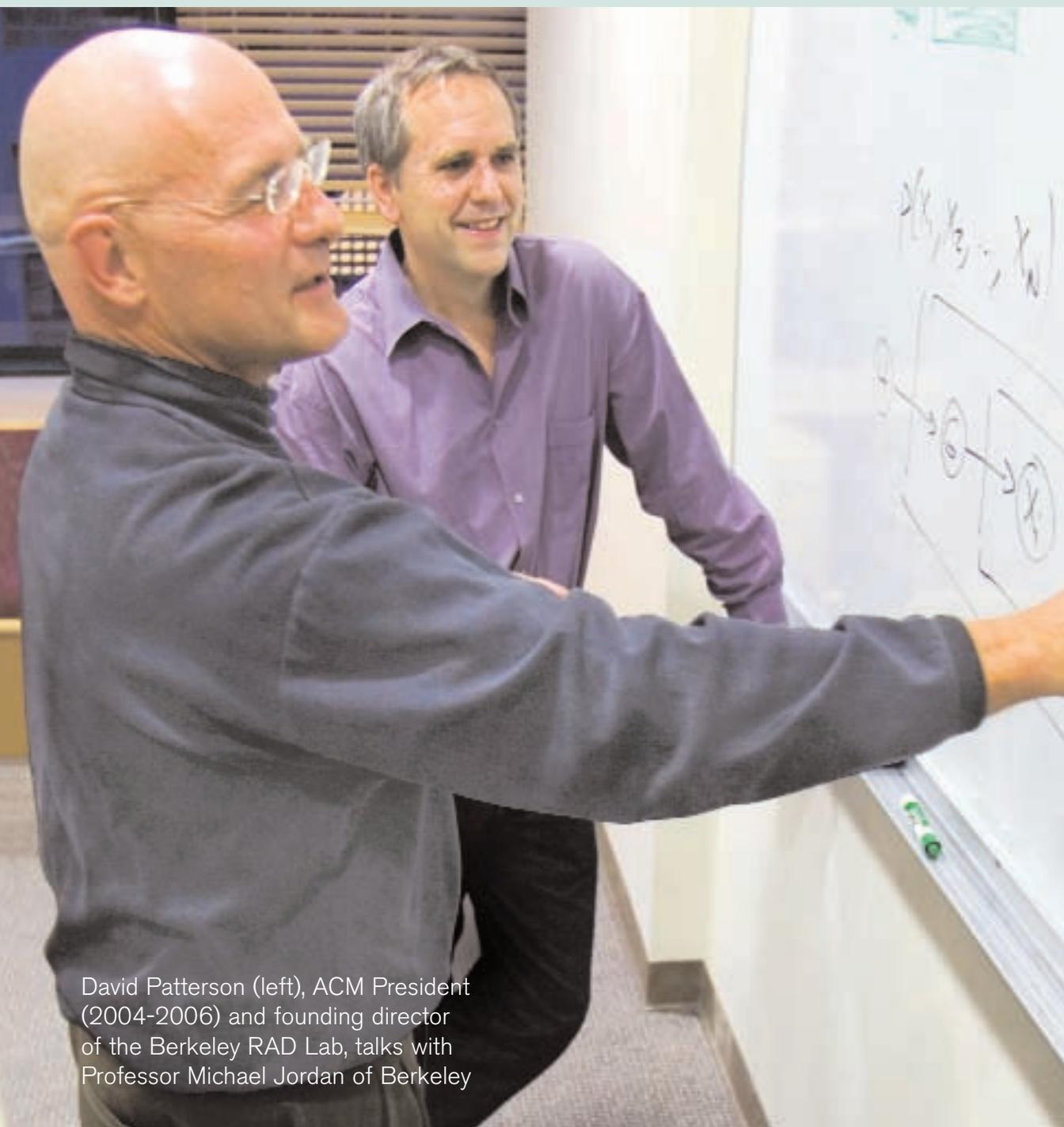
David Patterson (left), ACM President
(2004-2006) and founding director
of the Berkeley RAD Lab, talks with
Professor Michael Jordan of Berkeley

ADVANCING COMPUTING AS A SCIENCE: THE SEEDS OF INNOVATION

CREATING A BODY OF KNOWLEDGE

For six decades, ACM has disseminated the fundamental discoveries in computing. The ACM Digital Library is the most comprehensive resource for exploring the accumulated knowledge in the field. This remarkable repository, which houses the outstanding publications that chronicle advancements in the computing field, can be searched and shared worldwide. The ACM Digital Library includes over one million bibliographic citations spanning the breadth of computing.

VENUES FOR EXCHANGING, SHARING, AND DEBATING IDEAS

With its extensive technical publications and conferences, ACM provides opportunities to challenge established assumptions, present new concepts, defend complex ideas, and debate competing theories. These resources refresh the science while rekindling the imaginations of computing's leading professionals – new possibilities emerge, and the field moves forward.

OPPORTUNITIES FOR COLLABORATION

The challenges faced by the computing field call for a collective response that can speed research, produce solutions, and disseminate results. ACM's Special Interest Groups (SIGs) cover major aspects of computing technology and conduct explorations of specific issues and problems. ACM SIG Conferences are an opportunity to join respected peers from organizations around the world in exploring promising solutions.

CULTIVATING THE COMMUNITY

Attracting and teaching promising young talent is essential to sustaining the field. ACM defines curricula and accreditation standards for university computing programs, and works to strengthen the foundations of computing education at the pre-college level. ACM-organized student competitions spark global interest in the field, allowing the computing community to see what the best students are capable of achieving.

ACM pursues initiatives to increase the representation of women and minorities in computing by facilitating networking among professionals throughout the world. By growing the community and striving for diversity, ACM helps strengthen the computing field.

ACM works to communicate the fundamental role that computing plays in shaping all scientific pursuits, as well as our future.

2004 A.M. Turing Award recipients Vinton Cerf (left) and Robert Kahn during "The Turing Conversation"

ADVANCING COMPUTING AS A PROFESSION:
SHAPING THE FUTURE

RAISING AWARENESS OF THE ROLE AND IMPORTANCE OF COMPUTING

ACM's goal is to raise awareness of the many technological innovations achieved by computing professionals that enrich our lives and advance our society. Through its numerous initiatives, ranging from scholarly activities to addressing major issues facing the profession, ACM works to communicate the fundamental role that computing plays in shaping all scientific pursuits, as well as our future.

INFORMING AND SHAPING PUBLIC POLICY

Applications of computing are evident virtually everywhere, but appreciation for its implications is not as common. Flawed perspectives can lead to flawed policy—inhibiting both the computing profession and society at large. ACM strives to inform legislators, regulators, and the public about the opportunities, challenges and risks of computing technology.

DEFINING THE PROFESSION

ACM lays the foundation for defining the profession through numerous efforts and activities.

ACM's Code of Ethics and Professional Conduct serves as the benchmark for ethical behavior and professional activity in the computing field. Often used as a model for other disciplines, these guidelines encompass fundamental ethical considerations and set the highest norms for professional conduct.

ACM accredits college-level computing programs and establishes university curricula guidelines that help define the body of knowledge for the profession.

Through its highly respected and distinguished Awards Program, ACM recognizes the top achievements in the computing field, and sets extraordinary standards for technical and professional achievement.

EMPOWERING THE PROFESSIONAL:
LIFE-LONG LEARNING

The importance of computing to the future is unquestioned, and the critical role of the computing professional is constantly changing.

ACM's broad array of life-long learning and skill development opportunities include tutorials, workshops, conferences, online books, online courses, and the ACM Digital Library. This extensive range of options and opportunities make it possible for computing professionals to keep abreast of technology and maintain a competitive advantage.

Computing professionals stand to realize the greatest gains from the services provided by ACM. Moreover, the entire computing field benefits as people improve their skills, increase their knowledge, and apply their expertise. The resulting proficiency adds to greater strength and new advances for the computing profession—which in turn creates new opportunities for the field and for society.
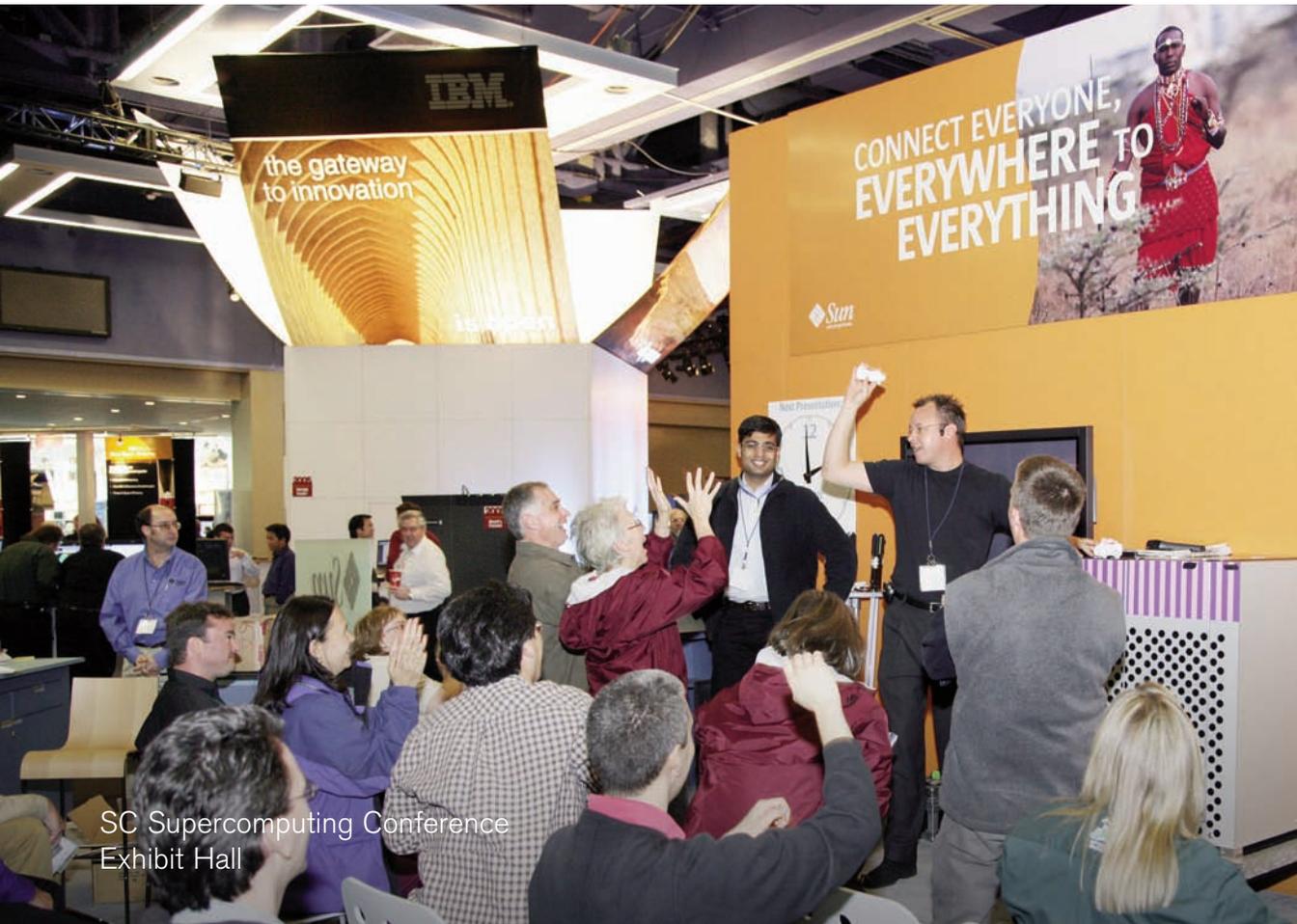
SC Supercomputing Conference
Exhibit Hall

ACM Code of Ethics and Professional Conduct

The Code represents ACM's commitment to promoting the highest professional and ethical standards, and makes it incumbent on all ACM Members to:

- Strive to achieve the highest quality, effectiveness and dignity in both the process and products of professional work.

- Acquire and maintain professional competence.

- Know and respect existing laws pertaining to professional work.

- Accept and provide appropriate professional review.

- Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks.

- Honor contracts, agreements, and assigned responsibilities.

- Improve public understanding of computing and its consequences.

- Access computing and communication resources only when authorized to do so.

View the entire ACM Code of Ethics at:
www.acm.org/about/code-of-ethics