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COMPUTING RESEARCH ASSOCIATION

2 0 0 1 ANNUAL REPORT

message from the Board chair

It is a pleasure to report that 2000-01 has been another successful year for the Computing Research Association. I will highlight just a few of CRA's many achievements last year.

Securing increased federal support for computing research continues to be a major focus of CRA's government affairs efforts. By any measure, the level of investment is dangerously low. Although 2000-01 marked the second year of significant increases at the National Science Foundation, under the aegis of the Information Technology Research (ITR) initiative, DARPA unfortunately has not fared as well. Additionally, the new administration has not yet prioritized science and engineering, with the result that future increases in ITR (envisioned as a 5-year program) may be in doubt. So, as always, there is much work to do. I cannot over-emphasize that "all politics is local," even at the federal level! Each and every one of us must become engaged — ideally with our congressional delegations but, as a starting point, with our campus or corporate federal relations' office. Just do it!

Issues facing women and underrepresented minorities in computing research continued to be a major focus for CRA. The CRA-W/Lucent Technologies Distinguished Lecture and Graduate School Recruiting Program was launched to encourage undergraduate women to consider graduate school in computer science and computer engineering. For the first time Canadian students became part of the Distributed Mentor Project, which continued to inspire top women to enter the top graduate schools in computer science. And the Coalition to Diversify Computing initiated a project to form a virtual community using the Access Grid to unite minority graduate students studying computing at geographically separated institutions.

CRA's biennial Conference at Snowbird in July 2000 broke previous attendance records. In February 2001, a revitalized Academic Careers Workshop attracted more than 70 participants. Three CRA surveys — Taulbee, Departmental Profiles, and Industry Lab Salaries — again provided data and analyses unavailable elsewhere. Information dissemination improved significantly by expanding the scope and timeliness of both the electronic Computing Research Bulletin and articles published in *Computing Research News*.

CRA's finances continued to be on a firm footing. Membership reached a high of 212, a total of 187 academic departments and 25 labs and centers. Twenty-five new academic members and four new labs and centers members joined last year.

On July 1, 1997, I succeeded Dave Patterson as chair of CRA's board. I'm delighted that on July 1, 2001, Jim Foley, in turn, will succeed me. CRA continues on a great trajectory and in great hands. I'm deeply appreciative to the Executive Committee, to the entire Board of Directors, to CRA's wonderful staff, and to you — the leaders of CRA's member organizations — for the energy and enthusiasm that drives CRA forward. Special thanks to Sandra Baylor, Sid Karin, and Barbara Ryder, who concluded their board terms on June 30.

Edward Lazowska
Board Chair

Highlights

RESEARCH POLICY

The CRA Government Affairs program built on recent successes in 2000-01. CRA maintained its vigorous campaign in support of increased funding for information technology research programs. The National Information Technology Research & Development (NITRD) program continued its momentum, with appropriators significantly increasing the NSF computing research budget for a second consecutive year. CRA, along with members of TechNet and the President's Information Technology Advisory Council, played a critical role in building a support coalition.

Membership in the Computing Research Advocacy Network (CRAN) continued to grow last year. CRAN is an electronic network established to alert participants of opportunities to advocate on federal issues of importance to computing research, and to provide resources to facilitate their efforts.

The Association for Computing Machinery (ACM) has hired Jeff Grove as a full-time government affairs director and has located him in CRA's Washington, DC offices. This arrangement significantly improves the coordination between CRA and ACM on policy issues, and should yield significant benefits to both organizations and to the computing research field.

A new administration and changes in congressional leadership inevitably create some uncertainty in any policy area. CRA's efforts during the coming year will be focused on gaining traction with the new administration and Congress, and further empowering our members to advocate on behalf of computing research.

INFORMATION ACTIVITIES

Computing Research News (*CRN*) continued to reach a broad audience of more than 6,000 subscribers. Regular articles describing the work of CRA's industry lab members were a popular feature. A new occasional series of articles was launched that will mine and analyze additional data from previous Taulbee Surveys and provide some historical perspectives.

The summary report of a workshop conducted by CRA-W in June 2000, *Recruitment and Retention of Women Graduate Students in Computer Science and Engineering*, was published.

The *CRA Bulletin*, launched in 1999-2000, was significantly revamped to make it more timely and relevant. This free list service, with more than 1,100 subscribers, now appears regularly twice a month. Its format has been changed and its scope expanded in an attempt to make it more attractive and useful to subscribers.

CRA conducted the 30th annual *Taulbee Survey*, widely acknowledged as the most complete and accurate accounting of statistical information about Ph.D.-granting CS&CE departments. The results of our second *Survey on Profiles of Ph.D.-Granting Departments of CS&CE*, which tracks management data in computer science and engineering departments, were published in *CRN* in the fall. And CRA once again conducted its annual *Salary Survey of Computer Science Researchers in Industrial Laboratories*.

Through its *Forsythe List of Ph.D.-Granting Institutions*, CRA continued to provide the chairs of all U.S. and Canadian Ph.D.-granting CS&CE departments with notices of conferences and other items of interest to the computing research community.

HUMAN RESOURCES

For many departments, CRA has become an increasingly important place to advertise computing faculty and research positions. In 2000-01, the number of advertisements in *Computing Research News* increased by 27 percent, and the number of jobs posted on CRA's webpages and list server continued to rise.

CRA's awards programs once again recognized outstanding contributions to the community. Anita Borg, President of the Institute for Women and Technology, received the 2001 *A. Nico Habermann Award* for working tirelessly to create a community of women in computer science. Awards to undergraduates with outstanding research potential were made to Lisa Anthony, Drexel University, and Kevin Zatloukal, University of Washington. Runner-up awards went to Litza Stark, University of Delaware, and Russell Cox, Harvard University. Honorable Mention was awarded to 27 undergraduates. Microsoft sponsored the undergraduate awards this year. In addition, an external awards committee worked to gain general recognition for the work of North American computing researchers.

"... the [DMP is] spectacularly successful... over 50% [of participants] were enrolled in graduate or professional school the year following their graduation, exceeding the enrollment for males."

NSF Budget Request Summary FY 2002

The Committee on the Status of Women in Computing Research (CRA-W) had another productive year, with support from CRA, the National Science Foundation, USENIX, Lucent Technologies, and EOT-PACI. CRA-W sponsored the first CRA-W/Lucent Distinguished Lecture Series and Graduate School Recruiting Panels to encourage females and minorities to pursue graduate education in scientific and technological disciplines. Ten events were hosted at various universities, each featuring a distinguished speaker and a panel consisting of an industrial researcher and current graduate students.

CRA-W's Distributed Mentor Project awarded grants to 29 students for a summer of research under the direction of a female faculty member. The first Canadian Distributed Mentor Project was initiated, with students participating this past summer. The Collaborative Research Environment for Women in Undergraduate Computer Science and Engineering (CREW) provided collaborative research experiences for 11 groups of undergraduate women to encourage them to pursue similar work in graduate school. Twenty-seven students were funded.

The Coalition to Diversify Computing (CDC), a joint committee of the ACM, CRA, and IEEE-Computer Society, received support from NSF's Education, Outreach, and Training Partnership for Advanced Computational Infrastructure (EOT-PACI) program, ACM, and CRA. Key CDC projects included the Distributed Rap Sessions (using the Access Grid technology to

build virtual communities of minority undergraduate and graduate students in the field of computing), a traveling Graduate School Forum (presented at the ADMI 2001 Conference), and a database of minority researchers.

A major CDC effort was organizing the Richard Tapia Celebration of Diversity in Computing Symposium, the first in a series of events designed to celebrate the technical contributions and career interests of diverse people in computing fields. The symposium is scheduled for October 18-20, 2001 in Houston, Texas. [For more information on CDC, see http://www. npaci.edu/Outreach/CDC.]

COMMUNITY-BUILDING

CRA hosted its seventh Computing Leadership Summit in February, bringing together the presidents, executive directors, and other senior leadership of CRA and its five affiliate societies — AAAI, ACM, IEEE-Computer Society, SIAM, and USENIX — and NRC's Computer Science and Telecommunications Board. This annual event provides a venue where common interests and potential cooperative efforts are discussed.

CRA's *Distinguished Service Award* was given to Marjory Blumenthal, Executive Director of the NRC's Computer Science and Telecommunications Board, for the influence CSTB has had on public policy in information technology.

In an effort to build the research community and provide lab managers an opportunity to share experiences, CRA helped to develop regional meetings of lab directors. Groups have been meeting every several months in San Francisco/San Jose, Boston, and New Jersey/New York. CRA also reached out to the heads of the recently emerging schools of information science in an effort to identify areas of common interest and provide a forum for the growing number of deans responsible for the academic side of computing. Several IS schools have since become CRA members.

cash position (thousands of dollars)

AS OF JUNE 30, 2001

Unrestricted FY 2001	$322
Unrestricted FY 2002	217
Accounts Receivable	44
Restricted (projects)	88
Restricted (operating reserve)	503
Total	$1,174

CRA financial statement

Revenue ($1,453,381)*

Academic dues • $371,000 • 26%

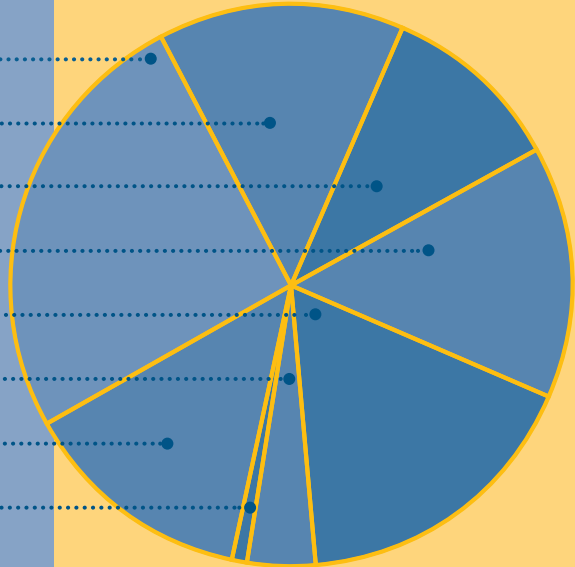Lab & center dues • $206,000 • 14%

Society dues • $152,000 • 10%

Ad revenue • $211,000 • 15%

Grant income • $248,706 • 17%

Interest income • $57,000 • 4%

Conferences • $195,000 • 13%

Miscellaneous • $12,675 • 1%

Expenses ($1,216,000)*

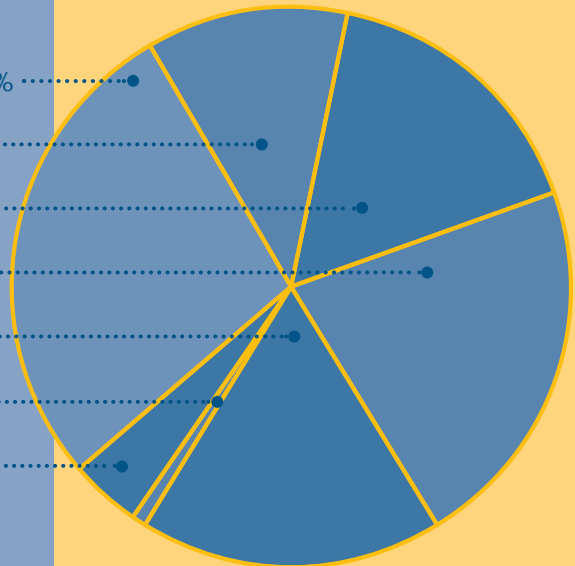Admin/Member services • $339,000 • 28%

Government affairs • $142,000 • 12%

Communications • $198,000 • 16%

Women & minorities • $264,000 • 22%

Other programs • $213,000 • 17%

Miscellaneous • $10,000 • 1%

Operating reserves • $50,000 • 4%

* This does not include an additional $150,000 of program support for CRA's women and minorities programs that comes directly from EOT-PACI.

The financial data supplied here are based on unofficial records kept by the CRA staff. Divisions into revenue and expense categories are approximate. Official books prepared by CRA's external auditors will be available for review in January 2002.

Board of Directors

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Sun Microsystems Laboratories

Stuart Zweben
Ohio State University
(ACM representative)

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members

AFFILIATED PROFESSIONAL SOCIETIES
American Association for Artificial Intelligence
Association for Computing Machinery
IEEE Computer Society
Society for Industrial and Applied Mathematics
USENIX Association

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AT&T Labs
Avaya (Supporting Member)
Compaq Computer Corp.
Computer Science Research Institute at Sandia National Labs
Fraunhofer Center for Research in Computer Graphics
FX Palo Alto Laboratory, Inc.
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Arizona State University • CSE
Auburn University • CSSE
Ball State University • CS
Boston University • CS
Bowie State University • CS
Bradley University • CS
Brandeis University • CS
Brigham Young University • CS
Brown University • CS
Bryn Mawr College • MCS
Bucknell University • CS
California State Polytechnic University • CS
Carnegie Mellon University • CS
Carnegie Mellon University • ECE
Case Western Reserve University • EE&CS
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Clemson University • CS
College of Charleston • CS
College of William & Mary • CS
Colorado State University • CS
Colorado Technical University • CS
Columbia University • CS
Cornell University • CS
Dalhousie University • CS
Dartmouth College • CS
DePaul University • CS
Duke University • CS
Florida Atlantic University • CSE
Florida Institute of Technology • CS
Florida International University • CS
Florida State University • CS
Florida State University • IS
Georgia Institute of Technology • CS
Georgia Southern University • IT
Grinnell College • IT
Harvard University • CS

Harvey Mudd College • CS
Indiana University • CS
Indiana University • I
Iowa State University • CS
Johns Hopkins University • CS
Kansas State University • CIS
Kent State University • CS
Lehigh University • EECS
Louisiana State University • CS
Massachusetts Institute of Technology • AA
Massachusetts Institute of Technology • EECS
Michigan State University • CS
Michigan Technological University • CS
Mississippi State University • CS
Montana State University • CS
New Jersey Institute of Technology • CIS
New York University • CS
North Carolina State University • CS
Northeastern University • CS
Northwestern University • CS
Northwestern University • ECE
Oakland University • CSE
Ohio State University • CIS
Ohio University • EECS
Oklahoma State University • CS
Old Dominion University • CS
Oregon Graduate Institute • CSE
Oregon State University • CS
Pace University • CSIS
Pennsylvania State University • CSE
Pennsylvania State University • IST
Polytechnic University • CIS
Portland State University • CS
Princeton University • CS
Purdue University • CS
Purdue University • ECE
Rensselaer Polytechnic Institute • CS
Rice University • CS
Rochester Institute of Technology • CS
Rutgers University, Busch Campus • CS
Santa Clara University • CE
Simon Fraser University • CS
Southern Methodist University • CSE
Southwest Texas State University • CS
Stanford University • CS
State University of New York, Albany • CS
State University of New York, Buffalo • CSE
State University of New York, Stony Brook • CS
Stevens Institute of Technology • CS
Swarthmore College • CS
Syracuse University • IS
Temple University • CIS
Texas A&M University • CS
Texas Tech University • CS
Tufts University • EECS
Tulane University • EECS
University of Alabama, Birmingham • CIS
University of Alabama, Tuscaloosa • CS
University of Alberta • CS
University of Arizona • CS
University of Arkansas • CSCE
University of British Columbia • CS
University of California, Berkeley • EECS
University of California, Berkeley • IMS
University of California, Davis • CS
University of California, Irvine • ICS
University of California, Los Angeles • CS
University of California, Riverside • CS
University of California, San Diego • CSE
University of California, Santa Barbara • CS
University of California, Santa Cruz • CE
University of California, Santa Cruz • CS
University of Central Arkansas • CS
University of Central Florida • CS
University of Chicago • CS

University of Cincinnati • ECECS
University of Colorado, Boulder • CS
University of Delaware • CIS
University of Denver • MCS
University of Florida • CIS
University of Houston • CS
University of Idaho • CS
University of Illinois, Chicago • EECS
University of Illinois, Urbana Champaign • CS
University of Iowa • CS
University of Kansas • EECS
University of Kentucky • CS
University of Louisiana at Lafayette • CACS
University of Maryland • CS
University of Maryland, Baltimore Co • CSEE
University of Massachusetts, Amherst • CS
University of Michigan • EECS
University of Michigan • I
University of Michigan, Dearborn • CIS
University of Minnesota • CSE
University of Minnesota, Duluth • CS
University of Mississippi • CIS
University of Missouri, Columbia • CECS
University of Missouri, Rolla • CS
University of Nebraska, Lincoln • CSE
University of Nevada, Las Vegas • CS
University of Nevada, Reno • CS
University of New Mexico • CS
University of North Carolina, Chapel Hill • CS
University of North Dakota • CS
University of North Texas • CS
University of Oklahoma • CS
University of Oregon • CIS
University of Pennsylvania • CIS
University of Pittsburgh • CS
University of Puerto Rico, Mayaguez • ECE
University of Puget Sound • MCS
University of Rochester • CS
University of South Alabama • CIS
University of South Carolina • CSE
University of South Florida • CSE
University of Southern California • EES
University of Southern California • CS
University of Tennessee, Knoxville • CS
University of Texas, Austin • CS
University of Texas, Dallas • CS
University of Texas, El Paso • CS
University of Toronto • CS
University of Tulsa • MCS
University of Utah • CS
University of Virginia • CS
University of Washington • CSE
University of Washington • I
University of Washington, Bothell • CS
University of Waterloo • CS
University of West Florida • CS
University of Western Ontario • CS
University of Wisconsin, Green Bay • CS
University of Wisconsin, Madison • CS
University of Wisconsin, Milwaukee • EECS
University of Wyoming • CS
Vanderbilt University • EECS
Virginia Tech • CS
Wake Forest University • CS
Washington State University • EECS
Washington University in St. Louis • CS
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