COMPUTING RESEARCH NEWS

Congress, White House Conclude Budget Deal for FY 2000

By Lisa Thompson

The first session of the 106th Congress concluded as so many others have in recent years—amid rancorous debate over the fine details of the federal budget. While both Congress and the President billed it as a struggle over the broad shape of fiscal policy, in reality the two sides were merely haggling over accounting gimmicks that would technically allow them to claim that they held overall spending below the budget caps, thus preserving the Social Security Trust Fund.

Eight of the 13 annual appropriations bills were completed without major incident by the end of October. During negotiations with the Administration on the other five, about $8 billion in offsets had to be found to make way for spending increases in the high-priority programs of both sides. For instance,

much of the "savings" was achieved by pushing the last military payday of the year into FY 2001.

Another of the offsets agreed to was a 0.38 percent across-the-board cut in discretionary spending for nearly all agencies, including those whose appropriations bills had already been passed. Republican appropriators had devised a larger across-the-board cut as a last-ditch effort to get all the spending bills passed while staying within the budget caps. When President Clinton opposed the indiscriminate budget reduction, calling it "mindless," the Republican leadership dug in and promoted it as a key element in their fight to reduce wasteful spending. The President made the symbolic concession, but pared the cut to about $1.4 billion and insisted that agency heads have maximum flexibility in implementing it.

After the agreement, Congress rolled the remaining five appropriations bills into a $390 billion "omnibus" package (HR 3194), stuffed it with goodies to placate Members who might otherwise vote against the measure, and passed it about seven weeks after the start of the fiscal year.

Both sides were able to declare victory and did. President Clinton, who obtained new funds for his high-profile police- and teacher-hiring programs, described the deal as a "hard-won victory for the American people." First-year Speaker of the House Dennis Hastert (R-IL), not usually known for hyperbole, said, "It changed the way that this town does business and it probably will put an indelible mark on how this country will see its fiscal and financial future." In addition to the across-the-board cut, the Republicans can claim they increased funding for defense, veterans' programs, medical research, and education reform.

R&D Budgets Fare Well

In many ways, supporters of federal research and development programs can also claim victory in

FY 2000, as Congress added $4 billion to the R&D budget request. Despite its self-imposed budget caps, Congress is favorably disposed toward R&D spending, and the Republican leadership takes pains to outdo the Administration's efforts to emphasize its support for science. Many segments of the research community stand to benefit mightily from this political competition.

According to an analysis by the American Association for the Advancement of Science, total federal support for R&D will come to an estimated $83.3 billion this year, 5 percent more than in FY 1999. However, three-quarters of the new funding is concentrated in the Department of Defense and the National Institutes of Health. Support for basic research is expected to total $19.1 billion in FY 2000, an increase of $1.8 billion or 10.6 percent over last year's levels and $1 billion more than requested. Here again, however, life sciences and medical research at NIH account for nearly all of the increase.

Inside CRN

NEC Research Institute Embarks on Second Decade

By C. William Gear and David L. Waltz

The first of a series of CRN *articles describing the activities of CRA's industry laboratory members.*

The NEC Research Institute (NECI), founded in 1989 to do high-risk, high-payoff basic research, celebrated its 10th anniversary in May. Located on the outskirts of Princeton, NJ, NECI is an American company, wholly owned by the NEC Corporation of Japan. It is funded entirely by NEC and reports to the leader of NEC's Central Research Labs. The Institute's goal is to have a major impact on computing and the Internet world through advances in computing paradigms, devices, algorithms, and applications.

NECI features diverse research projects in physics and computer science designed to encourage collaboration. A physicist constructs an apparatus for quantum cryptography, while a computer scientist does basic research on computability classes that would apply to quantum computation. A system based on a PC and a camera learns to identify actions that a person carries out with toy blocks (pick up, stack, drop, etc.) in real time. Biophysicists do wet-lab research for understanding the processing of signals from a fly's eye

to its brain. Reinforcement learning software based on the metaphor of a market-based economy is developed, where cooperating problem-solving operators co-evolve with other operators that create and "invest in" new problem-solving operators (and share in the returns that their creations generate).

NECI's primary "customer" is the R&D Group of the parent company. The Institute seeks patents on new technologies and passes those technologies to NEC. Recognizing the importance of enabling researchers in a fundamental research laboratory to interact openly with researchers from other institutions, the Institute encourages collaborations and publishes everything in the open literature. Many computer science research projects result in software of broad interest; the Institute has mechanisms for distributing software to other researchers, and is now initiating a licensing program for software of commercial interest. Like many other research laboratories, spin-offs are an option for some research results. Recently the Institute has begun to consider ways in which Institute research staff can be involved in an independent startup, in return for equity to be shared by the researchers and NEC.

Projects currently under way at

NECI, approximately forty in all, include research in:
- ferroelectric materials for future DRAMs;
- distributed object-oriented operating systems;
- computer vision for face and object recognition;
- self-assembling materials;
- new methods for cryptography that use queries about proofs in place of factoring of large numbers;
- new models for judging the correctness of computations; and
- highly efficient low-level communications and caching software for building high-performance intelligent storage systems.

NECI's organization is relatively flat, with all Principal Research Members (PRMs) reporting to a Vice President. Some PRMs work independently, but most employ from one to eight scientists, post-docs, research assistants, interns, and consultants. All PRMs—and many in their groups—hold Ph.Ds. Most PRMs are involved in one or more collaborations with faculty at universities in the United States and other countries, or with groups at NEC/Japan.

Virtually all NECI research projects originate with the PRMs. In a few cases, NEC personnel have requested NECI's help or collabora-

Outstanding Undergraduate Award Winners

The Computing Research Association honors the recipients of the CRA Outstanding Undergraduate Awards competition for 2000, sponsored this year by Mitsubishi Electric Research Laboratory.

This year's selection committee included Janice Cuny, University of Oregon (Chair); Gregory Andrews, University of Arizona; and Larry Snyder, University of Washington.

Natalia Hernandez-Gardiol from Michigan State University received the Outstanding Female Undergraduate award. **Luke Zettlemoyer**, North Carolina State University, received the Outstanding Male Undergraduate award. **Emma Brunskill**, University of Washington, was the runner-up for the female award. **Jonathan Cohen**, Brown University, was named runner-up for the male award.

About the Winners

Natalia Hernandez-Gardiol is majoring in Computer Science and Engineering at Michigan State University. Her research focuses on Artificial Intelligence. In pursuing her research, she has worked in several different labs at MSU. In the Pattern Recognition and Image Processing Lab, she developed face-isolation and finger print pressure components of a recognition system. In the Autonomous Agents Laboratory, she created a visualization tool for robot navigation. And in the Genetic Algorithms Lab, she worked on a system that learns to deduce the contents of web pages. Her current research is on hierarchical reinforcement learning methods for real-world learning problems. Natalia is the winner of the MSU 1999 Outstanding Computer Science Senior Scholarship Award and the 1998 Outstanding Computer Science Junior Scholarship awards. She is a member of Tau Beta Pi. Natalia has also been a high school tutor and a community volunteer.

Luke Zettlemoyer is a senior at North Carolina State, majoring in Computer Science and Applied Mathematics. His research focuses on intelligent user interfaces. He has worked on a variety of problems, including developing a framework for misconception detection in 3D learning environments, devising algorithms for real-time planning, developing image processing algorithms for the detection of visual occurrences, and developing methodologies for acquiring the task knowledge needed by collaborative software agents. He has worked as a researcher in the IMG Lab at NC State, on the NC State IntelliMedia Initiative, at the Mitsubishi Electric Research Lab, and in collaboration with researchers at the MIT Media Laboratory. Luke is a co-author on eight publications. He has been named as the NC State Department of Computer Science Faculty Senior Scholar and he is a member of Phi Beta Kappa, Pi Mu Epsilon, and Upsilon Pi Epsilon. Luke has been a teaching assistant and he has been active in campus leadership.

Emma Brunskill (Runner-Up) is majoring in Computer Engineering and Physics at the University of Washington. She has been a researcher on six different projects in the UW Departments of Computer Science, Physics, Geophysics, and Chemistry. She also worked as summer research student at CERN (the European Center for Particle Physics).

Her Computer Science research focuses on scalable distributed systems, where she created on a visualization tool for a new cluster membership protocol. She is now working on a mathematical analysis of that protocol. Emma has been named as the 1999 Mary Gates Scholar, the 1999 Anderson Scholar, and twice as a University of Washington Undergraduate Scholar. She has been a teaching assistant in both the Physics and the Computer Science departments and she has been active in the CRA Undergraduate Mentor Program.

Jonathan Cohen (Runner-Up) is majoring in Mathematics and Computer Science at Brown University. He joined the Brown University Graphics Laboratory during his freshman year where his research has focused on the "sketching" of 3D drawings. His work includes the development of an interface for rapid 2D sketching of arbitrarily complex 3D scenes, a system for dynamic surface representation, and algorithms for drawing 3D curves. Jonathan also worked, as a summer intern at Microsoft, on tools for cutting out selected objects or regions from images. He is a co-author of two papers. Jonathan has been a teaching assistant and a high school math tutor.

Outstanding Undergraduate Award, Honorable Mention

Karolyn Abram	Dartmouth College
Helen Anderson	University of Virginia
James Bruce	Carnegie Mellon University
Thomas Carley	University of Maryland
Ada Chan	University of California, Berkeley
Elaine Cheong	University of Maryland
Dina Demner-Fushman	Hunter College of the City University of New York
James Fogarty	Virginia Polytechnic Institute and State University
Benjamin Hallen	University of Virginia
Theckla Louchios	University of Illinois at Urbana-Champaign
Elitza Maneva	California Institute of Technology
Kevin O'Neill	University of British Columbia
Mark Plesko	Carnegie Mellon University
Monica Rogati	University of New Mexico
Daniel Scholnick	Dartmouth College
Mark Seigle	University of Pittsburgh
Adnan Sulejmanpasic	University of Washington
Gaurav Tewari	Massachusetts Institute of Technology
Gary Yngve	Georgia Institute of Technology

CRA CONFERENCE AT SNOWBIRD ◆ JULY 9-11, 2000 ◆ SNOWBIRD, UTAH

The flagship conference for academic and research laboratory administrators interested in computing research issues.
As usual, the NSF Research Infrastructure Workshop July 7-9 and the CRA Board of Directors meeting July 8-9 will precede the conference.
Conference Sponsors: AAAI; ACM; Bell Labs, Lucent Technologies; Hewlett Packard; IBM; IEEE-Computer Society; Microsoft; and USENIX.

Sunday, July 9

Registration 2:00PM-7:30PM

Workshop for New Department Chairs 3:00PM-6:00PM
Chairs: Stuart Zweben, Ohio State University
Kathleen McKeown, Columbia University

Welcome Reception 6:00PM-7:30PM

Dinner 7:30PM-9:30PM
Some Challenges for Computer Science as it Enters the 21st Century
Speaker: William A. Wulf
President, National Academy of Engineering

Monday, July 10

Breakfast Buffet 7:00AM-8:30AM

Registration 7:30AM-6:00PM

Welcome 8:30AM-8:40AM
Speakers: John Stankovic, Academic Snowbird Chair
University of Virginia
Frances Allen, Industrial Snowbird Chair
IBM TJ Watson Research Center

JOINT ACADEMIC/INDUSTRIAL 8:40AM-10:10AM
PLENARY SESSION I
What Are the Important Research Areas for the New Millennium?
Chair: Frances Allen, IBM TJ Watson Research Center

Break 10:10AM-10:30AM

Workshop I (parallel sessions) 10:30AM-NOON
Using Spin-offs and Venture Capital to Market New Ideas
Chair: Peter Hart, Ricoh Silicon Valley
Speakers: John Wheadon, Xerox Corp.
Steve Socolof, Lucent Technologies

Reshaping Doctoral Education
Chair: Jeffrey Vitter, Duke University

CSTB Report on Research Agenda for the New Millennium
Chair: Marjory Blumenthal, Computer Science and
Telecommunications Board, National Research Council

Department Management: Teaching, Research, and Management Issues at
Undergraduate Institutions
Chair: Marion Harmon, Florida A&M University

Software Engineering Licensing and Certification
Chair: David Notkin, University of Washington

Luncheon NOON-1:30PM

JOINT ACADEMIC/INDUSTRIAL 1:30PM-3:00PM
PLENARY SESSION II
Impact of the Economic Development Imperative on Universities
Chair: James Foley, Georgia Institute of Technology
Speakers: Rick Adrion, National Science Foundation
Randy Katz, University of California, Berkeley

Break 3:00PM-3:30PM

Workshop II (parallel sessions) 3:30PM-5:00PM
Joint Academic/Industrial Workshop—University Venture Capital/Incubation
Initiatives
Chair: Azer Bestavros, Boston University
Speakers: Wayne Hodges, Georgia Tech

CS and IT Degree Programs
Chair: Dennis Gannon, Indiana University

Government Support for Research in the New Millennium
Chairs: Daniel Reed, University of Illinois, Urbana-Champaign
Lisa Thompson, Director of Government Affairs, CRA

CRA Academic Profiles Survey
Chairs: Stephen Seidman, Colorado State University
Mirek Truszczynski, University of Kentucky

Government-Sponsored Initiatives on Women and Minorities
Chair: Doris Carver, Louisiana State University

Birds of a Feather/Open Networking 5:00PM-6:00PM
Potential topics:
◆ How to scale computer fluency courses
◆ Supporting department infrastructure
◆ Designing and moving into a new building
◆ A chair's fund-raising responsibilities
◆ How to get and use an associate chair
◆ How to evaluate teaching
◆ Keeping computer staff in the face of escalating salaries

Dinner and State of the CRA Address 6:30PM-9:30PM
Speakers: Edward Lazowska, University of Washington
William Aspray, CRA
The CRA Distinguished Service and A. Nico Habermann Awards will be
presented after dinner.

Tuesday, July 11

Breakfast Buffet 7:00AM-8:30AM

PLENARY SESSION III 8:30AM-10:00AM
Educational Challenges for the New Millennium
Chair: James Kurose, University of Massachusetts, Amherst
Speakers: Ellis Horowitz, University of Southern California

Break 10:00AM-10:30AM

Workshop III (parallel sessions) 10:30AM-NOON
Industry Workshop—Managing Industrial Research Labs
Chair: Richard Waters, Mitsubishi Electric Research

CS and CE Department Accreditation
Chair: Kenneth E. Martin, Computing Sciences Accreditation Board

Where Is the Information Technology Profession Headed?
Chair: Peter Denning, George Mason University

Research on Recruitment and Retention of Woman and Minorities
Chair: Mary Lou Soffa, University of Pittsburgh

New Government-Sponsored Research Initiatives
Chair: TBA

Luncheon NOON-1:30PM
[CRA Board Interaction with Conference Participants]

Workshop IV (parallel sessions) 1:30PM-3:00PM
Industry-University Collaboration
Chair: Larry Snyder, University of Washington

The Relationship Between Computer and Computational Science
Chairs: Sidney Karin, University of California, San Diego
Robert Schnabel, University of Colorado at Boulder

Best Practices: Recruiting and Retaining Faculty, Graduate Students, and
Researchers
Chair: John Stankovic, University of Virginia
Speakers: Tomasz Imielinski, Rutgers University
Tomas Lozano-Perez, Massachusetts Institute of Technology
Eric Manning, University of Victoria

Systems Administration Courses and the CS Curriculum
Chair: David Parter, University of Wisconsin and SAGE

Distance Education/Learning
Chair: Ellis Horowitz, University of Southern California

Workshop for Deans 1:30PM-9:00PM
Chair: Peter Freeman, Georgia Institute of Technology

This is a working draft of the program that will undergo further changes. It includes names of confirmed organizers and speakers only. For program updates and registra-
tion information when available, please check the CRA website at: http://cra.org/Activities/Snowbird00.html; e-mail snowbird@cra.org; or call 202-234-2111.

1998-1999 Taulbee Survey

1998-1999 Preliminary Taulbee Data on Faculty Salaries

By Mary Jane Irwin and
Frank Friedman

Each September the Computing Research Association surveys academic departments in the United States and Canada that offer the Ph.D. in computer science or computer engineering. The annual CRA Taulbee Survey collects data on enrollment in the undergraduate, master's, and Ph.D. computing programs; employment of Ph.D. graduates of these programs; and number and salaries of faculty in these programs.

This is the 29th year that CRA has tracked the production and employment of Ph.Ds in the computer science field. For the past 13 years, computer engineering data have also been incorporated into the survey. The traditionally high response rate to the survey makes the data especially useful; the data are used widely, not only by CRA's members but also by other organizations and institutions.

Each January, as a service to our members, CRA publishes a prelimi-

nary report of the survey's salary data. We believe these preliminary results comprise enough data to be valuable and valid as tools for planning for the spring faculty-recruiting season. The full survey, including updated salary data, enrollment, production, and employment data as well as trend analyses, will appear in the March 2000 issue of CRN.

The following tables show the results in a format comparable to that used in previous CRA surveys. This year, for the first time, CRA asked for salary data on non-tenure-track teaching faculty (e.g., instructors, lecturers, etc.). Due to a low return rate to date for computer engineering programs (only 3 of 22 surveys have been received), we have not reported preliminary salary data for computer engineering. Information from all of the surveys returned will be published in the final report in March. In the tables that group the departments by rank, the groupings are based on the 1993 National Research Council ranking of research-doctorate programs in the United States, released in

1995 (http://www.cra.org/statistics/nrcstudy2).

Each department was asked to report the minimum, mean, and maximum salary for each rank (full, associate, assistant, non-tenure track teaching faculty) and the number of persons at each rank. The salaries are those effective as of January 1, 2000. For U.S. departments, nine-month salaries are reported in U.S. dollars. For Canadian departments, twelve-month salaries are reported in Canadian dollars. Respondents were asked to include salary supplements such as salary monies from endowed positions.

The minimum and maximum of the reported salary minima (and maxima) is self-explanatory. The range of salaries in a given rank among departments that reported data for that rank is the interval ["minimum of the minima," "maximum of the maxima"]. The mean of the reported salary minima (maxima) in a given rank is computed by summing the departmental reported minimum (maximum) and dividing by the number of departments reporting data

at that rank. The average salary at each rank is computed by summing the individual means reported at each rank and dividing by the number of departments reporting at that rank.

For comparison with last year's data, Table 8 shows, separately, the overall average salaries for U.S. departments and for Canadian departments. The preliminary data from 1998 are those published in the January 1999 CRN, and the final data from 1998 are those published in the March 1999 CRN. As can be seen, the U.S. averages appear to have increased by 6.5 percent, 4.7 percent, and 2.7 percent for Assistant, Associate, and Full Professors, respectively. Canadian averages appear to have increased at the considerably higher rate of 9.2 percent, 6.7 percent, and 5.4 percent for Assistant, Associate, and Full Professors, respectively.

Mary Jane Irwin, Pennsylvania State University, and Frank Friedman, Temple University, co-chair CRA's Taulbee Survey Committee.

Table 1. Nine-Month Salaries, 121 Responses of 156 US Computer Science Departments

Faculty Rank	# Faculty	Reported Salary Minimum			Average of all salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	394	$10,000	$43,382	$98,131	$49,025	$30,575	$56,268	$126,904
Assistant	560	$40,000	$60,940	$75,500	$64,279	$54,583	$68,230	$84,000
Associate	783	$42,616	$65,843	$90,000	$72,796	$57,677	$80,705	$131,667
Full	1062	$45,600	$77,287	$109,650	$102,767	$63,400	$123,873	$239,135

Table 2. Nine-Month Salaries, 11 Responses of 12 US Computer Science Departments Ranked 1-12

Faculty Rank	# Faculty	Reported Salary Minimum			Average of all salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	59	$24,470	$56,943	$98,131	$65,273	$48,434	$74,082	$126,904
Assistant	84	$55,650	$64,992	$68,800	$69,414	$67,300	$74,435	$81,800
Associate	89	$51,050	$71,415	$90,000	$79,686	$77,570	$86,700	$95,000
Full	202	$45,600	$81,557	$93,300	$108,896	$130,000	$149,875	$180,000

Table 3. Nine-Month Salaries, 12 Responses of 12 US Computer Science Departments Ranked 13-24

Faculty Rank	# Faculty	Reported Salary Minimum			Average of all salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	46	$33,333	$48,010	$65,592	$57,296	$48,428	$68,229	$83,200
Assistant	54	$61,192	$65,576	$70,000	$69,546	$67,000	$75,091	$81,800
Associate	66	$61,811	$72,096	$90,000	$80,715	$80,200	$89,574	$101,750
Full	172	$66,818	$83,735	$93,300	$108,595	$130,000	$113,643	$239,135

Table 4. Nine-Month Salaries, 12 Responses of 12 US Computer Science Departments Ranked 25-36

Faculty Rank	# Faculty	Reported Salary Minimum			Average of all salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	28	$38,000	$49,904	$65,000	$56,036	$43,900	$63,467	$120,000
Assistant	75	$58,000	$64,248	$71,000	$67,301	$62,237	$71,040	$80,000
Associate	81	$60,810	$70,585	$83,400	$77,710	$70,000	$89,241	$131,667
Full	137	$67,574	$79,296	$92,383	$102,842	$96,678	$139,909	$190,000

Table 5. Nine-Month Salaries, 86 Responses of 120 US Computer Science Departments Ranked Higher than 36 or Unranked

Faculty Rank	# Faculty	Reported Salary Minimum			Average of all salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	261	$10,000	$39,931	$95,000	$44,679	$30,575	$51,222	$95,000
Assistant	337	$40,000	$59,266	$75,500	$62,504	$54,583	$66,013	$84,000
Associate	540	$42,616	$63,809	$87,000	$70,541	$57,667	$77,847	$104,700
Full	538	$52,898	$75,460	$100,000	$91,285	$63,400	$113,643	$235,000

1998-1999 Taulbee Survey

Table 6. Twelve-Month Salaries, 16 Responses of 23 Canadian Computer Science Departments (Canadian Dollars)

Faculty Rank	# Faculty	Reported Salary Minimum			Average of all salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	35	$35,000	$46,952	$70,000	$50,213	$39,008	$54,926	$79,643
Assistant	78	$46,640	$60,890	$80,916	$64,868	$51,728	$69,112	$90,725
Associate	118	$54,472	$67,507	$90,030	$76,812	$73,352	$86,829	$120,000
Full	149	$58,088	$80,112	$109,867	$95,719	$79,712	$118,115	$168,299

Table 7. Nine-Month Salaries for New Ph.D's, Responding US CS and CE Departments

Faculty Rank	# Faculty	Reported Salary Minimum			Average of all salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Tenure-Track	96	$42,000	$64,637	$83,000	$65,418	$60,012	$66,253	$83,000
Researcher	6	$40,200	$53,733	$82,000	$53,733	$48,000	$56,333	$82,200
Non-Tenure Teaching Faculty	13	$36,000	$50,555	$68,000	$50,861	$36,000	$51,000	$68,000
Postdoc	8	$25,000	$34,333	$44,000	$37,666	$35,000	$44,333	$55,000

Table 8. Average Salary Comparison with 1998 Survey

	US CS/CE Departments			Canadian CS Departments		
	Preliminary 1998	Final 1998	Preliminary 1999	Preliminary 1998	Final 1998	Preliminary 1999
Number Reporting/Surveyed	118/168	129/168	125/178	12 / 18	12 / 18	16 / 23
Non-Tenure Teaching Faculty	Not Reported	Not Reported	$48,823	Not Reported	Not Reported	$50,213
Assistant	$60,418	$60,373	$64,273	$59,217	$59,217	$64,686
Associate	$66,887	$69,775	$73,061	$71,990	$71,990	$76,812
Full	$93,313	$92,901	$95,426	$90,823	$90,823	$95,719

Following are budget summaries for key research agencies.

Department of Defense: For five years running, Congressional appropriators have added money to the DOD R&D budget request, though spending on defense R&D is still far below what it was in the 1980s. In FY 2000, funding for DOD R&D will rise by just over $1 billion to a total of $39 billion, about $4 billion more than DOD had requested. Basic research (category 6.1 research in DOD parlance) was funded at $1.2 billion, an increase of 5.4 percent over the FY 1999 level. Spending on applied research (category 6.2) is expected to be $3.4 billion, an increase of 7.5 percent above last year's level. Despite the overall increases, DARPA's request for new information technology research funding under the Administration's Information Technology for the 21st Century initiative (IT²) was cut by more than half, from $70 million to $30 million. There are plans for another $30 million to be spent on other IT² programs elsewhere in DOD.

Department of Energy: DOE spending on R&D will grow to $7.2 billion in FY 2000, an increase of $258 million or 3.7 percent. However, the $130 million budget for Computational and Technology Research, a civilian program, is down—by $26 million compared to last year and $70 million compared to the request—due to the rejection of DOE's proposed Scientific Simulation Initiative (SSI), another element of IT². Appropriators apparently felt that SSI duplicates DOE's Accelerated Strategic Computing Initiative (ASCI), a defense research program that also involves development of next-generation teraflop computers. ASCI was funded at $315 million in FY 2000, an increase of 4.6 percent above last year's level. (See the legislative wrap-up on page 6 for more news concerning ASCI.)

NASA: After House appropriators caught NASA off guard with a $1.4 billion cut, the space agency rallied its troops, supplicated its key champions in the Senate, and got the funding restored. However, the agency has seen better days. Neither the Administration nor Congress has targeted NASA as a beneficiary of their surging support for science as they have with NIH, NSF, and other research agencies. NASA's budget for FY 2000 is $13.6 billion—down by $64 million or about a half a percent from the FY 1999 funding level, but slightly more than what was requested.

National Institutes of Health: NIH appropriations come from one of the five bills that was subject to negotiations over the omnibus budget package. In fact, Congress's insistence on adding $2.2 billion to the NIH budget was one of the reasons that offsets were needed to get back under the spending caps. The FY 2000 NIH budget totals $17.8 billion, 14.3 percent more than its FY 1999 budget and $1.9 billion more than the Administration had requested. There is a catch, however, as the omnibus appropriations bill restricts NIH from spending the last $3 billion of its budget until September 29, 2000, one day before the end of FY 2000. The Administration unsuccessfully contested this provision, an accounting trick that is not often imposed on research programs.

National Science Foundation: The NSF budget will grow by $240 million in FY 2000 to a total of $3.9 billion, 7 percent above funding in FY 1999. The increase includes $90 million for a new Information Technology Research (ITR) program and $36 million to develop a five-teraflop computing facility, which together comprise the NSF's contributions to IT². With the new ITR funding, the Computer and Information Science and Engineering Directorate's budget will increase by 30 percent, to $390 million, in FY 2000. Two other priority research areas—biocomplexity and plant genome—will see expanded support in FY 2000.

Outlook for IT Research in FY 2001

Next month the President will release his budget request for FY 2001. It is expected to include second-year funding for the IT² initiative, consistent with the recommendations made by the President's Information Technology Advisory Committee (PITAC). PITAC called for the expansion of support for fundamental computing and networking research by $1.37 billion over five years.

IT research will not be the only highlight of the science budget, however. The Administration is also expected to unveil a new initiative in nanotechnology, described as the creation and utilization of functional materials, devices, and systems through the control of matter on a scale of a fraction of a nanometer to tens of nanometers.

Although IT² was not implemented in its entirety during the first year of consideration, it fared relatively well for a new initiative, with the lead agency, NSF, obtaining nearly full funding for its components. Prospects for sustaining progress toward full implementation of a five-year IT research program are good and could be enhanced by further Congressional action on the Networking and Information Technology Research and Develop-

Legislative Update

By Lisa Thompson

NITR&D

Rep. James Sensenbrenner (R-WI), Chairman of the House Science Committee, introduced the Networking and Information Technology Research and Development Act (HR 2086) in June 1999. The Committee approved it overwhelmingly in September, and the bill now has 45 cosponsors. It is likely that the House will take up the measure soon after Congress reconvenes this month.

The bill would amend the High Performance Computing and Communications Act to reauthorize HPCC funding for the six agencies under the Science Committee's jurisdiction for the next five years. It would also set aside a portion of the National Science Foundation's HPCC funding for a new Networking and Information Technology R&D Program. The NITR&D Program, based on the PITAC recommendations to expand support for fundamental computing research, would consist of "grants for long-term basic research on networking and information technology, with priority given to research that helps address issues related to high-end computing and software and network stability,

fragility, reliability, security (including privacy), and scalability."

Major Science Policy Legislation

In July 1999, the Senate passed by unanimous consent the Federal Research Investment Act (S 296), a measure sponsored by Senator Bill Frist (R-TN), Chairman of the Science, Technology, and Space Subcommittee, to authorize a doubling of the civilian R&D budget over 10 years. In late October, Rep. Heather Wilson (R-NM) and 11 cosponsors introduced a counterpart bill in the House.

The proposal to double support for civilian R&D originated in the Senate several years ago and a number of Senate Commerce Committee members have become its ardent champions. But the House Science Committee majority regards this approach to science policy with skepticism. Authorization bills hold more significance in the House than in the Senate, and Sensenbrenner protects his authorization prerogatives fiercely. With science agency budgets authorized under a general doubling plan, the Science Committee's opportunity to influence appropriations with annual passage of carefully crafted authorization bills could be diminished.

The fate of the doubling bill is probably tied to that of the NITR&D Act. With Senate science policy leaders committed to the former and House leaders pushing the latter, they will need to arrive at a compromise before either measure is enacted.

R&D Tax Credit

On the last day of the 1999 session, Congress passed a minor 'omnibus' tax bill (HR 1180) to extend various popular tax breaks that typically have to be reauthorized every year. The fallback measure became necessary when President Clinton vetoed the $700 billion tax reduction package offered by the Republicans. Like the major tax package, the enacted bill includes a provision to extend the Research and Experimentation Tax Credit for 5 years, an important milestone in the high-tech industry's long-running efforts to have the credit made permanent.

National Nuclear Security Administration

The highly publicized security lapses at DOE's national security laboratories sparked an intense drive in Congress to bring DOE to heel. The defense authorization bill enacted in August (S 1059, PL 106-65) established the National Nuclear Security Administration (NNSA), a semi-autonomous agency within DOE responsible for ensuring the security and reliability of the nation's nuclear weapons stockpile. DOE Secretary Bill Richardson opposed the measure because it impinged on his authority. He ultimately relented and President Clinton signed the bill in October; Clinton then tried to get around the law by appointing Richardson himself as the head of NNSA. Naturally outraged, Congress pressured the Administration into agreeing to name an independent NNSA Administrator.

About half of all DOE R&D now falls under the NNSA, which is also charged with nuclear safety and environmental protection efforts. Responsibility for the $2.2 billion Stockpile Stewardship Program, of which the Accelerated Strategic Computing Initiative is a part, has been transferred to NNSA, as has authority for the Livermore, Los Alamos, and Sandia nuclear weapons' laboratories, where the security controversies originated.

IT Worker Shortage

A flurry of bills to address the IT worker shortage were introduced in 1999. None got very far, however, as Congress had wearied of the issue in 1998. Senator Phil Gramm (R-TX) and Rep. David Dreier (R-CA) are sponsoring legislation (S 1440 and HR 2698, respectively) that would raise the cap on H-1B visas to 200,000; Senator John McCain (R-AZ) has introduced a bill to temporarily remove the cap (S 1804). Senator Kent Conrad (D-ND) and Rep. James Moran (D-VA) each introduced legislation to establish a tax credit to offset IT worker training expenses (S 456 and HR 838, respectively). Conrad's proposal was offered as an amendment to the Republican tax reduction bill, but was rejected 46-54.

Perhaps the most interesting of the proposals is one to create a new "T" or "Tech" visa for international students who receive science and engineering degrees from American universities and want to stay and work in the United States. The concept is embodied in the Bringing Resources from Academia for the Industry of our Nation Act (BRAIN; HR 2687) introduced by Rep. Zoe Lofgren (D-CA), and in the Helping Improve Technology Education and Competitiveness Act (HITEC; S 1645) being sponsored by Senator Chuck Robb (D-VA). The bills face an uphill climb, as do most proposals to change U.S. immigration policy.

Nominees Sought for Board

The Computing Research Association is seeking nominations for its Board of Directors. The deadline for receipt of nominations is **March 1, 2000**.

Each spring CRA's member organizations elect about one-third of the association's board members to three-year terms. Candidates are not required to be affiliated with CRA member organizations. It is important that the CRA Board represent the interests of the entire computing research community, and it is CRA's policy to solicit a broad range of candidates.

The CRA board is a working board, and all members are expected to actively participate. Although CRA has a small professional staff, board members have detailed involvement in all major projects. Recent and current projects include:

● planning the biennial CRA Conference at Snowbird.
● conducting the annual CRA Taulbee Survey.
● conducting other surveys (e.g., industrial lab salaries; departmental budgets, space, personnel).
● developing workshops on critical policy issues for computing research.
● planning academic and industrial careers and effective teaching workshops.

● increasing the participation of women and minorities in computing research, with the help of National Science Foundation grants.

In addition to actively participating in board projects, board members are asked to attend at least two board meetings per year and pay their travel costs to the meetings.

Service on this board is important. Research in computer science and computer engineering is facing major challenges as the political environment for government support changes. Computing has been identified as a technology of critical social importance. This increased political attention places new demands on our field and offers new opportunities.

Please contact the person you are nominating before submitting his or her name to ensure that the nominee is willing to stand for election to the board. Nominees are required to write a brief (100-word) statement supporting their nominations. Nominees will receive information about CRA and its activities (also available on the Web at http://www.cra.org).

To receive a nomination form, send an e-mail request to Jean Smith at elections@cra.org. Nominations must reach CRA by March 1, 2000.

Nominations Sought for CRA Service Awards

CRA invites nominations for each of two service awards for the year 2000. The deadline for receipt of nominations is **February 15, 2000.**

CRA Distinguished Service Award

CRA makes an award, usually annually, to a person who has made an outstanding service contribution to the computing research community. This award recognizes service in the areas of government affairs, professional societies, publications or conferences, and leadership that has had a major impact on computing research.

A. Nico Habermann Award

CRA makes an award, usually annually, to a person who has made an outstanding contribution to aiding members of underrepresented groups within the computing research community. This award recognizes work in areas of government affairs, educational programs, professional societies, public awareness, and leadership that has had a major impact on advancing these groups in the computing research community.

Nomination Procedure

Nominations should be no longer than two pages and should describe the contribution(s) that is the basis of the nomination. Letters in support of the nomination are welcome, but not required. Nominations should reach CRA via e-mail (awards@cra.org), fax (202-667-1066), or postal mail **no later than February 15, 2000**. For specifics, see our website: http://www.cra.org/main/cra.awards.html

Past Distinguished Service Award Recipients:

1999: Bill Joy, Sun Microsystems, and Ken Kennedy, Rice University (co-winners)
1998: Merrell Patrick, National Science Foundation
1997: Anita Jones, University of Virginia
1996: Paul Young, University of Washington
1995: Randy Katz, University of California at Berkeley
1994: William A. Wulf, University of Virginia
1993: not awarded
1992: Joseph Traub, Columbia University
1991: David Gries, Cornell University
1990: Robert Kahn, CNRI
1989: Peter Denning, George Mason University
1988: Kent Curtis, National Science Foundation (posthumous)

Past Habermann Award Recipients:

1999: Sheila Humphreys, University of California, Berkeley
1998: Bryant York, Northeastern University
1997: Andrew Bernat, University of Texas at El Paso
1996: Caroline Wardle, National Science Foundation
1995: Eugene Lawler (posthumous), University of California at Berkeley
1994: Richard A. Tapia, Rice University

Photo credit: SC99 Photo by Steve Reed, Oscar and Associates, Chicago, IL.

Ken Kennedy (r), co-winner of CRA's 1999 Distinguished Service Award, accepts his award on November 18 at the SC99 Conference in Portland, Oregon. Presenting the award is CRA Board member, Dan Reed (University of Illinois at Urbana-Champaign). The award was presented jointly to Professor Kennedy (Rice University) and Bill Joy (Sun Microsystems, Inc.) in recognition of their contributions to the computing research community as co-chairs of the President's Information Technology Advisory Committee (PITAC).

ment Act (HR 2086), legislation to reauthorize the High Performance Computing and Communications Program and implement the PITAC recommendations. (See the legislative wrap-up on page 6 for further details on the status of NITR&D.)

But further success also depends on continued advocacy by the IT research community and on the strength of the coalition of university and industry organizations across the realm of computing, networking, and computational research that emerged in support of the PITAC proposal. CRA will continue to lead the charge in FY 2000 by providing information and recommendations to Congress and facilitating action among computing researchers.

Grace Hopper Celebration of Women in Computing 2000

September 14-16, 2000
Sheraton Hotels
Cape Cod, Massachusetts
http://www.sdsc.edu/Hopper

tive participation. Such requests have been in areas closely associated with work already being done by the NECI PRM. When a PRM begins a new area of research, a one-page project description is prepared and a short presentation is made to the Board of Fellows. The Board often makes suggestions and occasionally asks for revisions, but to date has never rejected a plan.

More than 80 percent of NECI's approximately 100 employees are scientific staff, with the remainder filling managerial, administrative, systems support, and secretarial positions. At any given time NECI also hosts about 70 other scientists—visitors (often faculty on sabbaticals), post-docs, consultants (often university faculty), student interns, and a handful of visitors from NEC Japan.

A major factor in NECI's ability to hire world-class scientists is its favorable working environment. Funding for projects comes with a PRM position. Periodic reporting requires only several pages per year. Scientists are, of course, expected to produce journal papers, patents, prototype systems, demos, distributable software, and other evidence of progress. PRMs are also expected to participate in evaluations of other scientists and to make occasional presentations for visitors and sponsors of NECI, but non-research demands are kept to a bare minimum. The Institute encourages publication; in fact, it promises staff that everything they do can be published, which is unusual for an industrial laboratory.

Junior scientists are hired for a provisional period of four years, during which their performance is reviewed annually. If the provisional appointment is converted to a regular appointment, subsequent in-depth evaluations occur every three years. Eight senior scientists with strong records of accomplishment,

SOME NECI RESEARCH HIGHLIGHTS

● *Inquirus*, an excellent Web metasearch engine used by most members of NECI and other NEC labs. Try this on an experimental basis at *www.inquirus.com*.

● *ResearchIndex*, a computer science citation system that provides citation reports based on approximately 250,000 articles; rated "best of the Web" by the Go Network and the Scout Report. To try it, go to *www.inquirus.com* and click on *ResearchIndex*.

● Electronic watermarking for DVD and video—NECI played a lead role in a pending standard.

● Size of the Web and coverage of various search engines—definitive studies conducted and published in *Science* and *Nature* and widely cited in the media.

● GMR (Giant Magneto-Resistance) semiconducting material that has more than 100 times the magneto-resistivity of other materials; may be important for higher density disk drives and many sensing applications.

● Discovery that large amounts of light can pass through a hole that is smaller than the wavelength of the light, with possible applications to microfabrication and more efficient optical scanning microscopes.

who meet as a Board of Fellows, help to set scientific directions for the Institute, supervise hiring, conduct scientific evaluations, and consider promotions.

In the coming year, NECI is likely to be hiring in the area of Web computing—especially combined with AI or systems. For more information, visit NECI's web site at: http://www.neci.nj.nec.com/neci-website/index-page.html.

Dr. Gear and Dr. Waltz are President and Vice President, respectively, of the NEC Research Institute.

Professional Opportunities

CRN Advertising Policy

Send copy and payment for Professional Opportunities advertisements to Advertising Coordinator, e-mail: crn@cra.org. **E-mail submissions are preferred**. Items may be mailed to *Computing Research News*, 1100 Seventeenth Street, NW, Suite 507, Washington, DC 20036-4632; fax: 202-667-1066.

The format of an ad must conform to the following: 1) the first line must contain the name of the university or organization, 2) the second line usually contains the name of the department or unit, and 3) the body of the ad should be in paragraph form. The words in the first two lines are included in the total word count for the ad. You may request in writing that some text be set in bold; a bold word in the body of the ad counts as two words.

The rate is $2.25 (U.S.) per word. Purchase orders, money orders, and checks are acceptable (please do not send cash). All CRA members receive 200 free words per dues year. CRA's standard advertising package consists of running an ad in *CRN*, and distributing it electronically to CRA's jobs listserv and webpage (where it remains for no less than two months). As an alternative to this package, advertisers may request that their Professional Opportunities ads just be published in *CRN* or just distributed electronically. The cost of the ad is the same whether the standard or the alternative package is selected.

Professional Opportunities display ads cost $60 (U.S.) per column inch, with a two-inch minimum. Ads must be submitted in camera-ready, offset (positives or negatives) or mechanical form. If your ad is larger than three inches, please request our Advertising Rate Card.

Computing Research News is published five times per year: in January, March, May, September, and November. If the closing date of a Professional Opportunities ad does not correspond with the publication of an issue of *CRN*, advertisers can choose the alternative advertising package and only have the ad distributed electronically. Advertising copy that is to appear in *CRN* must be received at least one month before publication. The deadline for the March issue is February 1. Ads for electronic distribution only may be submitted at any time.

Argonne National Laboratory

Undergraduate Program in Computational Science, Mathematics and Computer Science (MCS) Division, Argonne National Laboratory. (May 30-August 11) Focus: research in numerical and nonnumerical methods, parallel tools, scientific visualization, collaboration tools, distributed computing, computational science, and systems administration. See http://www.mcs.anl.gov/division/information/educational_programs/studentopps.html. Contact: Jan Griffin, MCS Division, Argonne National Lab., 9700 S. Cass Ave., Argonne, IL 60439; griffin@mcs.anl.gov; 630-252-7271; fax 630-252-5676. Deadline: February 1, 2000.

Argonne National Laboratory

Summer Givens Associates appointments, Mathematics and Computer Science (MCS) Division, Argonne National Laboratory. Focus: for graduate students beginning careers in numerical analysis of computational mathematics. See: http://mcs.anl.gov/division/information/educational_programs/givens00.html Contact: Jan Griffin, MCS Division, Argonne National Lab., 9700 S. Cass Ave., Argonne, IL 60439; griffin@mcs.anl.gov; 630-252-7271; fax 630-252-5676. Deadline: February 10, 2000

Auburn University

Director and Faculty Positions To Support The Institute for Reconfigurable Smart Components for Next Generation Information Technology

Auburn University invites nominations and applications for four tenure track faculty positions including the Director. The Institute involves the Departments of Computer Science and Software Engineering (CSSE) and Electrical and Computer Engineering (ECE) in a new university initiative to develop Pinnacles of Excellence.

The Institute

The Institute will focus College expertise on Reconfigurable Smart Components. The research includes:

● Creation of enabling technology for reconfigurable smart components, and the transfer of the technology, as appropriate, to industry.

● Enhancement of the graduate research programs in the College of Engineering by adding new highly qualified faculty and increasing the level of extramural funding.

A reconfigurable smart component is an augmented version of a standard component (what constitutes a 'component' will depend on the system in question). The augmentation, consisting of both hardware and software, provides a way for the component to participate in an ad-hoc network of other similar components and a way for the system as a whole to connect to larger, more permanent networks. Communication may be via direct connection or wireless.

The University will invest over $1M (estimated) in five years in new positions with an objective of gaining national prominence in the area over this time period.

Description of Positions

● Director Position (12 month)

The Director will report to the Dean of Engineering on matters related to the Institute and has responsibility for coordinating and managing the research effort, as well as providing much of the vision and direction for the Institute. The successful candidate will have demonstrated excellence in leading a research effort in the information technology area and developing partnerships with government and industry. While it is anticipated that candidates with the credentials and reputation to assume this position would qualify for appointment at the Professor level, outstanding candidates eligible for appointment at Associate or Assistant Professor will also be considered.

● Three faculty positions (9 month) in the areas of:

1) Systems Software (CSSE)

2) RF Devices and Circuits, including TCAD Software (EE)

3) Computer Networks (CSSE)

Successful candidates for these tenure track positions will possess a Ph.D. in Computer Science or the appropriate engineering discipline. Rank within one of the involved departments and salary will be commensurate with qualifications. Candidates must plan to strongly impact the research program in the institute, and will have teaching responsibilities within the department.

Auburn University

Auburn University was chartered in 1856, and is the largest university in the state of Alabama, with a student enrollment of over 22,000 and 1,125 faculty. Auburn is located 100 miles southwest of Atlanta and 50 miles Northeast of the State Capitol Montgomery. Auburn is ranked 38th overall and 34th in Engineering among public universities by U. S. News and World Report. Auburn offers nearly 150 baccalaureate degree programs in 64 academic departments. The graduate school provides master's level programs in 130 areas and doctoral programs in 96 fields. The College of Engineering has an enrollment of 3,100 undergraduates and 500 graduate students in 8 departments. The picturesque main campus covers 1,875 acres, and includes the entire southwest quadrant of the city of Auburn. The Auburn-Opelika community has an additional population of about 50,000, an excellent public school system, and has been nationally ranked as one of the "best small towns in America".

Applicants should submit a current curriculum vitae, research vision, teaching philosophy and 5 references to:

Dr. John M. Owens
Associate Dean For Research
College of Engineering
108 Ramsay Hall
Auburn University, AL 36849
www.eng.auburn.edu/irsc/
Interview process to begin February 1, 2000.

AA/EEOE/Women and Minorities are encouraged to apply.

Ben-Gurion University
Department of Math and Computer Science

The Computer Science Division at the Ben-Gurion University of the Negev in Israel invites applications for tenure track positions at all levels.

Candidates must have a Ph.D. in computer science or a related field and demonstrate excellence in research and teaching. Candidates in all areas of computer science will be considered.

The Division offers B.Sc., M.Sc., and Ph.D. degrees in Computer Science and is young and dynamic, comprising of 18 full-time faculty members. It is currently undergoing a significant expansion with a large increase in the number of faculty members and resources. Faculty members enjoy a research oriented atmosphere with moderate teaching loads and are encouraged to interact with the burgeoning high technology industry in Israel.

Applications, including resume and the name and address of at least three references (please indicate E-mail addresses) should be sent to:

Dr. Shlomi Dolev, CS Coordinator, Dept. of Mathematics and Computer Science, Ben-Gurion University, P.O.Box 653, Beer-Sheva, 84105, ISRAEL, Email: dolev@cs.bgu.ac.il.

Bowdoin College
Department of Computer Science

The Department of Computer Science at Bowdoin College invites applications for a tenure-track position at the rank of Assistant Professor or Instructor to begin in the Fall of 2000. Ph.D. preferred, ABD considered. The successful candidate will be expected to teach four courses per year including introductory, core, and advanced undergraduate courses. Area of specialization open; particular interest in graphics, scientific modeling, scientific visualization, or human-computer interaction. Applicants must possess a commitment to undergraduate education and demonstrate the potential to develop a productive research program.

Bowdoin is a highly selective, coeducational, liberal arts college of 1,550 students located two hours north of Boston, close to Portland, along the Maine coast in a community of 24,000. The CS Department has just moved into a newly renovated building, along with the Mathematics and Physics departments, with whom we maintain close and collegial relationships. Departmental lab facilities include Macintoshes for the introductory courses, and a network of Linux machines for use by students in intermediate and advanced courses. Further information about Bowdoin and the department is available at www.bowdoin.edu

Applicants should send a letter of application, a curriculum vitae, statements of teaching philosophy and research interests, and arrange for three reference letters to be sent to:

David Garnick
Department of Computer Science
8650 College Station
Brunswick, ME 04011

Questions can be directed by email to garnick@bowdoin.edu. Consideration of applications will begin January 3, and continue until the position is filled. Bowdoin is committed to equal opportunity through affirmative action. Women and members of minority groups are encouraged to apply.

Brown University
Department of Computer Science

Applications are invited for a tenure-track assistant professor position in computer science commencing no later than September 1, 2000. Outstanding applicants are sought in all areas of systems including databases, distributed systems, environments, networks, operating systems, programming languages, software engineering, mobile computation and Web-related technologies. Candidates are sought who will meet the teaching and research needs of the department. They must have completed all the requirements for the doctoral degree by no later than September 1, 2000. The initial appointment will be for three years and is renewable.

Successful applicants will find at Brown a stimulating environment conducive to professional growth. Brown has a strong department with a variety of interesting research projects in analysis of algorithms, artificial intelligence, combinatorial optimization, computational complexity, computational geometry, computer graphics, concurrent data structures and architectures, database systems, graph drawing, operating systems, parallel computation, programming environments, data mining, programming languages, robotics, and software engineering.

Applicants should send a resume in hard copy and have at least three referees send letters of recommendation to:

Prof. Steven P. Reiss
Dept. of Computer Science
Brown University, Box 1910
Providence, RI 02912

Inquiries may be addressed to faculty_search@cs.brown.edu. All application materials must be received by January 31, 2000 for full consideration. Brown University is an equal opportunity/affirmative action employer and strongly encourages applications from women, minorities, and protected persons.

Butler University
Department of Computer Science
OUTSTANDING OPPORTUNITY TO PARTICIPATE IN THE DEVELOPMENT OF A NEWLY FORMED DEPARTMENT.

The Department of Computer Science at Butler University invites applications for two faculty positions at any rank from individuals interested in the establishment of an innovative undergraduate Software Engineering curriculum founded on mathematics and problem solving. Applicants should have a Ph.D. in Computer Science or a related discipline and background in an applied field (i.e. software engineering, operating systems, networks, computer architecture, etc.). A strong commitment to teaching and distinction in scholarship are expected and encouraged. Salary will be commensurate with background and experience.

Applicants should send a detailed resume to Professor Peter B. Henderson, Head, Department of Computer Science, Butler University, 4600 Sunset Ave, Indianapolis, IN 46208-3485 and arrange to have at least three letters of reference sent to the same address. Screening will begin immediately, and continue until the positions are filled.

Butler University, with an enrollment of 3350 undergraduate students, is located in a residential area of Indianapolis, Indiana, and offers an array of professional and pre-professional programs within the context of a strong commitment to the traditional arts and sciences and to the

Professional Opportunities

values of liberal education. It enjoys a national reputation for excellence and quality, and has been ranked among the top institutions in its Carnegie category.

Letters and requests for information may also be sent to recruitcs@butler.edu. In addition, please e-mail to the same address a URL pointing to your online resume and publications.

Applications from women and minorities are particularly sought. Butler University is an affirmative action/equal opportunity educator and employer.

California Institute of Technology
Computer Science Department

Caltech invites applicants for tenure-track or tenured faculty positions in Computer Science with possible joint appointments in Electrical Engineering and other disciplines. Faculty searches have been approved for positions in the broad area of Computer Science, including, but not restricted to:
● Computer Networks
● Information Systems: Multimedia Databases and Internet Data Systems
● Fundamentals of Computer Science: Algorithms, Complexity, and Logic

The principal requirements include demonstrated excellence in innovative research and the potential for high quality teaching and mentoring. Completion of a Ph.D. in Computer Science or in a related field is required. The initial appointment term for tenure-track positions is four years.

Interested persons should send a one-page summary of their future research and teaching plans, a resume, names of at least three references, a list of publications, and a URL of a personal webpage that includes pre/reprints of publications. Applications should be mailed to:
  CS Search
  Caltech, MC 256-80
  Pasadena, CA 91125

In addition, applicants are requested to fill out an online summary of their application at http://www.cs.caltech.edu/search.

Questions about the application process may be directed to: search@cs.caltech.edu.

Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

Carnegie Mellon University
Department of Electrical and Computer Engineering

The Department of Electrical and Computer Engineering (www.ece.cmu.edu) at Carnegie Mellon has several faculty (both research and tenure track) openings in the areas of Computer Engineering and Computing Systems. The College is ranked among the top ten in the country and the Computer Engineering program is ranked among the top five. The faculty has strong ties with many multidisciplinary centers and Institutes such as Institute for Complex Engineered Systems (graduated NSF ERC), Software Engineering Institute, Human Computer Interface Institute, The Robotics Institute, Parallel Data Laboratory, and the Information Networking Institute. The department is home to several multidisciplinary centers and laboratories such as the Data Storage Systems Center (NSF ERC), Center for Electronic Design Automation, Center for Highly Integrated Processing and Storage Systems, Micro Electro-Mechanical Systems Laboratory, Distributed Robotics Laboratory, Networking Laboratory, and Laboratory for Computer Systems.

A moderate teaching load allows time for quality research and close involvement with students and other faculty. We expect candidates for a tenure track position to have a strong commitment both to research and to teaching at the undergraduate and graduate levels.

Exceptional candidates in all areas of Computer Engineering and Computing Systems will be given serious consideration, but especially those that broaden the department in emerging areas or that strengthen existing areas. Particular areas of interest include wireless systems, computer security, computer networks, distributed systems, embedded systems, computer architecture, I/O and storage systems, wide area information services, internet-based computing, and technologies for emerging

applications such as, for example, e-commerce, ubiquitous computing and post-PC computing.

The department is primarily seeking individuals at the Assistant Professor rank; however, under unusual circumstances and commensurate with the qualifications of the individuals, appointments may be made at the rank of Associate Professor or Professor. Senior-level applicants should have demonstrated leadership in building a strong research program and have a distinguished teaching and research record. Applicants must have earned a doctorate in a related area by the date of appointment.

Applications must specify the position (research or tenure track) and include a comprehensive resume, a list of three to five professional references, a statement of research and teaching interests (less than 2 pages), and copies of two research papers (journal or conference papers). The applicant is responsible for soliciting the reference letters to be sent directly to the address below. All applications must be sent to
  Pradeep K. Khosla
  Dowd Professor and Head
  Electrical and Computer Engineering
  Hamerschlag Hall
  Carnegie Mellon University
  Pittsburgh, PA 15213-3890

Evaluation of applications will begin immediately and continue throughout the academic year until available positions are filled. Candidates are encouraged to apply early. Carnegie Mellon is building a culturally diverse faculty and encourages applications from female and minority candidates. Carnegie Mellon is an Equal Opportunity Employer.

Clemson University
Department of Computer Science
Department Chair

Clemson University invites applications and nominations for the position of Chair of the Department of Computer Science. Applicants should hold a doctorate in Computer Science or closely related area, have a strong commitment to effective and innovative teaching and have a strong research record. A background in one of the Department's research focus areas (algorithms, graphics, and software engineering) is considered a plus. Applicants should be at a level of experience that would support an appointment as a tenured full professor. The position is available beginning July 2000.

The Department currently has twenty-one faculty positions, more than 500 undergraduate majors and more than 125 graduate students, and offers BA, BS (CSAB-accredited), MS and Ph.D. degrees. Descriptions of faculty research projects and additional information about the Department are available at: http://www.cs.clemson.edu.

Clemson University, located in the town of Clemson, SC, is the land-grant university of South Carolina and has an enrollment of more than 17,000. Clemson is a small college town located on Lake Hartwell in the foothills of the Blue Ridge Mountains.

Applicants should send a curriculum vitae and names of three references to Professor Stephen T. Hedetniemi, Department of Computer Science, Chair Search Committee, Clemson University, Clemson, SC 29634-0974. Screening will begin January 1, 2000 and will continue until the position is filled. Qualified women and minority candidates are especially encouraged to apply. Clemson University is an Equal Opportunity/Affirmative Action Employer.

Colgate University
Department of Computer Science

Colgate University invites applications for a one-year visiting position at the rank of Assistant Professor starting in Fall 2000. A Ph.D. degree or equivalent with strong interest in both teaching and research are expected. Applicants are sought in all areas of computer science. Successful applicants will teach in their area of expertise, help staff other department courses, and be encouraged to participate in all-university programs.

Colgate University is a highly competitive liberal arts college situated in upstate New York. The university is committed to

promoting excellence in both teaching and research.

Review of applications will begin February 1 and continue until the position is filled. Resumes and three letters of recommendation should be sent to:
  Chair, Faculty Search Committee
  Department of Computer Science
  Colgate University
  13 Oak Drive
  Hamilton, NY 13346

Colgate is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply.

College of William and Mary
Department of Computer Science
Senior Faculty Position

Are you interested in a tenure-track faculty position that offers an exciting opportunity to influence and contribute to the continuing growth of the Department of Computer Science at one of the nation's oldest and most prestigious universities? We are seeking candidates at either the associate or full professor level with a documented history of outstanding research and teaching, coupled with the desire and ability to play an active leadership role in defining the characteristics of a growing and rapidly evolving department.

Applicants must hold a Ph.D. in Computer Science or in a closely related scientific field. The department currently consists of fourteen faculty members who support BS, MS and Ph.D. programs graduating approximately 40 BS students annually and enrolling approximately 40 MS and 35 Ph.D. students.

More information about the department and the College can be obtained by connecting to http://www.cs.wm.edu. The department maintains a contemporary computing environment for both teaching and research and is currently supported by a competitive NSF Major Research Instrumentation grant for several high performance computing research projects. Opportunities exist for joint research activity within the department, with members of the Computational Science Cluster, and with scientists and engineers at the nearby NASA Langley Research Center, ICASE, and the DoE's Thomas Jefferson National Accelerator Facility.

A resume and any supporting documents should be sent to:
  Faculty Search Committee
  Department of Computer Science
  College of William & Mary
  P.O. Box 8795
  Williamsburg, VA 23187-8795

Questions can be e-mailed to search@cs.wm.edu. Review will begin on February 1, 2000 and continue until the position is filled. The College is an EEO/AA employer.

Columbia University
Department Of Computer Science

The Department of Computer Science anticipates several tenure-track openings this year at both the junior and senior levels, based in part on a major endowment from the Fu Foundation. We invite applications from exceptional candidates at all ranks and in all areas, but especially in information systems (e.g., information retrieval, database systems, and text/data mining), computer engineering (e.g., computer architecture, computer system design, and VLSI CAD), human-computer interaction, software and graphics systems.

Our department of twenty tenure-track faculty and four lecturers emphasizes excellence in research and teaching and attracts excellent Ph.D. students; virtually all of whom are fully supported by research grants. Departmental facilities include Sun and SGI servers, numerous workstations, PCs, plus state-of-the-art experimental systems. The department is in the fourth year of an NSF CISE research infrastructure grant and this year received a major grant from Microsoft Research for a Windows NT teaching lab. We have close ties to the nearby research laboratories of AT&T, Bell Atlantic, Telecordia Technologies, IBM, Lucent, Matsushita, NEC, Siemens, and other leading industrial companies, including the start-up companies of Manhattan's Silicon Alley and the financial companies of Wall Street.

Columbia University is one of the leading research universities in the United

States, and New York City is one of the cultural, financial, and communications capitals of the world. Columbia's enclosed campus of tree-lined walks is located in Morningside Heights on the Upper West Side. University subsidized housing and parking are available.

Candidates for tenure-track Assistant Professor should exhibit exceptional research promise, while those seeking a more senior position should have an outstanding record of research achievement. Interest and ability in teaching undergraduates and graduates is necessary. Applicants should submit a summary of research interests, curriculum vitae, e-mail address, and the names and e-mail addresses of at least three references by filing an online application using the form at http://www.cs.columbia.edu/recruit. A confirmation of receipt will be sent by e-mail.

Columbia University is an Equal Opportunity/Affirmative Action Employer. We encourage applications from women and minorities.

Computists International
Computists' Weekly

Weekly digests of AI-related M.S./Ph.D. research and teaching jobs, grant opportunities, industry news, research software, free online resources, career tips, philosophy, humor, etc. Browse archives at http://www.computists.com.

Cornell University
Department of Computer Science
Multiple Positions
Tenure-track Positions, all levels, REF: AP#1

Applications are invited for tenure-track positions. These positions are at the Assistant, Associate, or Full Professor level depending on experience. Applicants should have a Ph.D. in Computer Science or in a closely related field. The department requires demonstrated research accomplishment at the highest level as well as outstanding teaching ability and leadership qualities.

The Department of Computer Science at Cornell University encompasses a wide range of research areas, including artificial intelligence, concurrency and distributed computing, databases, algorithms, information organization and retrieval, multimedia systems, applied logic and semantics, numerical analysis and scientific computing, theory of computation, programming languages and methodology, computer vision, computational biology, graphics, theory, networks, operating systems, and natural language processing.

We are especially interested in networks, databases, digital libraries, graphics, systems, and computational biology. Applicants in all areas of computer science will be considered.
Non-Tenure Track Positions, REF: NT#5

We are seeking applicants for non-tenure track professorial positions at all levels as well as Lecturers and Instructors. The primary focus of these positions would be research or teaching. Applicants should have a Ph.D. in Computer Science or closely related field, a research program including demonstrated research accomplishments and a commitment to excellence in teaching computer science or closely related field.
Research, REF: RES#3

Also available: research positions in scientific computing and software systems.

Further information about the department is available on the World Wide Web at URL: http://www.cs.cornell.edu/.

Applicants should submit a curriculum vitae and the names of at least three references to: Chair, Faculty Recruiting Committee, Department of Computer Science, 4130 Upson Hall, Cornell University, Ithaca, NY 14853-7501. Please include reference number with application.

Cornell University is an equal opportunity employer and welcomes applications from women and ethnic minorities.

Dartmouth College
Department of Computer Science
Robotics Laboratory

Postdoctoral Research Associate in Computer Science to conduct focused research on reconfigurable robotics. This is

Professional Opportunities

a two-year appointment which may be extended depending on funding. Research is concerned with designing and building distributed systems of reconfiguring robots and supporting algorithms, working with a team of computer scientists and engineers to advance the state of the art in developing reconfigurable massively-parallel robot systems. The work has a strong theoretical component; it will also require building hardware, C++ system building, and experimentation. A background in geometric algorithms and robotics is a plus. Responsibilities include coordinating with government agencies and working with graduate students and programmers. Applicants must hold a Ph.D. in Computer Science or a related discipline, or show evidence that the Ph.D. will be completed before the start of the position. Please send a resume and have at least two referees send letters of recommendation to Prof. Daniela Rus, Dept. of Computer Science, Dartmouth College, 6211 Sudikoff Laboratory, Hanover, NH 03755-3510, rus@cs.dartmouth.edu, http://www.cs.dartmouth.edu/~rus/. Electronic submissions are encouraged. Dartmouth College is an Equal Opportunity Affirmative Action employer.

Eastern Connecticut State University
Mathematics and Computer Science Department
FACULTY POSITIONS/FALL 2000
Eastern Connecticut State University is characterized as an innovative undergraduate liberal arts and science program, with dynamic programs of professional preparation, and a commitment to experiential learning.
Eastern faculty are expected to be outstanding teachers, to possess sensitivity to a diverse population, and to demonstrate a commitment to creative activity and scholarship, professional development, and professional service. The University serves approximately 5,000 full- and part-time students in a rural environment east of Hartford and midway between New York City and Boston.
All faculty positions listed below are being searched for as tenure-track placement at the Assistant Professor rank unless otherwise indicated, with competitive salary and excellent fringe benefits. Normal faculty workload is twelve hours each semester (day and evening classes) along with involvement in research and creative activity and service. All applicants should submit hard copies of vitae, three letters of recommendation, and a graduate transcript to:
Eastern Connecticut State University Mathematics and Computer Science Department
Charles Webb Hall - Room #323
83 Windham Street
Willimantic, CT 06226-2295
POSITION: Computer Science (Two Positions)
QUALIFICATIONS: Ph.D. or ABD to be completed by Fall 2000 in Computer Science or a closely related field. Rank based upon qualifications.
POSITION DESCRIPTION: The applicant is expected to be able to teach courses, which range from introductory to upper level undergraduate computer science courses. The teaching load is the equivalent to twelve credit hours per semester. Successful candidates should be committed to excellence in teaching, research, and professional growth.
RESPOND TO: Dr. John F. Sharlow, Search Chair
Review of applications will begin immediately and will continue until the positions are filled. Further information about the university and department is accessible from the University webpage at www.ecsu.ctstateu.edu.
ECSU is an AA/EEO Employer. Women, members of protected classes, and people with disabilities are encouraged to apply.

George Mason University
Department of Computer Science
Ideally located in the world's largest Internet Technology and Services zone just seventeen miles west of the nation's capital, the Computer Science Department at George Mason University invites you to apply for a faculty position as Assistant, Associate, Full, or Visiting Professor.

We welcome applicants in all areas of computer science. We are especially interested in applicants with expertise in distributed and parallel systems, programming languages and environments, networking and Internet technologies, multimedia systems, software architecture, agent technology, and artificial intelligence. You must hold a Ph.D. in Computer Science or a closely related discipline. You will be expected to develop an excellently funded research program. Our salaries and startup packages are highly competitive.
With twenty-four faculty, we offer BS, MS, and Ph.D. degrees in Computer Science. Student demand for our programs is strong and we have strong support from the university. Our research interests include all the areas mentioned above as well as computer architecture, performance evaluation, software engineering, computer graphics and visualization, vision, and robotics. We have recently been awarded an NSF Major Research Infrastructure grant. We have numerous contacts and relationships with government and industry. Our website is http://www.cs.gmu.edu.
Northern Virginia is a great place to live. The high-tech information technology industry is growing by leaps and bounds. There are great opportunities to work with startups and with established groups in industry and government. The regional school systems are among the best in the nation. There are many ethnic communities and frequent world class cultural events.
To apply: Send a letter of application including a statement of professional goals, complete resume, samples of representative publications, and the names of four references to:
Chair, Recruitment Committee
Department of Computer Science,
4A5
George Mason University
Fairfax, VA 22030-4444
Inquires: recruit@cs.gmu.edu
The search process will continue until all open positions are filled. AA/EOE.

Georgia Southern University
Department of Mathematics and Computer Science
Tenure Track Assistant or Associate Professors, Computer Science
Multiple positions (up to 3) in Computer Science as part of the University System of Georgia's Project Yamacraw. Georgia Southern University is one of five USG institutions chosen to participate in this bold new initiative in research, education, and economic development to secure Georgia's leadership in microchip design and high-bandwidth communications — key components in the new global economy. Key areas of the Yamacraw Project are: The Yamacraw High-Bandwidth Communications Cluster, The Yamacraw Education Cluster, and the Yamacraw Design Center. The Yamacraw Education Cluster, under the leadership of the Georgia Board of Regents, will adapt curricula for at least eight institutions in the state to graduate a sufficient number of highly trained electrical engineers and computer scientists to fill new jobs. It will also augment research into high-bandwidth communications. Specific foci include modeling and simulation of opto-electronic devices and systems; modeling and simulation of mixed-signal Ics and boards; methodology for embedded software development; development of a middle layer for embedded software; and development of an auto-encoding environment for embedded software. Georgia Southern University also participates in a collaborative academic program with Georgia Tech, the Georgia Tech Regional Engineering Program (GTREP), which leads to a BS degree in Computer Engineering and is directly tied to the Yamacraw project.
Ph.D. in computer science or computer engineering is required by the starting date of the position. Positions are available beginning immediately, 4 January 2000, or 1 August 2000. Salary and rank are dependent upon qualifications. Applicants must be competent in spoken and written English. A demonstrated potential for scholarly activity and excellence in teaching are required. Preference will be given to applicants with training or experience in at least one of the following

areas: digital signal and image processing, pattern recognition, computer graphics, data communication and networking, modeling and simulation, embedded software development, Unix network programming, artificial intelligence, and design optimization.
Duties will include teaching undergraduate and graduate courses in computer science and supervision of research projects for MS degree candidates. Our computer science program is fully accredited by CSAB. Research activity in Project Yamacraw related areas will be expected. Faculty hired under this initiative will also be designated as USG system-wide Yamacraw faculty. For more information on our department, see our web pages at www.cs.gasou.edu. For more information on Project Yamacraw, see its web pages at www.gcatt.gatech.edu/yamacraw/.
Georgia Southern University, a unit of the University System of Georgia, is the largest and leading center of higher education in the southern half of Georgia and is third in student enrollment among public universities, serving approximately 14,400 students. As a comprehensive, residential university, its mission is strongly centered on the education of undergraduate students. The University offers approximately 130 degree programs at the baccalaureate, masters, and doctoral levels through six colleges. Founded in 1906, Georgia Southern became a regional university in 1990. The 634-acre campus is located in Statesboro, a community of approximately 30,000 residents, 50 miles northwest of historic Savannah and 200 miles southeast of Atlanta.
A completed application consists of a letter of application, curriculum vitae, an unofficial transcript of all graduate work, a brief description of planned research activities, and three letters of reference. Send application materials to: Dr. Donald W. Fausett, Yamacraw Search Chair, Department of Mathematics and Computer Science, PO Box 8093, Georgia Southern University, Statesboro, GA 30460-8093, or e-mail inquiries to dfausett@GaSoU.edu.

The FAX number is 921-681-0654. Screening of applications will begin immediately, and will continue until the positions are filled.
Georgia Southern is an Equal Opportunity, Affirmative Action Institution. Georgia is an Open Records state. Persons who need reasonable accommodations under the Americans with Disabilities Act in order to participate in the search process should notify the search chair.

Georgia State University
Department of Computer Science
The Department of Computer Science of Georgia State University invites applications for anticipated tenure-track positions for Assistant or Associate Professors starting Fall 2000, semester in the fields of computer architecture, graphics, networks, software engineering, and systems programming.
Specialties of particular interest include: optical networks, high speed access devices, content processing, internet multimedia communications, modeling and simulation of opto-electronic devices and systems, modeling and simulation of mixed-signal ICs and boards, methodology for embedded software development, development of a middle layer for embedded software, development of an auto-coding environment for embedded software, and the design and fabrication of prototype products. The anticipated positions are part of a strategic initiative, Project Yamacraw, by the State of Georgia to make the state the global leader in the electronic design of high bandwidth communications.
Earned Ph.D. in Computer Science, or a closely related discipline, and a commitment to excellence in teaching and research in computer science are required with preference for extramural funding. Departmental computing facilities for research and instruction include a departmental network of PCs, UNIX workstations, and a 16-processor Origin 2000 supercomputer and five laboratories, one with ATM switches for network research and another for hypermedia and

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visualization research. Two full-time Systems Programmers support the departmental computing facilities.

Applicants should send a letter of application, curriculum vitae without birthdate, but with citizenship status, and three letters of reference and transcripts of all graduate and undergraduate work to: Chair, Department of Computer Science, Georgia State University, University Plaza, Atlanta, Ga. 30303-3083 (or e-mail mfraser@cs.gsu.edu). Applications will be accepted until positions are filled.

Georgia State University is an EEO/AA institution.

Globe Institute of Technology
Computer Science Position

Globe Institute of Technology in NYC invites applications for a position in the College's Computer Programming Department beginning January 2000. Duties include teaching object-oriented programming (C++, Visual Basic and Java),engaging in scholarly activity and providing service to the Department and College. Salary and benefits are competitive. A Ph.D. in a computer related field is required as are five years of college teaching experience, research experience, a background in curriculum development and outstanding communication skills. Publications are a plus.

All applications should include a cover letter, curriculum vitae and the names and addresses of three references. Address applications to Academic Dean, Globe Institute of Technology, 291 Broadway - 2d Floor, New York, NY 10007. Fax: 212-227-5920. Email: irena.shteyn@globeinstitute.org. Applications will be accepted until the position is filled.

For more information about our college, please visit our website at http://www.globeinstitute.org.

Globe Institute of Technology is an Equal Opportunity/Affirmative Action employer, and strongly encourages applications from women and minorities.

Harvey Mudd College
Computer Science
Assistant Professor
(http://www.cs.hmc.edu)

The Computer Science Department of Harvey Mudd College intends to appoint a tenure-track Assistant Professor of Computer Science, to start 1 July 2000 (classes start about 1 September). Applicants for one-year visiting appointments or partial appointments (such as sabbatical visitors) will also be considered. While applicants are invited from all areas of computer science, those teaching and conducting research in one or more of the following are preferred: software architecture, distributed systems, artificial intelligence, languages, and visualization.

The successful candidate will have completed the Ph.D. in Computer Science by the time of appointment, and is expected to devote attention to excellence in teaching, as well as to the development of a research program involving undergraduates.

Harvey Mudd College is a highly selective undergraduate college (650 students) emphasizing science, mathematics, and engineering. It is a member of the Claremont Consortium in Southern California, which collectively provides the equivalent of a small university environment in a pleasant residential community.

The Computer Science Department offers a wide array of courses in both foundations and advanced topics in computer science. Qualified students engage in research and publication with faculty members. The department's Computer Science Clinic provides a strong link to the industrial community in the form of yearlong student projects. The normal teaching load is two courses per semester, plus supervision of Clinic and research projects.

Applicants should respond with a curriculum vitae, a statement regarding teaching and research philosophy or plan, and supporting materials such as reprints. Concurrently, please ask three references to write to us directly. Email applications and reference letters (plain text preferred) are accepted: keller@cs.hmc.edu.

Professor Robert M. Keller, Chair
Computer Science Department

Harvey Mudd College
301 E. Twelfth Street
Claremont, CA 91711

Harvey Mudd College is an Equal Opportunity Employer. Applications from members of groups typically underrepresented in college computer science faculties are strongly encouraged.

Iowa State University
Department of Computer Science
http://www.cs.iastate.edu

We seek outstanding applicants for several tenure-track faculty positions at all levels. Preference will be given to candidates in parallel and distributed computing, networks, bioinformatics, database and knowledgebase systems, software engineering, intelligent software agents, machine learning, and programming languages. The position requires a Ph.D. in Computer Science or a related field, and strong evidence of research and teaching potential.

The department currently has thirteen full time tenure-track faculty and offers BS, MS, and Ph.D. degrees in Computer Science. It also participates in interdepartmental graduate programs in Bioinformatics and Computational Biology and Neuroscience. It has strong research and education programs in algorithms, artificial intelligence, bioinformatics and computational biology, complexity theory and complex systems, databases, networks, parallel and distributed computing, programming languages, robotics, software engineering, and theory of computing. A strong graduate program, a well-funded research program, opportunities provided by the Iowa Computational Biology Laboratory, DoE Ames Laboratory, Virtual Reality Applications Center, and moderate teaching load (three courses per year) provide an excellent work environment that nurtures leading edge research and innovative education.

Iowa State University is a major land-grant university located in Ames, Iowa. Ames is a pleasant small yet cosmopolitan city with a population of 50,000 (25,000 students), a vibrant cultural scene, and a secondary school system that ranks as one of the best in United States. It is within convenient driving distance from the cultural and entertainment opportunities offered by Kansas City, Minneapolis, and Chicago.

Applicants should send a curriculum vitae, including names of three references, to: Chair of Search Committee, Department of Computer Science, Iowa State University, Ames, IA 50011. Fax: 515-294-0258, Tel. 515-294-4377, E-mail: faculty-search@cs.iastate.edu.

The deadline for applications is February 15, 2000 or until the position is filled. ISU is an Equal Opportunity/Affirmative Action employer. Women and minorities are particularly encouraged to apply.

James Madison University
Computer Science Department
Faculty Positions

The Computer Science Department at James Madison University is seeking applicants for tenure-track faculty positions at the assistant or associate professor level starting Fall 2000. Preference will be given to applicants specializing in information security, software engineering, programming languages and systems, networking and telecommunications, or multimedia systems, particularly those with industrial, business, and/or governmental experience. A Ph.D. in Computer Science or an appropriately related field is preferred.

Information about the department and university can be found at www.jmu.edu and www.cs.jmu.edu.

Send a letter of application with a resume and the names, addresses, and telephone numbers of three references to: CS Faculty Search Committee, College of Integrated Science and Technology, MSC 4103, James Madison University, Harrisonburg, VA 22807. Review of applications will begin January 10, 2000, and will continue until suitable applicants are found.

James Madison University is an Equal Opportunity/Affirmative Action/Equal Access employer and encourages applications from minorities, women, and persons with disabilities.

Johns Hopkins University
Department of Computer Science

The Department of Computer Science at The Johns Hopkins University is seeking applications for tenure-track faculty positions at all ranks. We have particular interest in candidates with research and teaching interests overlapping existing strengths in the department. These strengths include natural language processing, algorithms, networking and distributed systems, information security, computational biology, programming languages, human-computer interaction, vision, and graphics. Also of significant interest are candidates with interests overlapping research centers currently affiliated with computer science at Hopkins: the Center for Language and Speech Processing, the Center for Networking and Distributed Systems, the Center for Imaging Science, the Center for Computer-Integrated Surgical Systems and Technology, and the Center for Computational Medicine & Biology.

All applicants must have a Ph.D. in Computer Science or a related field and are expected to show evidence of an ability and willingness to develop academic research and teaching programs of the highest quality. Commitment to quality teaching at the undergraduate and graduate levels will be required of all candidates considered.

Johns Hopkins is a private university well known for its commitment to academic excellence. Accordingly, Hopkins attracts extremely talented undergraduates and graduate students. The Department of Computer Science stands among the first rank of departments at Hopkins in terms of funded research activities and student involvement in educational programs. The administration at Johns Hopkins recognizes the major role computer science and information technology must play in the future of the University. The anticipated expansion in faculty and infrastructure in the Department of Computer Science is directed at further increasing national and international recognition of our research and teaching programs. See the department webpage at http://www.cs.jhu.edu for additional information about the department, including links to research laboratories and centers.

Applicants should have (ASCII or PostScript copies of) a comprehensive curriculum vitae, a statement of future plans for research and teaching, and at least three letters of reference sent via e-mail to search@cs.jhu.edu. To ensure full consideration, complete electronic applications should be received by February 1, 2000. Applications may also be sent to: Faculty Search Committee, Department of Computer Science, Room 224 New Engineering Building, Johns Hopkins University, Baltimore, MD 21218-2694. Fax: 410-516-6134.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action employer.

Kansas State University
Department of Computing and Information Sciences
Faculty Position

The Department of Computing and Information Sciences at Kansas State University invites applications for a tenure-track position beginning in Fall 2000. Applicants should have a Ph.D. degree in computer science by the starting date of the appointment; salary will be commensurate with qualifications. Applicants must be committed to both teaching and research. Primary consideration will be given to computer scientists who work in data/knowledge base systems, programming languages, distributed and parallel systems and software engineering. Applications must include descriptions of teaching and research interests along with copies of representative publications. Non-U.S. citizens must include visa status.

The department has a faculty of seventeen and offers BS, MS, MSE, and Ph.D. degrees. Computing facilities center around a network of UNIX- and Solaris-based single- and multi-processor Sun workstations, X-terminals, and PCs. Details can be found at the URL http://www.cis.ksu.edu/

Please send applications to Dr. Virgil Wallentine, Head, Department of Comput-

ing and Information Sciences, 234 Nichols Hall, Kansas State University, Manhattan, KS 66506 (email: virg@cis.ksu.edu). Review of applications will commence January 15 and will continue until the positions are filled.

Kansas State University is an Affirmative Action Equal Opportunity Employer.

La Salle University
Department of Mathematics and Computer Science

La Salle University's Department of Mathematics and Computer Science invites applications for a tenure-track faculty position in Computer Science at the rank of Assistant Professor beginning Fall, 2000. La Salle is a Roman Catholic institution of higher Education in the tradition of the De La Salle Christian Brothers. The university strives to offer, through effective teaching, quality education founded on the idea that intellectual and spiritual development go hand in hand mutually complementing and fulfilling one another. Candidates should have a Ph.D. in Computer Science although candidates who are ABD will be considered. The successful candidate will be expected to teach and advise both undergraduate and graduate students in Computer Science. The department is interested in all areas of Computer Science and Information Technology with a special interest in networks, client/server environments, distributed computing, multimedia system design, software engineering, and project management.

La Salle University offers the B.A. and B.S. degrees in Computer Science, the B.S. degree in Information Technology, the B.A. degree in Digital Arts and Multimedia Design, and the M.S. degree in Computer Information Science. The typical teaching load is twelve undergraduate hours per semester. Instructors who teach a graduate course may reduce this teaching load to nine hours.

Please submit a curriculum vita, three letters of recommendation (with at least one addressing the applicant's teaching experience), and a letter indicating teaching and research interests to: Linda J. Elliott, Chair, Department of Mathematics and Computer Science, La Salle University, 1900 West Olney Avenue, Philadelphia, PA 19141-1199 (elliott@lasalle.edu). Review of applications will begin immediately and continue until the position is filled.

La Salle University is an Equal Opportunity, Affirmative Action employer.

Lehigh University
Department of Electrical Engineering and Computer Science

The Electrical Engineering and Computer Science Department of Lehigh University is seeking applicants at all levels for tenure track positions in Computer Science and Computer Engineering. Exceptional applicants with a doctorate (by September of 2000) in any area of Computer Science or Computer Engineering are sought, with preferences in networking, compilers, languages, embedded systems, computer architecture, and software systems. Applicants must have a proven record of innovative research and be committed to teaching.

The EECS department has high quality Computer Science and Computer Engineering divisions with approximately 50 MS and Ph.D. students and $471,000 per faculty member in external research funding. Approximately 30% of the Computer Science and Computer Engineering faculty are NSF PYI or CAREER grant winners. See www.eecs.lehigh.edu for more information. Lehigh University is committed to recruiting and retaining women and minorities.

Lehigh University is in a beautiful sylvan setting in Bethlehem, Pennsylvania, which is 80 miles west of New York City and 60 miles north of Philadelphia, and which offers an excellent mix of urban and rural lifestyles. Lehigh, with 4500 undergraduates and 2000 graduate students, is small enough to be intimate but large enough to have the advantages of a big institution. The EECS department is one of six departments in the newly endowed P. C. Rossin College of Engineering. Lehigh's longstanding reputation for excellence in engineering enhances opportunities for professional development.

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Applications should include a vita, names of at least three references (with both postal and email addresses) and teaching and research statements. Send applications to

Professor Terrance Boult,
Faculty Search Committee,
Dept. of Ele. Eng. and Comp. Sci.,
Lehigh University
Bethlehem, PA 18015
compsearch@eecs.lehigh.edu
The review of applications will begin 1 February 2000.

Louisiana State University and Southern University
Anticipated Assistant/Associate Professor

(Two TENURE-TRACK FACULTY POSITIONS) Louisiana State University (LSU) and Southern University (SU) in partnership with the National Science Foundation and the Louisiana Board of Regents have established a Joint Faculty Appointment Program (JFAP) in the area of high performance networking. LSU is the only Research I University in Louisiana, while SU is a major Historically Black College and University (HBCU). These universities are only eight miles apart in Baton Rouge, the capital city of Louisiana, with many ongoing joint curricula and collaborative research projects. The partnership wishes to increase the diversity of engineering education in Louisiana. Through this JFAP, two tenure-track faculty positions are available at the rank of Assistant or Associate Professor, designated as a LaSER assistant/associate professor. The appointment will begin Fall Semester of 2000. The successful candidates will have a 50% faculty appointment in each university, and fringe benefits will be appropriately arranged. Special provisions for these positions include; (i) a $120,000 start-up fund for two years; (a) establishing a research lab; (b) up to two summer months salary per year for two years; (c) graduate and undergraduate student support; (d) travel, and (e) materials and supplies. (ii) Full usage of teaching and research resources at both universities as well as full privileges of a regular faculty member at both universities. An earned Ph.D. degree in Computer Science, Computer Engineering, or a closely related field with expertise in Telecommunications and Networking, Distributed Computing and related areas are preferred. Candidates possessing experience in High Performance Computing and Communication, teaching and/or industrial experience, and strong demonstrated research funding and publications record are especially encouraged to apply. The successful candidates are expected to teach at both undergraduate and graduate levels, and develop externally funded research programs. Salary and rank will be commensurate with qualifications and experience.

The Department of Computer Science at LSU offers the BS (Computer Science), MS (Systems Science), and Ph.D. degrees with approximately 250, 60, and 45 students, respectively. They receive federal grants of about $1 million/year from AFOSR, ARO, DOE, NASA, DARPA, NSF, and other agencies. The Southern University presently offers a BS degree in Electrical Engineering and is expected to initiate a Masters Program in Engineering during the beginning Fall 2000 and Ph.D. in Material Science Engineering in Fall 2001.

Please submit: (a) a cover letter including vision statement addressing research and teaching goals, how to achieve these goals while being affiliated with the two institutions, and a statement of career objectives, (b) curriculum vitae, (c) a statement of work authorization status, and (d) names, addresses, and phone numbers of five references. Applications received by June 1, 2000 will be fully considered, and screening will continue until the positions are filled. Please provide these materials to:

Dr. S. S. Iyengar, Chair of the Joint Faculty Appointment Program
Department of Computer Science
Ref. Log# 0436
Louisiana State University
Baton Rouge, Louisiana 70803
LSU IS AN EQUAL OPPORTUNITY/ EQUAL ACCESS EMPLOYER

Michigan Technological University
Department of Computer Science
Tenure Track Faculty Position

Applicants in all areas of computer science and computational science and engineering (CS&E) are invited to apply for one or more tenure track faculty positions beginning September 2000, pending funding. Applicants for assistant professor positions are expected to demonstrate potential for excellence in teaching and research. Of particular interest are candidates with research in areas of software engineering.

Michigan Technological University, designated as one of four Michigan research universities, has over 6,200 students and 400 faculty. The Department has 13 fulltime faculty members and well established undergraduate and M.S. programs with excellent students. The Department also has a central role in the interdisciplinary CS&E Ph.D. program. In addition to supporting work in traditional computer science areas, this program fosters research and teaching in the application of computer science to problems in engineering and the sciences.

Facilities in the Department include a network of Sun Sparc, Digital Alpha and SGI servers and workstations, as well as Linux workstations. Research equipment includes a 128node Beowulf cluster, a 12node Sun E4500, and Internet 2 access.

Michigan Technological University is located in Houghton in Michigan's scenic Upper Peninsula. Surrounded by Lake Superior and nearby forests, the community offers year-round recreational opportunities. This environment combined with a competitive compensation package and a low cost of living results in an excellent quality of life.

Review of applications will continue until the position is filled. Women and minorities are particularly encouraged to apply. Applicants should send a resume, mail address, and a list of at least three references to:

Linda Ott, Chair
Department of Computer Science
Michigan Technological
University Houghton, MI 49931
linda@mtu.edu
(906) 4872209
For more information see our web page http://cs.mtu.edu/.
Michigan Technological University is an equal opportunity educational institution/ equal opportunity employer.

Middle Tennessee State University
Computer Science Department

One or more positions at Assistant/ Associate rank. A Ph.D. in Computer Science required. Evidence of excellence in teaching ability and demonstrable potential for research in computer science are required.

Department currently offers an MS and a CSAB/CSAC accredited BS in Computer Science. Contact Richard C. Detmer, Chairperson, Box 48, Middle Tennessee State University, Murfreesboro, TN 37130. Full position announcement available at www.mtsu.edu/~csdept.

Monmouth College
Mathematics and Computer Science Department

Monmouth College, a nationally ranked liberal arts college, invites applications for a tenure-track position in the Mathematics and Computer Science Department to start either January or August of 2000. Candidates who hold or expect a Ph.D. in Computer Science are preferred, but applications from candidates with doctorates in related fields or other outstanding credentials will be considered.

The successful candidate will teach a broad range of courses and help shape the computer science curriculum. Strong commitment to undergraduate teaching in a liberal arts setting is essential; interest in participating in the College's General Education program is a plus. Teaching load is 21 to 24 semester hours per year.

Send letter of interest, curriculum vitae, statement of teaching philosophy, evidence of effective teaching, and three letters of reference to:

Michael McNall, Director of Personnel
Monmouth College
Monmouth, Illinois 61462
or apply electronically at compsearch@monm.edu. Formal evaluation of applications will begin immediately and continue until the position is filled. Monmouth College, an equal opportunity employer, is committed to diversity, and encourages applications from women and minority candidates.

New Jersey Institute of Technology
Department of Computer and Information Science

Outstanding candidates are sought in all areas of computer and information science for multiple tenure-track positions at all levels. We are particularly looking for candidates working in areas that will complement or build upon our existing strengths.

NJIT is a public, technological research university serving more than 8,000 students. The school has a rapidly growing research culture and funding record. The university is located in northeastern New Jersey, just a short distance from New York City.

With a total enrollment of over 2,000 (including eighty Ph.D. students), the department offers BS, MS, and Ph.D. degrees in both computer and information science.

Interested candidates should send their curriculum vitae, and also request three letters of reference be sent to:

Chair, Computer and Information Science
Search Committee
New Jersey Institute of Technology
Personnel Box F-CIS
University Heights
Newark, New Jersey 07102-1982
Additionally, please send an e-mail copy to "recruit@cis.njit.edu". See http://www.cis.njit.edu, for more information on the department. Applications will be considered continuously from November 1 through the end of April.

New Mexico Institute of Mining and Technology
Part-time Instructor

New Mexico Institute of Mining and Technology seeks applicants for one or more part-time (one year) Instructors in Computer Science. Position to begin January 2000. Successful applicant will teach Computer Science courses, especially Operating Systems and related courses. Master's Degree required in Computer Science, Engineering or closely related field. Must have teaching experience at the undergraduate level and industrial experience in Computer Science. Must be fluent in written and spoken English. Must have computer skills. Submit resume, three references, transcripts, and letter of application to New Mexico Institute of Mining and Technology, 801 Leroy Pl., Human Resources Wells Hall Box 132A, Socorro, NM 87801. For more information on New Mexico Tech www.nmt.edu. E-mail applications **not** accepted.
AAEOE

New Mexico State University
Department of Computer Science

The New Mexico State University Department of Computer Science invites applications for one or two tenure-track assistant/associate professor position(s) in computer science beginning academic year 2000-2001. Strong commitment to both research and teaching required. Applications from women and members of minority groups invited. Qualifications include a Ph.D. in Computer Science or closely related discipline (in hand by date of hire) and evidence of strength in teaching and research. The Department has 12 tenure-track faculty positions, and offers B.S., M.S., and Ph.D. degrees. The Department collaborates with the Computing Research Laboratory (CRL), an independent research center at NMSU. Departmental facilities include a network of some 60 Sparc workstations, a 14-processor Sun Sparc, a 32-node Beowulf, and several other multiprocessors. The Department recently received $1.5m grant from NSF to upgrade its infrastructure. Arrange for vita, short research description, and at least three reference letters to be sent by postal mail directly to: Faculty Recruiting Committee, Department of Computer Science, NMSU MSC CS, PO Box 30001, Las Cruces, NM 88003-8001. Application review will begin January 31, 2000. NMSU is an EEO/AA employer.

Northwestern University
Computer Science Department

Invites applications for the Lisa Wissner-Slivka and Benjamin Slivka Junior Chair of Computer Science. We seek outstanding junior candidates in all areas of systems, broadly construed, including operating systems, multimedia, databases, programming languages and environments, distributed systems, networking, and graphics and animation. Outstanding candidates from other areas of computer science may also be considered.

Send applications to Search Committee, Northwestern University, Computer Science Department, 1890 Maple Ave., Evanston, IL 60201, by Feb. 1, 2000.

Northwestern University is an Equal Opportunity/Affirmative Action Employer. Hiring is contingent upon eligibility to work in the United States. Applications by women and minorities are especially encouraged.

Northwestern University
Computer Science Department

Invites applications for the Board of Trustees Chair of Computer Science. We seek outstanding candidates in all areas of systems, broadly construed, including operating systems, multimedia, databases, programming languages and environments, distributed systems, networking, and graphics and animation. Candidates should have a proven record of research leadership in computer science.

Send applications to Search Committee, Northwestern University, Computer Science Department, 1890 Maple Ave., Evanston, IL 60201, by Feb. 1, 2000.

Northwestern University is an Equal Opportunity/Affirmative Action Employer. Hiring is contingent upon eligibility to work in the United States. Applications by women and minorities are especially encouraged.

Ohio University Faculty Positions
School of Electrical Engineering and Computer Science

After two highly successful years of faculty recruiting, the School of Electrical Engineering and Computer Science (EECS) of the Fritz J. and Dolores H. Russ College of Engineering and Technology at Ohio University anticipates hiring two additional tenure-track faculty in Computer Science and/or Computer Engineering at the rank of Assistant Professor. Qualified applicants in all areas of Computer Science and Computer Engineering are encouraged to apply, but special considerations will be given to candidates in operating systems/distributed systems, parallel processing, and graphics.

All faculty are expected to participate in graduate and undergraduate teaching and in obtaining and participating in sponsored research. Applicants must have

Professional Opportunities

a Ph.D. or equivalent in Computer Science, Electrical Engineering, or Computer Engineering. Salary considerations will be based on qualifications; the school provides nationally competitive compensation, including initial summer support and equipment funds.

Applications will be accepted until the positions are filled; however, on-campus interviews of candidates will begin in January 2000. Send a vita including a statement of research and teaching objectives and the names of at least three references to Dr. Dennis Irwin, Chair, School of Electrical Engineering and Computer Science, Stocker Center, Ohio University, Athens OH 45701-2979; irwin@homer.ece.ohiou.edu. Ohio University is an equal opportunity and affirmative action employer.

Ohio Wesleyan University
Department of Mathematics and Computer Science

Applications are invited for a tenure-track position in computer science at the Assistant or Associate rank beginning in August 2000. A Ph.D. (completed by the time of appointment) in Computer Science or a closely-related field is required. Responsibilities include teaching a broad range of undergraduate computer science courses, developing a program of scholarly/professional activities in computer science, and working closely with undergraduates both in and out of the classroom. A commitment to high-quality undergraduate education is required. Applicants in any areas of expertise will be seriously considered; some preference may be given to applicants with expertise, interest, and/or experience in the areas of parallel/distributed computing, operating systems, or artificial intelligence.

The Department of Mathematics and Computer Science has a faculty of seven and offers majors in computer science and mathematics. Departmental computing facilities include a laboratory of UNIX workstations, a parallel-computing cluster, a small fleet of robots, and a number of personal computers. University computing facilities include a variety of mainframes as well as a number of Windows-based microcomputer laboratories, one of which is designated for primary use by computer science and mathematics courses. Our department offers an established, successful, growing computer science major.

Ohio Wesleyan University is a selective, undergraduate-only liberal arts and sciences institution of 1,800 students located in Delaware, OH, a community of 21,000 located twenty miles north of Columbus (the state capital, having a metropolitan population of 1.5 million). The university has a continuing tradition of excellence in science education. Science programs and facilities are a focus of the university's current capital campaign, and planning for expanded, renovated science facilities (in which the Department of Mathematics and Computer Science will be housed) is being completed, with construction to begin as fund-raising progresses.

To apply, send cover letter, curriculum vitae, brief statement of teaching and research interests, graduate and undergraduate transcripts (unofficial acceptable), and three letters of recommendation to: Computer Science Search, Department of Mathematics and Computer Science, Ohio Wesleyan University, Delaware, OH 43015.

Applications complete as of January 24, 2000 will be guaranteed full consideration, with later applications reviewed as needed. Further information is available at www.owu.edu/~macsweb. Ohio Wesleyan University is an affirmative action/EEO employer and encourages women and minority applicants.

Oklahoma State University
Computer Science Department

Applications are invited for anticipated full time, tenure-track positions at the Assistant Professor level. The term of initial appointment will begin in Fall, 2000.

The Oklahoma State University (OSU) Computer Science Department is seeking applications from qualified candidates with teaching and research experience in any areas of Computer Science. Preference will be given to candidates with research experience in artificial intelligence, database systems, or programming

languages. The ability to teach highly technical courses in Computer Science is critical. A Doctorate in Computer Science or a closely related area is required.

The OSU Computer Science Department is a growing department that is committed strongly to the goal of excellence in research, teaching and extension. It offers a full range of undergraduate and graduate courses leading to B.S., M.S., Ph.D., and Ed.D. degrees in Computer Science. The department recently expanded its B.S. and M.S. programs to the new OSU campus in Tulsa, OK and also offers courses to students at remote sites using interactive video and the World-Wide Web. There are currently more than 200 undergraduate students and more than 190 graduate students enrolled in the department. The department has a goal of CSAB/CSAC accreditation within the next few years.

Tulsa is one of two metropolitan cities in Oklahoma, located in north-eastern Oklahoma. Tulsa is 65 miles east of Stillwater, where the main campus of OSU is located. The population of Tulsa is about 380,000, and the population of Tulsa County is about 530,000. There are numerous cultural activities in Tulsa, including a performing arts center that regularly hosts touring Broadway shows, and the Tulsa opera, ballet and philharmonic orchestra. Just a few minutes away, one also can enjoy outdoor activities such as fishing, boating, and hiking.

Oklahoma State University encourages applications from qualified women, minorities, and persons with disabilities. Please send curriculum vita and names of three references to Chair, Faculty Search Committee; Computer Science Department; Oklahoma State University; Stillwater, OK 74078-1053. Telephone: (405) 744-5668; FAX: (405) 744-9097.

E-mail:faculty-search@cs.okstate.edu: WWW:http://www.cs.okstate.edu.search. For full consideration applications should be received by January 15, 2000, but applications will be accepted until the position has been filled. Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.

Oregon Graduate Institute of Science and Technology
Department of Computer Science and Engineering

The Department of Computer Science and Engineering has immediate openings for qualified faculty candidates. Currently identified goals include starting new programs in networking, embedded systems, computational science, and computer architecture, and expanding our existing efforts in systems, computational finance, data management, software engineering, and applied formal methods. In addition we are interested in candidates in our other established research areas, which include database systems, distributed computing, functional programming, neural networks, human computer interaction, and spoken language systems. We encourage applicants at all ranks, but will give preference to applicants with prior faculty or postdoctoral research and teaching experience. Exceptional candidates who are anticipating completion of a Ph.D. may also be considered.

OGI is a private graduate school. It conducts internationally acclaimed research and provides outstanding graduate and professional education in science and technology. OGI is located near Portland, Oregon, in the beautiful Pacific Northwest. Portland offers extensive cultural amenities (gourmet coffee, brew pub ale, and fine local Pinot Noir are popular local favorites) as well as spectacular natural wilderness. It is possible to spend summer mornings skiing on Mt. Hood, followed by some of the best windsurfing in the world in the Columbia River Gorge in the afternoon. In short, the quality of life in Portland is extraordinary. OGI offers career faculty appointments but does not subscribe to academic tenure.

More information about our department can be found at http://www.cse.ogi.edu. To find out why the Portland area is a great place to live go to http://www.portland.citysearch.com.

To apply, send a brief description of research interests, the names of at least three references, and a curriculum vitae with a list of publications to:

NORTHEASTERN UNIVERSITY

COLLEGE OF COMPUTER SCIENCE

Boston, Massachusetts

Trustee Professorship in Computer Science

The College of Computer Science of Northeastern University invites applications and nominations for the position of Trustee Professor of Computer Science. This position is one of the first endowed chairs to be recruited in a longer range program to add a total of eight new endowed Trustee Professorships throughout the University.

We seek renowned scholars who have achieved national and international distinction in the field of computer science. It is expected that applicants will possess an established record of scholarship, effective teaching and external research funding. The ability to interact with industrial partners and the potential to provide leadership in research are essential.

The College maintains a strong research program with significant funding from the major federal research agencies and private industry. It has particular strengths in programming languages and software engineering, distributed computing, databases, artificial intelligence, and cryptography. The College's NSF-sponsored 32-node Beowulf-class network for research in distributed systems will begin operation this year in a special laboratory housed in the new Egan Engineering Science Research Center.

The College has a diverse full-time faculty of 21. There are 500 undergraduates, 125 Masters students and 30 Ph.D. students. The College inaugurates this year an innovative B.S. program in Information Science, combining traditional computer science with relevant material from the social sciences in an integrated program that focuses on the interaction between information, computers, and people.

Located on the Avenue of the Arts in Boston's historic Back Bay, the College takes advantage of its location to foster collaborations with other institutions in the greater Boston area.

Please send a resume, statement of research interests, and the names of referees to:

Faculty Hiring Committee, College of Computer Science, 161 Cullinane Hall, Northeastern University, Boston, Massachusetts 02115.

Screening of applications begins on December 15, 1999, and will continue until the position is filled. For further information, send e-mail to hiring@ccs.neu.edu or see the College's home page at http://www.ccs.neu.edu/hiring.

The College also invites applications for one or more tenure-track faculty positions at the Assistant or Associate Professor level beginning in Spring or Fall 2000. Candidates will be considered from all major disciplines of computer science. A Ph.D. in computer science or related field is required. See the College's home page for details and application procedures.

Northeastern University is an Equal Opportunity/Affirmative Action Employer. We strongly encourage applications from women and minorities.

Professional Opportunities

Chair, Recruiting Committee, Department of Computer Science and Engineering, Oregon Graduate Institute, 20000 NW Walker Road, Beaverton, Oregon 97006. E-mail: csedept@cse.ogi.edu.

OGI is an Equal Opportunity/ Affirmative Action employer. We particularly welcome applications from women, minorities, and individuals with disabilities.

Appointment is subject to the availability of funding.

Oregon Institute of Technology
Software Engineering Technology Faculty

Oregon Institute of Technology, a member of the Oregon University System, is initiating a search to hire a full time, faculty member to teach within the Software Engineering Technology degree program.

Primary responsibility includes teaching undergraduate courses in the areas of C/ C++, GUI, Data Structures, Compiler Writing, Database Systems, Operating Systems Development, and Networks. Other duties include participation in curriculum and course development, student recruiting and retention, advising, and acquisition of external funding.

Minimum qualifications include a master's degree, Ph.D. desirable, in Computer Science or related discipline and at least three years of software development experience.

Initial screening of applications will begin on January 15, 2000, and will continue until the position is filled. To apply, send a letter of application, current resume and names, addresses, and phone numbers of three professional references to:
Human Resources - #99-66002
Oregon Institute of Technology
3201 Campus Drive
Klamath Falls, OR 97601-8801
For further information, visit our Web page at www.oit.edu/jobs or phone Don Metzler, Department Chair, at (541) 885-1604.

OIT is an Affirmative Action/Equal Opportunity/ADA employer.

Pacific University
Department of Mathematical Sciences

Applications are invited for a tenure-track position in Computer Science to begin August 2000. Ph.D. preferred. A more complete description of Pacific University and this position can be found at http://www.cs.pacificu.edu/csad.html.

Applications should include a letter of application, curriculum vitae, three letters of reference and unofficial transcripts. Complete applications must be received by post.

Application review will begin December 15.

Direct your application to
Computer Science Search
ATTN: Michael Boardman
Pacific University
2043 College Way
Forest Grove, OR 97116

Polytechnic University
Department of Computer and Information Science

Polytechnic University's Department of Computer and Information Science is continuing a major expansion and has several open positions at all levels for tenured or tenure-track faculty at our Brooklyn and Long Island campuses. We are particularly interested in candidates in computer systems, architecture, networks, databases, and image processing, but will consider strong candidates in other areas. Excellence in research and teaching are required. Candidates should have significant publications and the ability to secure external research funding.

Current active areas of research in the department include computational geometry, image processing, databases, theory, parallel and distributed systems, software engineering, and text mining. Faculty research is supported by numerous NSF grants and by funding from industry and other government agencies.

Polytechnic University (formerly known as Brooklyn Poly) is located on three campuses in the New York City metropolitan area, close to many major companies in the financial, telecommunications, and computer industries. For

more information, see http://cis.poly.edu and http://www.poly.edu.

Qualified applicants should send their curriculum vitae to
Prof. Lisa Hellerstein, Head of CIS Search Committee, c/o Human Resources, Polytechnic University, Six MetroTech Center Brooklyn, NY 11201, or by e-mail to facsrch@morph.poly.edu.

Candidates are strongly encouraged to apply by January 14, 2000 but applications will be considered while positions are still open.

Polytechnic is an Equal Opportunity Employer. AA/EOE.

Portland State University
Positions in Computer Science

Portland State University anticipates one or more tenure-track, nine month faculty positions to begin Fall 2000. The positions preferably will be at the Assistant Professor Level, but candidates will be considered at all levels. The department's strengths are in database, software engineering, and programming languages, and we are also building a systems/networking group, which could include a computer security aspect. Our intention is to build on these strengths, but excellent applicants in all areas will be considered.

The department currently has sixteen faculty and offers a CSAB accredited B.S. and a vigorous graduate program in Computer Science. Our graduates at all levels are in high demand by local industry, and there is opportunity for research collaboration with industry colleagues and with faculty at the nearby Oregon Graduate Institute. Our teaching loads give faculty time to maintain quality research and teaching programs and to interact with local industry. The department currently serves approximately 350 undergraduates and 100 graduate students. Further information about the department is available at http://www.cs.pdx.edu.

Portland State University is located in downtown Portland, Oregon. Portland's "Silicon Forest" is one of the major software/hardware development centers in the country. Within the Portland metropolitan area are over 200 hardware and software companies, including the world headquarters of Tektronix, InFocus, and Mentor Graphics, major R&D sites of Oracle and Informix, the former Sequent Corp., now a division of IBM, and the site of the world's largest campus of Intel, along with many other companies ranging from major corporations to software start-ups. The University is approximately one hour from magnificent beaches and from year-round skiing.

Review of applications will begin immediately and will continue until the positions are filled. Please send a statement of research and teaching interests, a vita, and the names of three references to:
Faculty Search Committee
Department of Computer Science
Portland State University
PO Box 751
Portland, OR 97207-0751
Portland State University is an equal opportunity/affirmative action employer.

Princeton University
Department of Computer Science

The Department of Computer Science at Princeton seeks applications from outstanding teachers to assist the faculty in teaching our introductory course sequence. There is no deadline for applications, but candidates are encouraged to apply early. Candidates should have an exceptional record of classroom instruction and curricular innovation. Princeton University prides itself on the quality of its undergraduate teaching and the Computer Science Department is committed to being a leader in developing new courses and teaching methods.

The job involves teaching recitation sections (two or three per semester) in the first and second year courses as well as certain responsibilities for overall management of the introductory sequence. There is also work supervising graduate students serving as assistants in instruction (i.e TA's) and developing curricular material, classroom demonstrations, and laboratory exercises. Lecturers are

appointed to one-year terms, renewable for up to six years. Promotion to the rank of senior lecturer, with unlimited renewable terms, is a possibility. We are seeking candidates who are interested in establishing a long-term professional relationship at Princeton. Qualified applicants should send a letter of application, a resume, and the names of four references to:
Lecturer Recruiting Committee
Department of Computer science
Princeton University
Princeton, NJ 08544
Princeton University is an Equal Opportunity/Affirmative Action Employer.

Princeton University
Department of Computer Science

The Department of Computer Science at Princeton University invites applications for Assistant Professor, tenure-track positions. We are entertaining applications in all areas of computer science. Candidates for more senior ranks with exceptional records of research will also be considered. Applicants must demonstrate superior research and scholarship potential as well as teaching ability. A Ph.D. or equivalent in Computer Science or related areas is required. Successful candidates at all ranks are expected to pursue an active research program and to contribute significantly to the teaching programs of the department.

Applications should include a resume and the names of at least three people who can comment on the applicant's professional qualifications. Applicants should be sent to:
Chair, Search Committee
Dept. of Computer Science
Princeton University
35 Olden Street
Princeton, NJ 08544-2087
E-mail search@cs.princeton.edu
The Committee will begin to consider application in January 2000. Princeton University is an Equal Opportunity/ Affirmative Action employer.

Purdue University
Computing Research Institute
DIRECTOR

Purdue University seeks a person with vision to direct its Computing Research Institute. The Institute's mission is to enhance computing research across the Purdue campus by providing focus for interdisciplinary initiatives and by facilitating large innovative research programs. The University is prepared to invest resources to achieve this end.

Position Responsibilities
The Director will provide leadership for activities designed to promote and facilitate research in computer systems and their applications in science and engineering; lead development of collaborative relationships with government and industry; assist faculty in identifying research opportunities; and organize multidisciplinary research programs.

The appointment is full-time with a minimum half-time effort devoted to Institute leadership. Remaining effort may include responsibilities in research, education, and administrative duties.

Requirements
Applicants must have a Ph.D. in a science or engineering discipline and must have demonstrated effective leadership of multi-investigator research programs. Administrative and academic experience should be commensurate with an appointment to a Full Professor faculty position.

The Director will report to the Vice President for Research and Dean of the Graduate School.

Applications/Nominations
A review of applications will commence December 1, 1999, and continue until the position is filled. Nominations or applications containing a résumé and names of three references should be sent to:
Dr. Richard J. Schwartz, Chair of the Search Committee
Dean, Schools of Engineering
Purdue University
1280 ENAD Building
West Lafayette, In 47907-1280
Tel. 764-494-5346; Fax: 765-494-9321

Purdue University is an Equal Opportunity/Affirmative Action Employer

Purdue University
Department of Computer Sciences

The Department of Computer Sciences at Purdue University invites applications for tenure-track positions beginning August 2000. Positions available are at the assistant professor level. Appointments at the associate and full professor levels, however, will be considered for highly qualified applicants. Areas of interest are: software engineering, computer graphics and scientific visualization, systems, and scientific computing. Excellent candidates in other areas of Computer Science and its applications will be seriously considered. Senior candidates must possess a distinguished record of accomplishments in research, teaching, and service.

Applicants should hold a Ph.D. in Computer Science, or a closely related discipline, and should be committed to excellence in teaching and research. Salary is competitive and depends on background and experience.

Successful applicants will find at Purdue a stimulating and nurturing academic environment. Computer Sciences at Purdue is a growing department with a variety of interesting research activities in analysis of algorithms, databases, distributed and parallel computing, geometric modeling and scientific visualization, information security, networking and operating systems, compilers, programming languages, scientific computing, and software engineering. Each faculty member has access to the departmental and University computing facilities, which include a variety of high performance computing platforms. Further information about the department is available at http://www.cs.purdue.edu.

Candidates should send curriculum vitae, statement of career objectives, and have at least three references send letters of recommendation to:
Chair, Faculty Search Committee
Department of Computer Sciences
Purdue University
West Lafayette, IN 47907
Inquiries may be sent to personnel@cs.purdue.edu. The interviewing process will continue until positions are filled.

Purdue University is an Equal Opportunity/Affirmative Action employer.

Queen's University
Department of Computing and Information Science

The Department of Computing and Information Science invites applications for two tenure-track positions at the Assistant Professor or Associate Professor levels. Queen's University is one of the top universities in Canada and is well known for the high quality of its students and faculty. Queen's University is situated in Kingston, a beautiful and historic city, which is located on Lake Ontario within easy travelling distance of Toronto, Montreal, Ottawa and Syracuse. Kingston offers the amenities of a large city and the comfort of a small city.

The Department of Computing and Information Science, which has 23 faculty, 16 staff and approximately 80 graduate students, is committed to excellence in both research and teaching. The faculty are doing research in a number of areas of computer science including computational imagery, molecular scene analysis, computer-assisted surgery, robotics and perception, software technology, database systems, computer networks, computational geometry, parallel computation and computational linguistics. The department offers undergraduate programs in computer science, cognitive science, and software design. It also hopes to begin a new undergraduate program in biomedical computing.

Applicants for the tenure-track positions should have a Ph.D. degree in computer science or a related field. The Department will consider applicants in software engineering, intelligent systems, parallel and distributed systems and database systems. Applicants in the area of software engineering and applicants in

Professional Opportunities

the four general areas whose research has applications to medical computing or bioinformatics are particularly encouraged to apply. The successful candidate will be expected to develop an active research program and to teach effectively at the undergraduate and graduate levels. Salary is commensurate with qualifications and experience.

Applicants are requested to send a curriculum vitae, including a list of publications and the names of three references, and copies of up to three recent papers to Dr. Janice Glasgow, Chair, Department of Computing and Information Science, Queen's University, Kingston, Ontario, Canada K7L 3N6. Openings are for July 2000 and beyond. Screening of applicants will begin immediately and continue until all positions are filled. Queen's University is committed to employment equity and welcomes applications from all qualified men and women, including visible minorities, aboriginal people, persons with disabilities, gay men and lesbians.

Rensselaer Polytechnic Institute
Department of Computer Science
The Department of Computer Science at Rensselaer Polytechnic Institute invites candidates for tenure-track positions in NETWORKING, SECURITY, PARALLEL and DISTRIBUTED COMPUTING and THEORY starting Fall 2000. We are committed to enhancing our strength in those research areas, however highly qualified candidates in other areas will also be considered. We also welcome applications for clinical (teaching) and visiting positions.

Applicants should submit a vita with a list of publications, a statement describing current and planned research, and a statement describing teaching philosophy to the New Staff Committee, Department of Computer Science, Rensselaer Polytechnic Institute, Troy, NY 12180-3590. Candidates should also arrange to have at least three letters of recommendation sent to the same address.

The Department offers B.S., M.S., and Ph.D. degrees in computer science, has multi-million dollar research programs and excellent computing facilities.

Rensselaer, under the leadership of the new president, plans to double its research program in the next five years and the Department of Computer Science will actively participate in this expansion. Currently, there are 17 full-time faculty members and we plan to increase the size of the faculty to about 25. There are approximately 600 undergraduate students, 70 Master's students and 70 Ph.D. students in the program.

Rensselaer Polytechnic Institute is an Affirmative Action/Equal Opportunity Employer.

Rice University
Department of Computer Science
The Department of Computer Science, the Department of Electrical and Computer Engineering, the Center for High Performance Software, and The Center for Multimedia Communication at Rice University expect to have at least four positions in the areas of computer science and engineering available beginning in the academic year 2000-2001 and invite applications for faculty and research staff positions. We are interested in receiving applications for appointments to the tenure-track faculty at the rank of Assistant Professor (however, appointment as Associate or Full Professor will be considered for exceptionally well qualified candidates), to the research faculty which may be at the rank of faculty fellow, senior faculty fellow, and distinguished faculty fellow (these are research positions), and to the research staff as a research scientist or as a postdoctoral research associate. We are especially interested in candidates with research experience in algorithms and complexity, artificial intelligence, compilers, computer graphics, computer systems, database management systems, digital libraries, distributed and mobile computing, embedded systems, high-performance hardware, information retrieval, networks, programming languages, software engineering, and parallel computing. We will consider strong candidates in other areas as well.

Applicants should hold a Ph.D. degree or the equivalent in Computer Science or a related discipline or expect to complete such requirements prior to assuming an appointment. Strong evidence of a commitment to excellence both in research and teaching is required for a tenured or tenure-track appointment. Preference will be given to early applications. The Departments of Computer Science and of Electrical and Computer Engineering share superb research facilities. NSF Educational Innovation, Research Infrastructure and Science and Technology Center grants, along with major grants and contracts from both industrial organizations and government agencies, have enabled the departments to build parallel and multiprocessor systems laboratories, a large network of engineering workstations, an extensive local area network, a high-speed network test-bed, and access to scientific communities via NSF, NASA, and Department of Energy electronic networks. The Center for High Performance Software supports several major research projects and provides access to massively parallel computer systems located at several cooperating institutions. The Center for Multimedia Communication develops embedded systems, distributed systems, and network architectures for tetherless and multimedia communication applications through collaborative research efforts. Both departments and associated centers are located in the new Computational Engineering Building, along with the Departments of Computational and Applied Mathematics and Statistics. Rice is a well-endowed private university with a strong reputation for academic excellence, particularly in undergraduate teaching. It attracts outstanding students nationally and internationally and provides a stimulating environment for research, teaching and joint projects with industry. Teaching loads are low to accommodate faculty research and faculty salaries are competitive.

Send a resume, a statement of research and teaching interests, as well as the names and addresses of at least three references to: Computer Science and Engineering Search Committee, Department of Computer Science MS 132, Rice University, P.O. Box 1892, Houston, Texas 77251-1892, before January 15, 2000. Please specify the position to which you are applying. For more information, see http://www.cs.rice.edu/ or call Iva Jean Jorgensen (713-527-4834) or send e-mail to ivajean@rice.edu.

Rice University is an Equal Opportunity/Affirmative Action employer.

Rutgers University
Faculty Positions in Management Science and Information Systems
The Department of MSIS (Management Science and Information Systems) has tenure track openings in information technology, broadly defined, at the junior and senior levels for the Fall 2000 semester. The MSIS Department has research strength in operations management, applied and theoretical operations research, statistics, and information systems. Candidates must have a strong quantitative educational background, be active researchers, and have either a proven record of scholarly excellence or a demonstrable potential for such excellence.

Candidates must have interest in information technology and a demonstrated skill in at least one of its areas. Special consideration will be given to candidates with skills in data mining, electronic commerce, and telecommunications and their business applications. Affiliation with the Rutgers Center for Operations Research (RUTCOR), Center for Information Management, Integration and Connectivity (CIMIC), and Information Technology and Electronic Commerce Clinic (ITECC) may be possible. Candidates are expected to teach undergraduate, MBA, and Ph.D. courses in management information systems, electronic commerce, operations management, statistics, or related topics.

Applications received by January 31, 2000 are guaranteed full consideration. Applicants should send a c.v. and the names of at least four references to Carol Gibson, MSIS Department Secretary, 94 Rockafeller Road, Piscataway, NJ 08854; FAX: (732) 445-6329; e-mail: gibson@rbs.rutgers.edu

Rutgers is an affirmative action equal opportunity employer.

Rutgers University
Department of Computer Science
Faculty Positions
The Department of Computer Science is seeking outstanding candidates for several tenure-track and senior tenured positions for the 2000 academic year.

We are looking for outstanding candidates for two senior faculty positions to lead our research in networking and human computer interfaces (HCI) respectively.

Additionally, we are interested in outstanding junior faculty candidates, particularly in artificial intelligence, bioinformatics, databases, digital libraries, distributed and parallel systems, networking (protocols, cryptography and security) and software engineering.

We are very competitive, in the last few years we have successfully recruited systems faculty from such top schools as Berkeley, Princeton and University of Washington, Seattle.

The new Rutgers University strategic plan places computer science as an area with one of the highest expected growth rates within the university. We are partners in major centers in theoretical computer science (DIMACS), cognitive science (RuCCS), and wireless and mobile computing (WINLAB), among others. (For more details, see http://www.cs.rutgers.edu.) Our department also has close ties to industry including AT&T, Cisco, Hewlett-Packard, Lucent, Microsoft, NEC, Siemens, and Sun, as well as several emerging companies in the New York area.

To apply please submit a curriculum vita including names of at least four professional references to
Hiring Chair
Department of Computer Science
Rutgers, the State University
110 Frelinghuysen Road
Piscataway, NJ 08854-8019
by February 1, 2000 or send email to hiring@cs.rutgers.edu for further information. We especially encourage applications from women and other under-represented groups.

Santa Clara University
Department of Computer Engineering
The Department of Computer Engineering at Santa Clara University invites applications for a tenure-track appointment at the assistant professor level in the area of software engineering. Candidates should have a doctorate in Computer Engineering, Computer Science, or a related field, and a demonstrated potential for quality research, as well as dedication to excellence in teaching and service.

Santa Clara University (http://www.scu.edu) is a private, Jesuit university located in the heart of Silicon Valley. It was established in 1851 as the first 4-year college in California. The University enrolls about 4,000 undergraduates and 4,000 graduate students. The department (http://www.cse.scu.edu) offers BS, MS, and Ph.D. degrees, has eleven full-time and twenty-five adjunct faculty, and about 225 undergraduate and 350 graduate students. The department aspires to combine the University's Jesuit tradition of competence, conscience, and compassion with a Silicon Valley entrepreneurial spirit to educate engineers who by their personal lives and by their professional activities will make a strong positive impact on their communities and the world.

Send a curriculum vitae, a brief description of current research with copies of three publications and the names, addresses, telephone numbers, and e-mail addresses of four references to: Dr. Dan Lewis (dlewis@scu.edu), Chair, Department of Computer Engineering, Santa Clara University, Santa Clara, CA 95053.

Santa Clara University is an Equal Opportunity/Affirmative Action employer.

Professional Opportunities

Southwest Texas State University (SWT)
Department of Computer Science

Applications are invited for tenure-track positions at the assistant professor level to begin Fall 2000. Applicants must have an earned doctorate in Computer Science, Computer Engineering, or an equivalent degree. A commitment to excellence in teaching, research, and service is essential.

The Department of Computer Science, with its nineteen full-time equivalent faculty, 640 undergraduate majors, and 135 master's students, is part of SWT, a comprehensive university with about 22,000 students. SWT is located in San Marcos, Texas, a scenic college town close to both Austin and San Antonio. With proximity to many major high-tech companies, the department and the university have enjoyed significant growth in the past decade. For more information see http://infinite.cs.swt.edu/recruitment/.

Application review will begin February 1, 2000, and will continue until the positions are filled. To apply, send a printed resume and a list of at least three references with telephone, e-mail, and postal addresses to: Chair, Recruitment Committee Department of Computer Science Southwest Texas State University 601 University Drive San Marcos, TX 78666-4616.

Although printed applications are preferred, applications can also be sent electronically (in postscript form only) to hiring@cs.swt.edu.

SWT is an AA/EEO employer. Women and minorities are encouraged to apply.

Stanford University
Department of Computer Science
Faculty Opening

The Computer Science Department of Stanford University invites applications for a tenure-track faculty position at the Assistant Professor level. We are seeking applicants from all areas of Computer Science, including Foundations, Artificial Intelligence, Graphics, Databases, Systems, and Networking. The department has also a particular interest in applicants who wish to pursue a research program at the frontiers of computer science, for instance in bioinformatics, quantum computing, computation and arts, or computational economics. Higher priority will be given to the overall innovation and promise of the candidate's work than to any specific area.

An earned Ph.D., evidence of the ability to pursue a research program, and a strong commitment to graduate and undergraduate teaching are required. The successful candidate will be expected to teach computer science courses at the graduate and undergraduate levels and to build and lead a team of graduate students in Ph.D. research. Further information about the Computer Science Department can be found at http://www-cs.stanford.edu.

Applications will be accepted until February 15, 2001, or until the position has been filled. Applicants interested in a position starting Autumn 2000 are strongly encouraged to apply before March 15, 2000. Applications should include a curriculum vita, statements of research and teaching interests and the names of at least four references. The application should be sent to:

Professor Jennifer Widom, Search Committee Chair
c/o Laura Kenny-Carlson
Computer Science Department
Stanford University
Gates 2B
Stanford, CA 94305-9025

Stanford University is an equal opportunity employer and welcomes applications from women and minority group members.

State University of New York at Albany

The University at Albany Computer Science Department invites applications at the Assistant/Associate level for faculty position beginning September 2000. Candidates must have a doctorate in computer science or a related field.

At the Assistant level, we seek applicants working in distributed systems, networks, operating systems, software engineering, databases, and in areas related to high-performance computing.

At the Associate level, strong preference will be given to those that have a demonstrated capability for research leadership and external funding. All areas will be considered.

The department has well established strengths in theory and formal methods including algorithms, data structures, automated reasoning and unification, software design, and especially in computational complexity(R.Stearns, Turing Award '93). Our goal is to build up applied areas to a similar strength, while maintaining and enhancing our established strengths.

The Department has an active research program and offers B.S., M.S., and Ph.D. degrees. Further information on the department can be found at: http://www.cs.albany.edu

Applications should be sent to: Lenore R. Mullin, Chair, Faculty Search Committee, Computer Science Department, University at Albany, 1400 Washington Avenue, Albany, NY 12222 (lenore@cs.albany.edu).

The University at Albany is an Equal Opportunity/Affirmative Action Employer. Applications from women, minority persons, handicapped persons, and/or disabled or Vietnam era veterans are especially welcome.

State University of New York at Stony Brook
Department of Computer Science
Industrial Coordinator/Liaison for Computer Science

Applications are invited for a position of Research Assistant Professor, beginning January or May 2000, with primary responsibilities for increasing interaction between the Stony Brook Computer Science Department and local industry under the Strategic Partnership for Industrial Resurgence (SPIR). Candidates should hold a Ph.D. in Computer Science or closely related field, and have a commitment to excellence in teaching and research at the university level.

Send resumes and the names of three references to: Prof. Steven Skiena, Search Committee, Computer Science Department, SUNY Stony Brook, Stony Brook, NY 11794-4400. Compensation is competitive and depends upon experience and qualifications. SUNY Stony Brook is an Affirmative Action/Equal Opportunity employer and educator.

State University of New York at Stony Brook
Department of Computer Science

The Computer Science Department of SUNY Stony Brook has several tenure-track faculty positions for Fall 2000. We are particularly but not exclusively interested in applications from junior faculty in the experimental computer systems area, such as operating systems, networking, graphics, databases, computer architecture, Internet-related systems, and automated verification.

The Department currently has 31 faculty members and is expected to recruit about 10 additional members in the next few years. There are five main active research areas in the department: graphics/visualization, logic programming/database, concurrency/verification, computer systems, and algorithms. Detailed information on the research activities of these groups can be found in the department home page: www.cs.sunysb.edu.

The Department is also associated with a new Center for Data-intensive Computing at the neighboring Brookhaven National Laboratory. The Center is expected to have about 10 computer scientists and will emphasize data mining, visualization, parallel and distributed computing and networking, and modeling and simulation.

Stony Brook enjoys close proximity to both New York City and Long Island's majestic ocean beaches. Its school districts are highly ranked nationally. Opportunities for industrial collaborations abound with many high profile IT companies close by. Moreover, the Computer Science Department offers a congenial working environment.

Applicants should have a Ph.D. in Computer Science or a related discipline. Apply by sending a detailed resume, the names of at least three references, and three

publications to Professor Scott Smolka, Chair, Faculty Recruiting Committee, Computer Science Department, SUNY at Stony Brook, Stony Brook, NY 11794-4400. Telephone: (516) 632-8453/8470; and have at least three reference letters sent to the same address. Letters may also be sent to recruit@cs.sunysb.edu. In addition, please e-mail to the same address a URL pointing to your online resume and publications.

Applications from women and minorities are particularly sought. Stony Brook is an affirmative action/equal opportunity educator and employer.

State University of West Georgia
Computing Department

The Computing Department at the State University of West Georgia invites applications for two or more tenure-track positions contingent upon funding. The positions are primarily at the assistant professor level, but highly qualified applicants at higher ranks will be considered.

The Department is experiencing rapid growth and preparing to move to a $20 million Technology-enhanced Learning Center by next Fall. The Department is seeking CSAB Accreditation and planning a graduate program.

Requirements include a Ph.D. in Computer Science and a commitment to quality teaching. We are especially interested in candidates specialized in database, networks, programming languages or OS systems. Applicants should submit curriculum vitae and three letters of references to:

Adel Abunawass
Computing Search
Computing Department
State University of West Georgia
Carrollton, GA 30118
E-mail: Adel@WestGA.Edu

Review of completed applications will begin January 15, 2000, but the search will remain open until all positions are filled. The State University of West Georgia is an EO/AA Employer.

Syracuse University
Department of Electrical Engineering and Computer Science
Multiple Positions

The department invites applications for: (1) one tenured senior faculty position in RF/Wireless systems with a starting date of January 1, 2000, or as soon as possible thereafter. New positions: (2) two tenure-track junior faculty positions in the general area of wireless communication systems; (3) at least two tenure-track junior faculty positions in one of the following areas: software and distributed systems, VLSI systems and CAD; (4) one temporary-term, non-tenure-track faculty position to teach courses central to CE and/or CS. Application deadline is January 15, 2000 or until the position is filled, and the starting date is August 23, 2000, or as soon as possible thereafter. For all positions, a doctorate in a field appropriate to the area is required. Submit curriculum vitae, research and teaching statements, copies of selected publications, and have three reference letters sent to: Faculty Search Committee, Department of Electrical Engineering and Computer Science, 121 Link Hall, Syracuse University, Syracuse, NY 13244-1240, USA. Please indicate position for which you are applying.

Please see: http://uplink.syr.edu/faculty/search/d1/positions.html for more information.

Syracuse University is an Affirmative Action/Equal Opportunity Employer. Qualified individuals from under-represented groups are urged to apply.

Temple University
Center for Computer Science and Applied Mathematics
Director and Multiple Faculty Positions in Computer Science

As part of a major expansion in the sciences, the new College of Science and Technology at Temple University is recruiting for thirty new faculty positions in the areas of Computer Science, Information Science, Biotechnology, Physical Sciences, Engineering, and Mathematics. Fifteen faculty members have already joined the College with strong research

programs and peer reviewed grant support, resulting in an increase in excess of five million dollars in external funding. Faculty searches for the remaining fifteen positions are in process.

The College has formed a Center for Computer Science and Applied Mathematics. At this time, the College invites applications for multiple positions in computer science at the level of Full, Associate, or Assistant Professor in the Center. Newly hired faculty in the Center will be given tenure track appointments primarily in the department of Computer and Information Sciences. Successful candidates are expected to have or be able to develop significant research programs and to provide effective instruction at both undergraduate and graduate levels in computer science. Appointments are possible at all academic levels appropriate to experience. Candidates for the position of Director must have nationally and internationally known research programs in computer science, extensive peer reviewed grant support, and a strong commitment to the teaching of undergraduate and graduate students. Applicants for Associate Professor or Full Professor are expected to have a substantial publications record and an externally supported research program.

Areas of interest in computer science include, but are not limited to, networking, distributed and mobile computing, programming languages, databases, operating systems, object-oriented computing, bioinformatics, performance modeling and analysis, and theory of computation. Strong candidates in other areas of computer science are encouraged to apply. We especially encourage applications from candidates whose research is interdisciplinary in nature. Salaries for new faculty are highly competitive, and substantial resources have been allocated for startup funding.

The College of Science and Technology offers Bachelors, Masters, and Ph.D. degrees in basic and multidisciplinary areas. Temple University, located in Philadelphia, Pennsylvania, is part of the Pennsylvania Commonwealth System of Higher Education and serves more than 27,000 students.

Applicants should submit a *curriculum vitae*, three representative publications, a statement of research interests, a statement of teaching philosophy, and should arrange for four letters of reference to be sent directly to the address below.

Professor Elliot B. Koffman
Chair, Faculty Search Committee
Office of the Dean
College of Science and Technology
409 Barton Hall A
Temple University
Philadelphia, PA 19122

Temple University is an equal opportunity/affirmative action employer and specifically invites and encourages applications from women and minorities. Additional information about the university and the department is available at http://www.temple.edu and http://www.cis.temple.edu.

Tufts University
Department of Electrical Engineering and Computer Science

The Department of Electrical Engineering and Computer Science at Tufts University seeks to hire a tenure-track faculty member in Computer Science at the Assistant or Associate Professor level. The successful candidate will be responsible for excellence in teaching, research, and advising in both the undergraduate and graduate programs of the department. We also expect the successful candidate to develop funded research programs in his/her area of interest, supervise graduate research, and publish in refereed journals. A doctorate in Computer Science or a closely related field is required. Preference will be given to candidates who can teach programming-oriented courses and whose research connects to on-going departmental research in artificial intelligence, data compression, discrete math/theory, distributed computing, human-computer interaction, machine learning, multimedia, CAD for integrated circuits, computational geometry, and/or visualization and exploration of large data sets.

Tufts University is a Research I class institution that happens to be the smallest such institution, giving it unique

Professional Opportunities

SCHOOL OF Computing Science
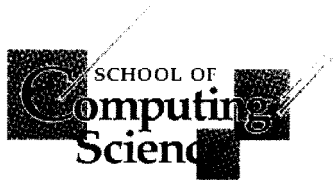
SIMON FRASER UNIVERSITY

Applications are invited for several tenure-track positions at the Assistant Professor level. A Ph.D. in Computing Science or equivalent is required, with a strong commitment to excellence in research and teaching. While outstanding candidates in all areas and at all levels will be considered, the ideal candidate will have demonstrated research expertise in a systems area, such as software engineering, graphics, multimedia systems, database systems, distributed systems or networking.

Responsibilities include research as well as teaching at the graduate and undergraduate levels. Excellent support will be provided to the successful applicants for establishing their research programs. As well, researchers in advanced systems will be eligible for fellowships in the B.C. Advanced Systems Institute.

The School of Computing Science has 36 faculty members, and offers an expanding graduate program with 120 M.Sc. and Ph.D. students. The School has state-of-the art computer equipment with excellent network support. There are well-equipped research laboratories in areas including algorithms, artificial intelligence, graphics and multimedia, and database systems. As well, the School has strong links with the university's Centre for Systems Science, the B.C. Advanced Systems Institute, and local industry.

Simon Fraser University serves about 18,000 students. The university has been ranked first in the comprehensive category for the third year running in the national ranking of Canadian universities carried out by Maclean's Magazine. The university is situated on top of Burnaby Mountain just east of Vancouver and commands magnificent views of Burrard Inlet, the North Shore Mountains, the Fraser River, and Vancouver harbour. The Lower Mainland area of British Columbia is unique in Canada for its mild climate and varied recreational opportunities.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Simon Fraser University is committed to the principle of equity in employment and offers equal employment opportunities to qualified applicants. Applications will be accepted until the position is filled. For updated information see www.cs.sfu.ca

To apply, send a curriculum vitae, evidence of research productivity (including selected reprints), and the names, addresses and phone numbers of three referees to:

Dr. James P. Delgrande, Director

School of Computing Science

Simon Fraser University

Burnaby, British Columbia, Canada, V5A 1S6

email: cs-chair@cs.sfu.ca

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character. With about 5,000 undergraduates, 3,000 graduate students, and a world-wide reputation for its undergraduate education and several of its graduate programs, Tufts offers a unique opportunity for academic professionals interested in combining world-class research with close connections to outstanding undergraduate, Masters, and Ph.D. students. Located just a few miles or a short 'T' ride from Boston and Cambridge, the Department offers B.S., M.S. and Ph.D. programs in Electrical Engineering, in Computer Engineering, and in Computer Science. For more information on the Department or other Tufts positions available, please visit <http://www.eecs.tufts.edu>.

Applications including a cover letter, a resume, a teaching statement, a research plan, and three letters of recommendation should be sent to Prof. Diane Souvaine, Chair of the Computer Science Search, Department of Electrical Engineering and Computer Science, Tufts University, 161 College Avenue, Medford, Massachusetts, 02155. Review of applications begins February 7, 2000. An Affirmative Action/Equal Opportunity employer, Tufts University is committed to excellence in teaching and scholarship, and to building a faculty that reflects the diversity of both its students and the world. Members of underrepresented groups (people of color, persons with disabilities, Vietnam veterans, and women) are strongly encouraged to apply.

Tuskegee University
College of Engineering, Architecture, and Physical Sciences
The College of Engineering, Architecture, and Physical Sciences at Tuskegee University seeks applicants for the following tenure-track and non-tenure-track faculty positions.
• Department Chair: Electrical Engineering; Aerospace Science Engineering

• Faculty: Computer Science; Aerospace, Electrical, Mechanical, and Chemical Engineering; Physics
Candidates must have an earned Ph.D. in the relevant discipline or closely related area as well as a proven track record of teaching, research, and service, commensurate with the rank of Assistant or Associate Professor and commitment to the professional development of minorities.
Additionally, candidates for Chair must demonstrate strong leadership skills, drive, vision, and a commitment to build and sustain a stable and progressive department.
The College also seeks applicants for the position of Computer Systems Engineer, beginning Fall 2000. Candidates must have an earned BS degree in Computer Science, Computer Engineering, or Electrical Engineering; a minimum of one year hands-on experience in UNIX system administration and PC network management using Windows NT and/or Novell; and familiarity with creating and maintaining accounts, installing and maintaining application software, network design and installation, licenses, and maintenance agreements.
Send application, resume, and names and telephone numbers of three references to: Dr. Legand L. Burge, Jr., Dean, College of Engineering, Architecture, and Physical Sciences, Tuskegee University, Tuskegee, Alabama 36088; Tel. 334-727-8356.

University of Alabama
Department of Computer Science
Position Announcement
The University of Alabama Department of Computer Science invites applications for two positions to begin August 16, 2000. One position is a senior position preferably at the Full Professor level, although we will consider candidates at the Associate Professor level. Applicants are sought in all areas of software engineering, database systems, software systems, and networking. Candidates are expected to have an established record of research,

scholarly activity, and funding, and to provide a leadership role in the ongoing expansion of our graduate program.
The second position is a tenure-track position at the Assistant Professor level in any area of computer science. Applicants must have an earned Ph.D. in Computer Science, with an evidence of research potential, commitment to teaching, and willingness to participate in the Department's graduate and undergraduate programs.
The Department of Computer Science has twenty faculty (eleven tenured/tenure-track), over 300 undergraduates in a CSAB-accredited BS degree, and forty MS and Ph.D. students. We expect to grow to sixteen tenured/tenure-track faculty within three years. Areas of research emphasis include algorithms, artificial intelligence, database systems, human-computer interface, networking, software engineering, and software systems.
Outstanding applicants should send a curriculum vitae and the names and addresses of at least three references to:
Dr. Allen Parrish, Chair
Computer Science Search Committee
Department of Computer Science
Box 870290
The University of Alabama
Tuscaloosa, AL 35487-0290
For additional information, please visit http://cs.ua.edu, or contact Allen Parrish at parrish@cs.ua.edu.
Review of applications will begin January 15, 2000 and will continue until the positions are filled. The University of Alabama is an Equal Opportunity/Affirmative Action employer. Women and minorities are particularly encouraged to apply.

The University of Alabama at Birmingham
Department of Computer and Information Sciences
The Computer and Information Sciences Department of the University of Alabama at Birmingham (UAB) invites

applications for a tenure-track faculty position at the assistant or associate professor level. Applicants should have a Ph. D. in computer science or a closely related field, a strong interest in and commitment to teaching, research and external research funding. A goal of the Department is to develop a research team which builds on existing strengths in computer networking, distributed computing and object-oriented software technologies. Applicants should have research interests in one or more of these areas and a demonstrated record of accomplishments.
Included within the University are the Graduate School and Schools of Medicine, Dentistry, Arts and Humanities, Social and Behavioral Sciences, Natural Sciences and Mathematics, Business, Education, Engineering, Public and Allied Health, Optometry, and Nursing. The Department of Computer and Information Sciences is located in the School of Natural Science and Mathematics and offers B.S., M.S., and Ph. D. degrees.
In addition to the areas listed above, departmental research areas include artificial intelligence, biomedical computing, data mining, and graphics and visualization. Over 16,000 students are pursuing their education on UAB's 270-acre campus, located between downtown Birmingham and Red Mountain. UAB ranks among the top public institutions in the country in federal research and development support, attracting more than $100-million in external funds and is ranked as a Carnegie I Research University. UAB's Office for the Advancement of Developing Industries (OADI) provides an environment for the initiation of corporate/academic interchange. Birmingham is a major metropolitan area of almost 900,000 and is a southeastern center of finance, communications, and medicine. The area has a pleasant climate all year. A wide variety of cultural, natural, and sports attractions are available in the immediate vicinity.

Professional Opportunities

For more information on the department, university and city, see our web page at www.cis.uab.edu.

Qualified applicants should send a curriculum vita and the names and addresses three references to Faculty Recruiting, Department of Computer and Information Sciences, The University of Alabama at Birmingham, 1300 University Blvd., Birmingham, AL 35294-1170.

Applications will be considered as they are received until the position is filled. The University of Alabama at Birmingham is an equal opportunity/ affirmative action employer.

University of Alabama in Huntsville
Department of Electrical and Computer Engineering

The Department of Electrical and Computer Engineering of the University of Alabama in Huntsville invites applications for two tenure-track positions at the Assistant Professor level in areas of computer engineering, communications/signal processing. Applicants should have a Ph.D. in electrical or computer engineering and demonstrated potential for excellence in both instruction and research. Please visit us at http://www.eb.uah.edu/ece/. Resumes with the names, addresses, and telephone numbers of three references should be mailed to Reza Adhami, Professor and Chair, Electrical and Computer Engineering Department, The University of Alabama in Huntsville, Huntsville, Alabama 35899.

Reviewing of applications will begin by December, 1999 and will continue until both positions are filled. UAH is an Equal Opportunity/Affirmative Action Employer

University of California, Davis
Department of Computer Science
Faculty Positions

The Department of Computer Science, at the University of California, Davis, invites applications for several tenure-track faculty positions. The department is seeking candidates at all levels. At the senior level, we invite applications from candidates with truly distinguished records and demonstrated excellence in research, teaching, and leadership; at the junior level, we invite applications from candidates with a commitment to excellence in teaching and demonstrated strong potential for excellence in research. The department welcomes applications from strong candidates in all areas, although it has a particular interest in the areas of Networks, Computer Systems (including Security), and Information Systems. The department expects more positions in the future in areas such as Computational Biology, and strong candidates are requested to consult our website for the latest information.

The CS Department currently has 23 faculty, covering all major areas of computer science. It is experiencing a period of strong growth in research and instruction and expects to continue this trend. The Davis campus is the third largest in the University of California system. UC Davis ranks among the nation's top 20 universities in research funding and has been rated as one of the top five "up and coming" universities in the country.

Davis is a pleasant, family-oriented community in a college-town setting with excellent public schools and a mild climate. Davis is ideally located for many recreational, cultural, and professional activities. It is just 15 miles from California's capital city of Sacramento and is within easy driving distance of the Sierra Nevada Mountains, Berkeley, San Francisco, Silicon Valley, Napa Valley wine country, and the Pacific Coastal areas.

These positions require a Ph.D. or equivalent. The positions are open until filled, but for full consideration, applicants should apply by January 21, 2000.

UC Davis is responsive to the concerns of dual career couples and offers a Partners Opportunity Program. UC Davis is an affirmative action/equal opportunity employer.

Please consult our web page (http://www.cs.ucdavis.edu/) for additional information and application procedures or send e-mail to: apply@cs.ucdavis.edu.

University of California, Irvine
Department of Information and Computer Science
Open Faculty Positions

The Department of Information and Computer Science (ICS) has several tenured or tenure-track positions open in the following areas of research emphases:

A. Computer Graphics

B. Systems Software: Databases, Operating Systems, Compilers, and Networks

C. Computer-supported cooperative work: social impacts of computing, information studies, and human-computer interactions.

D. Other areas of computer science such as software and software engineering, computer security, cryptography, bioinformatics or medical informatics.

Available positions are for an Associate or Assistant Professor in Computer Graphics and Assistant Professor positions in other areas, but exceptional candidates from all ranks will be considered. In all cases, we are looking for applicants with a Ph.D. degree in Computer Science or a related field, and strong research credentials as evidenced by scholarly publications. Applicants for senior positions must also demonstrate a proven track record in funded research activities.

The ICS Department is organized as an independent campus unit reporting to the Executive Vice Chancellor. It runs the second most popular major at UCI and has designed an undergraduate honors program that attracts the campus' most qualified students. External funding from government and industrial sponsors exceeded $10 million last year. The Department currently has thirty-eight fulltime faculty and 150 Ph.D. students involved in various research areas including computer science theory, embedded computer systems, artificial intelligence, networks and distributed systems, databases, multimedia systems, computer systems design, software/ software engineering, human-computer interaction, and computer-supported cooperative work. ICS faculty are involved in the forefront of research in the emerging areas of the computer science discipline such as multimedia/ embedded computing, knowledge-discovery in databases, bioinformatics and the role of information in computer science and society. The faculty has effective interdisciplinary ties to colleagues in digital arts, biology, cognitive science, engineering, management, medicine, and the social sciences.

Although UCI is a young university, it has attained remarkable stature in the past three decades. Two Nobel prizes were recently awarded to UCI faculty. UCI is located three miles from the Pacific Ocean near Newport Beach, approximately forty miles south of Los Angeles. The climate is ideal year-round avoiding extreme temperatures in winters and summers. Irvine is consistently ranked among the safest cities in the U.S. and has an exceptional public school system. The campus is surrounded by high-technology companies that participate in an active affiliates program.

Both the campus and the area offer exciting professional and cultural opportunities. Mortgage and housing assistance are available including newly built, for-sale housing located on campus and within short walking distance from the department.

Applicants should send a cover letter indicating which of the areas above [A-D] best fits their research, a curriculum vitae, three sample papers and contact information for three or four references to: recruit@ics.uci.edu (PDF, postscript, Word, or ASCII).

Applicants are requested to ask their references to send letters of evaluation to recruit@ics.uci.edu by January 15, 2000. Those that insist upon sending hard copy may send it to:

ICS Faculty Position [A-D]
c/o Lori Miskell
Department of Information and Computer Science
University of California, Irvine
Irvine, CA 92697-3425

Application screening will begin immediately upon receipt of curriculum vitae. Maximum consideration will be given to applications received by January 7, 2000.

The University of California is an Equal Opportunity Employer, committed to excellence through diversity.

University of California, Los Angeles
Department of Computer Science

The Department of Computer Science at the University of California, Los Angeles, invites applications for tenure-track positions at all levels. Applications are especially welcome from distinguished candidates at more senior levels.

Quality is our key criterion for applicant selection. Applicants should have a strong commitment to both research and teaching and an outstanding record of research for their level. We seek applicants in any mainstream area of Computer Science, but we particularly welcome those with a strength in operating systems, compilers, graphics, database systems, embedded systems, networking and security.

Interested applicants should send a letter of application, a resume, and the names of four references to: Professor Richard R. Muntz, Chair, UCLA Computer Science Department, 4732 Boelter Hall, Los Angeles, CA 90095-1596.

University of California, Santa Barbara
Faculty Positions: Department of Computer Science

The University of California at Santa Barbara invites applications for faculty positions in Computer Science. While the department emphasizes building strengths in experimental computer science, applicants in all areas of computer science are welcome.

The Department of Computer Science currently has 20 full-time faculty and about 120 graduate students (including 60 Ph.D. students) involved in various research areas including digital libraries and databases, parallel and distributed systems, programming languages, networking and security, theory and algorithms, and scientific computing. External funding from federal agencies and industrial sponsors exceeded $4 million last year.

The Department of Computer Science is part of an expanding College of Engineering which encompasses over 100 faculty in various engineering disciplines. UCSB is a major research institution, elected member of the Association of American Universities, as well as an integral part of the nine-campus University of California system. Graduate degrees in Computer Science are offered at the M.S. and Ph.D. levels.

Applicants should hold a doctoral degree in Computer Science or a related field; appointments are scheduled to begin in 2000-2001. Primary consideration will be given to candidates who apply by January 15, 2000 (or earlier), however the position will remain open until filled. Send resume and names of at least four referees to: Recruitment Committee, Department of Computer Science, University of California, Santa Barbara, CA 93106-5110. To apply by electronic mail, send the application in an ASCII or postscript file to: recruitment@cs.ucsb.edu. Additional information about the Computer Science Department may be found at http://www.cs.ucsb.edu. An EO/AA employer.

University of Central Arkansas
Computer Science Department

The Department of Computer Science is seeking faculty candidates for two positions at the assistant or associate level commencing August 2000. Rank commensurate with experience. Ph.D. in computer science or related field required. The position is either a tenure-track or three-year-renewable appointment by mutual agreement. Tenure-track at competitive salary, three-year-renewable at the national average by rank in computer science.

The Department currently offers a BS in Computer Science and is actively developing an MS Degree in Applied Computing, a BA in Computer Science, and a 2-year Associate Degree in Computer Science. We are committed to excellence in teaching and research. Current active research areas include robotics, medical imaging, distributed computing, and computer science education. Applicants with interests in software engineering, networking, and databases will be given

preference but all areas of computer science, especially those that complement and strengthen current research areas, will be considered.

The Computer Science Department was established in 1996 and currently has over 170 majors; it enjoys strong support from the administration and is growing rapidly. The University of Central Arkansas has made "computer science and computing" one of its highest priorities. The CS Department will move into a new $8.0 million building, designated for technology related programs in 2001.

UCA has approximately 9,000 students and is located in Conway, a rapidly growing town of 40,000, about thirty miles from Little Rock and a few hours drive from Dallas (6+) and Memphis (2+). Candidates should send a letter of application, resume' and the names and addresses of three references to: Faculty Search Committee, Computer Science Department, UCA, Conway, AR 72035. Electronic submission preferred (fsearch@cs.uca.edu).

Review of applications will begin Jan. 15, 2000 and continue until the positions are filled. UCA is an equal opportunity employer.

University of Colorado at Denver
Department of Computer Science and Engineering
Department Chair

The University of Colorado at Denver invites applications and nominations of outstanding individuals for the position of Chair of the Computer Science and Engineering Department. The position requires a Ph.D. in Computer Engineering, Computer Science or a closely related field, an excellent record in teaching and research, a demonstrated record of external funding, and credentials appropriate for appointment as a tenured full professor. A strong candidate should have excellent leadership skills, an ability to work closely with industry and a commitment to teaching excellence. The position is available beginning July 1, 2000.

The Computer Science and Engineering Department has ten full time faculty and approximately 13 part-time honoraria, 400 undergraduate students and 200 graduate students. The department offers a B.S. in Computer Science and Engineering, a M.S. in Computer Science, a Master's of Engineering with Computer Science emphasis, and participates in a Ph.D. in Applied Mathematics with a Computer Science concentration through the Department of Mathematics.

CU-Denver is the urban, non-residential campus of the four-campus University of Colorado system and the only public university in the Denver metropolitan area. Located in downtown Denver, CU-Denver serves approximately 12,000 students, whose average age is 30 and over 85% of whom work. Over 44% are graduate students. CU-Denver offers 36 undergraduate degrees and 43 master's degrees through the Colleges of Architecture and Planning, Arts and Media, Business, Engineering, and Liberal Arts and Sciences, the School of Education and the Graduate School of Public Affairs, and the Ph.D. in applied mathematics, civil engineering, health and behavioral sciences, educational leadership, and public affairs. Classes are offered during weekday and evening hours, on weekends, at off-campus sites, and on-line. CU-Denver values teaching and research equally and has a statutorily established applied research mission. CU-Denver is expected to serve the complex higher education needs of its city, the region that depends on the city and, by extension, cities worldwide.

For more information about the department contact http://carbon.cudenver.edu/public/compsci/

The University of Colorado at Denver is an equal opportunity employer committed to excellence through inclusiveness.

The Colorado Open Records Act (C.R.S. 24-72-204) requires a written request for confidentiality at the time of application. Applications without such a request may be open records and may be disclosed. Materials submitted by electronic mail are open records.

Applicants should send their vita and the names of six references to:
Dr. Richard Lundgren,
Chair of the Computer Science and Engineering Search Committee

Professional Opportunities

University of Colorado at Denver
Department of Engineering and
Applied Science
Campus Box 104
P.O. Box 173364
Denver, CO 80217-3364
Lundgren@carbon.cudenver.edu
Review of applications will begin
January 10, 2000. Applications will
continue to be accepted until the position
is filled.

University of Colorado at Boulder
Department of Computer Science
Tenure-track Positions

The Department of Computer Science
of the University of Colorado at Boulder is
seeking applications for a number of
tenure-track faculty positions. While we
expect most of the appointments to be at
the Assistant Professor level, we will
consider strong candidates at all levels.

The Department has twenty-five faculty,
about 175 graduate students, and 485
undergraduates. It has strong research
programs in artificial intelligence, human
computer interaction, numerical and
parallel computation, software and systems,
and theoretical computer science. The
Department is the recipient of three
consecutive five-year infrastructure grants
from the NSF to support its computing
infrastructure and collaborative research
among its faculty. Our location in Boulder
combines a pleasant college town ambi-
ence, easy access to the great outdoors, and
participation in a vibrant, rapidly-growing
high tech industry community.

More information about the Depart-
ment, including current information on
areas of special priority in our search, can
be found at http://www.cs.colorado.edu.

Review of applications will begin
immediately, and continue as long as
positions are open. We expect to have
positions in future years as well as for
appointments beginning in academic year
2000-2001, and we welcome inquiries
about these future opportunities.

We would also be glad to consider the
possibility of making multiple appoint-
ments to enable research collaborators to
join our faculty together.

Applicants should send a current
curriculum vitae, the names of four
references, and one-page statements of
research and teaching interests to:
    Professor Clayton Lewis, Search
Committee Chair, Department of Com-
puter Science, Campus Box 430, Univer-
sity of Colorado, Boulder, CO 80309-
0430.

Inquiries can be addressed to Professor
Lewis at search@cs.colorado.edu.

The University of Colorado at Boulder
is committed to diversity and equality in
education and employment.

University of Delaware
Department of Computer and Information
Sciences

Applications are invited for two
tenure-track Assistant Professor positions
for Fall 2000. Outstanding senior level
candidates will also be considered. It is
anticipated that one or more visiting
faculty positions will be available as well.
Of primary interest are candidates whose
research is in an area of experimental
computer science such as systems,
networking, software engineering,
multimedia, or web-based technologies;
although candidates in related areas will
be considered. Applicants should hold a
Ph.D. or its equivalent and should be
committed to excellence in research and
teaching. The normal teaching assignment
is three courses per year.

The department has sixteen tenure-
track, two visiting, and three research
faculty members, with a substantial portion
of our ninety graduate students pursuing
the Ph.D. We have significant external
funding, including a $1.5M grant for an
Army Research Lab in Telecommunications
and Information Distribution, a recent
$900K NSF CISE Research Infrastructure
Grant for parallel and distributed comput-
ing, and NSF CAREER awards. The
University of Delaware is centrally located
between Philadelphia and Baltimore, with
major government and industrial labs
nearby. More information is available at
http://www.cis.udel.edu

To apply, please mail curriculum vitae
to: Dr. B. David Saunders, Chair of the

Faculty Search Committee, Department of
Computer and Information Sciences,
University of Delaware, Newark, DE
19716. In addition, candidates should
have three to five confidential letters of
reference sent directly to the above address
or by e-mail to csfacsch@cis.udel.edu.
Applications will be accepted until the
positions are filled; those received by
February 1, 2000 are assured full consider-
ation. Qualified minority group members
and women are encouraged to apply.

The University of Delaware is an equal
opportunity employer.

University of Denver
Department of Mathematics and
Computer Science

We invite applications for one or more
tenure-track faculty positions to begin fall
2000. The minimum requirements are, by
September 2000, a Ph.D. in CS or related
areas and demonstrated ability in research
and teaching. The department is particu-
larly interested in candidates who can teach
and direct research in systems areas
including OS, data bases, web technology,
parallel and distributed systems, graphics,
multimedia, networks, mobile computing,
telecommunications, and/or software
engineering.

Our current faculty have research
programs in algorithms, computational
geometry, database systems, graphics,
multimedia servers, network security,
optical networks, parallel computer
architecture, web technology, parallel/
distributed processing, and performance
modeling. We offer BS and MS degrees in
each of Computer Science and Mathemat-
ics, and a joint Ph.D. in Mathematics and
Computer Science. For more information
contact our web site at http://
www.cs.du.edu.

The University of Denver is a medium-
size (8,000 students) private university
with a strong emphasis on teaching and
research. Class sizes are small, the teaching
load is moderate and the salary is competi-
tive. The University is located in an
attractive residential area 5 miles from
downtown Denver. Denver, with its metro
area population of 2.3 million, is consis-
tently ranked as one of the country's most
pleasant places to live. Denver offers a
wide spectrum of quality cultural arts and
fine dining. In addition, many of the
country's best ski areas, hiking/biking trails,
and the 14,000 foot peaks of the Colorado
Rockies are only one or two hours away.

The University of Denver is committed
to enhancing the diversity of its faculty and
staff and encourages applications particu-
larly from women, minorities and the
disabled.

Application screening will begin
immediately and continue until the
position is filled. Applicants should submit
a curriculum vitae, a statement of teaching
and research interests, and have at least 3
reference letters sent to:
    Chair, Computer Science Search
    Committee
    Mathematics and Computer Science
    Department
    University of Denver
    2360 S. Gaylord Street
    Denver, CO 80208-0189

University of Georgia
Department of Computer Science

The Department of Computer Science
of The University of Georgia invites
applications for four tenure track positions
in computer science to begin Spring or Fall
of 2000. At least one of the appointments
is expected to be at the level of Associate
or Full Professor. Two of the positions are
part of a Georgia strategic initiative to
achieve pre-eminence in the design/
fabrication of large embedded systems.
Applicants for these two positions should
have demonstrated expertise in distributed
information systems, high performance
networking, software engineering, optical
networks, high speed access devices,
modeling and simulation of opto-electronic
devices and systems, modeling and
simulation of mixed-signal ICs and boards,
or methodology for embedded software
development. For the other two positions,
the department intends to hire persons
whose research complements existing
departmental strengths. We are especially
interested in networking, graphics,
compilers and programming languages,

operating systems, and software engineer-
ing. However, outstanding applicants in all
areas are encouraged to apply. Successful
applicants must be committed to excel-
lence in both research and teaching.

The Department of Computer Science
is a growing and congenial department of
eighteen faculty with wide areas of research
interests. The department has 500
undergraduate and 80 graduate students,
and offers the BS, MS, and Ph.D. Degrees
in Computer Science. The teaching load
allows for substantial concentration on
research. Faculty interacts with several
centers for computational science,
including centers for Genomics and
Computational Biology, Molecular
Structure and Design, Computational
Quantum Chemistry, and Simulational
Physics.

The University of Georgia, founded in
1785, is the oldest land-grant university in
the nation and the largest university in the
state of Georgia, with a student body of
31,000. Located in Athens, a charming
and historic university town of 100,000,
approximately sixty-five miles from
metropolitan Atlanta, with mild winters
and warm summers, the University boasts a
major Performing Arts Center and
numerous other cultural amenities.

Applicants should submit a curriculum
vitae, statement of research interests, and
arrange to have four reference letters sent
to:
    Faculty Search Committee
    Department of Computer Science
    The University of Georgia
    Athens, GA 30602-7404

Applicants should indicate the rank for
which they wish to be considered. To be
assured full consideration, applications
should be received by January 15, 2000.
The University of Georgia is an Equal
Opportunity/Affirmative Action employer,
and especially encourages applications from
women and minorities.

University of Houston
Department of Computer Science

The Department of Computer Science
at the University of Houston (UH) seeks
applicants for at least three tenure-track
faculty at any rank. Successful candidates
are expected to participate in teaching at
all levels, carry out independent research,
and strengthen graduate programs in
communications/networks, computational
science, computer graphics/vision,
databases, and scientific/engineering data
visualization. Other areas may be
considered as well. The Department is
experiencing a period of strong growth and
expects this trend to continue. Faculty is
sought to lead in maintaining an innovative
curriculum and to continue or initiate
collaborative research programs.

Applicants should have a Ph.D. in
computer science or a related field and
have a strong interest in both teaching and
leading-edge research. Successful candi-
dates may affiliate with the Texas Center
for Computational and Information
Sciences (TCCIS), the Texas Learning and
Computation Center (TLC2), and/or the
Virtual Environments Research Institute
(VERI). TCCIS, TLC2, VERI, and the
department have a substantial infrastruc-
ture to support both teaching and research
activities (see www.cs.uh.edu,
www.tccis.uh.edu, and www.vetl.uh.edu).
UH, together with Rice University, Baylor
College of Medicine, and Texas A&M
University, operates a regional OC-12
network connected to the vBNS. UH is
also a charter Internet2 member. The
department is affiliated with the Center for
Research in Parallel Computation (Rice)
and both NSF Partnerships for Advanced
Computing Infrastructure. Significant
opportunities for collaborative research
exist within the university and with the
Texas Medical Center, the NASA/Johnson
Space Center, and the region's oil/gas
industry.

UH is an equal opportunity/affirmative
action employer. Minorities, women,
veterans, and those with disabilities are
encouraged to apply.

Applications, including a resume, a list
of publications and funding, and the names
of at least three references (five for senior
positions) should be sent to:
    Faculty Search Committee
    Department of Computer Science
    Mail Stop CSC-3475
    Houston, TX 77204-3475 USA

713-743-3343 (voice)
713-743-3335 (fax)
johnson@cs.uh.edu (email)
Review of applications will begin
immediately and will continue until the
positions are filled.

University of Houston
Department of Electrical and Computer
Engineering

The Department of Electrical and
Computer Engineering at the University of
Houston (UH) invites applications for
tenure track faculty positions in all areas of
computer engineering at the level of
Assistant Professor beginning Aug. 15,
2000. Areas of interest include but are not
limited to VLSI, EDA, and hardware and
software systems. The positions require a
Ph.D. in Electrical or Computer Engineer-
ing, or Computer Science. Responsibilities
include graduate and undergraduate
teaching, supervising MS and Ph.D.
students, and developing an externally
funded research program.

Successful candidates can expect a
highly competitive start-up package and
numerous opportunities for collaboration.
The latter include working with the Texas
Center for Computational and Information
Sciences (with a 64 node SP), the Virtual
Environment Technology Lab (with a 3D
cave), and various Houston institutions
such as Compaq, NASA, and the Texas
Medical Center. In addition, UH, together
with Rice, Baylor College of Medicine, and
Texas A&M, operates a regional OC-12
network connected to the vBNS through
the Texas GigaPoP. UH is also an
Internet2 Charter Member.

Candidates should send a c.v. with the
names, addresses, and phone numbers of at
least three references to:
    Professor Fritz Claydon, Chair
    Department of Electrical and
    Computer Engineering
    University of Houston
    Houston, Texas 77204-4793

The University of Houston is an equal
opportunity/affirmative action employer.
Minorities, women, veterans, and persons
with disabilities are encouraged to apply.

To ensure full consideration, applica-
tions should be received Feb.15, 2000.

University of Idaho
*Distinguished Professor of Information
Security and Assurance*

The University of Idaho invites
nominations and applications from
outstanding candidates with strong
academic credentials to join a well
established resident faculty with growing
undergraduate, graduate and research
programs. The computer science depart-
ment is seeking strong individuals at the
full professor level to be named a distin-
guished professor of information security
and assurance. Qualifications include an
earned Ph.D. in computer science or a
closely related field, teaching experience,
documented research experience and
scholarly activity. Successful candidates are
expected to pursue an active research
program, to teach and to supervise
graduate students. Position subject to
funding approval.

The Department of Computer Science
has both a strong research and education
program and has established itself as an
important research center within the insti-
tution. The department's major research
areas include information assurance,
particularly information security, and the
university has been designated by NSA as
one of only seven national Centers of
Academic Excellence in Information
Assurance Education (http://www.nsa.gov/
isso/).

Letters of nomination and applications
should be sent either in hardcopy or
electronic form to: search@cs.uidaho.edu,
Search Committee, Department of
Computer Science, University of Idaho,
Moscow, ID 83844-1010. Applicants
should include a letter of interest address-
ing the qualifications identified above, a
resume, and the names, addresses and email
addresses of at least three references.
Review of applications will begin January
10th and the position will remain open until
filled. To enrich education through
diversity, the University of Idaho is an
equal opportunity employer. For more
information see http://www.cs.uidaho.edu/
search/.

Professional Opportunities

University of Idaho
Faculty Positions in Information Security and Assurance

The University of Idaho invites nominations and applications from outstanding candidates with strong academic credentials at the assistant or associate level to join a well established resident faculty with growing undergraduate, graduate and research programs. Qualifications include an earned Ph.D. in computer science or a closely related field, teaching experience or potential, documented research experience and scholarly activity. We are specifically looking for candidates with backgrounds in the area of Information Security and Assurance. Successful candidates are expected to pursue an active research program, to teach and to supervise graduate students. Positions subject to funding approval.

The Department of Computer Science has both a strong research and education program and has established itself as an important research center within the institution. The department's major research areas include information assurance, particularly information security, and the university has been designated by NSA as one of only seven national Centers of Academic Excellence in Information Assurance Education (http://www.nsa.gov/isso/).

Letters of nomination and applications should be sent either in hardcopy or electronic form to: search@cs.uidaho.edu, Search Committee, Department of Computer Science, University of Idaho, Moscow, ID 83844-1010. Applicants should include a letter of interest addressing the qualifications identified above, a resume, and the names, addresses and email addresses of at least three references. Review of applications will begin January 10th and the position will remain open until filled. To enrich education through diversity, the University of Idaho is an equal opportunity employer. For more information see http://www.cs.uidaho.edu/search/.

University of Kentucky
Department of Computer Science
Gartner Group Chair in Networking

The University of Kentucky Computer Science Department invites applications for the Gartner Group Chair in Networking. The successful candidate will have made significant scholarly contributions in an area or areas related to computer networks, and possess a research record commensurate with the rank of Full Professor in the department. The holder of the Gartner Group chair is expected to play a leadership role in the University's Center for Advanced Networking, to conduct innovative research, to pursue external funding, and to participate in the department's undergraduate and graduate instructional programs.

The Department has a vibrant network research program supported by funding from DARPA, NSF, and several prominent communication industries. Recent equipment and infrastructure grants from the National Science Foundation support state-of-the-art networking and distributed computing systems research laboratories

both in the CS Department and in the Center for Advanced Networking. A new building, scheduled for completion in late Spring 2000, will serve as the home for the Center for Advanced Networking and provide labs and office space for faculty, students, and visiting researchers from our corporate sponsors.

The Department of Computer Science is part of the College of Engineering at the University of Kentucky and offers BS, MS, and Ph.D. degrees, with approximately 500 undergraduate and 100 graduate students currently enrolled. The department is enjoying a period of dynamic growth, and has been selected by the University and State of Kentucky as a target for substantial investment of resources that will enhance the University's standing as a research university over the next two decades. Networking has been identified as a specific focus area for this funding.

CS faculty are actively involved in research related to networking, distributed operating systems, multimedia systems, graphics, computer vision and image processing, cryptography, artificial intelligence, numerical analysis and theory. External grants and contracts support most of these research efforts.

The University of Kentucky is the flagship graduate degree granting institution in Kentucky, strongly committed to the goal of maintaining research and teaching excellence and high national visibility. The Center for Robotics and Manufacturing Systems and the Center for Computational Sciences, located on campus, offer excellent opportunities for collaboration.

The University of Kentucky is an equal-opportunity employer and especially encourages applications from women and minority candidates.

The beginning date for this appointment is August 15, 2000. Review of the applicants will begin on January 1, 2000, and the search process will continue until the position is filled. Please send curriculum vitae and the names of at least four references to: Faculty Search Committee, c/o Ms. Diane Mier, Department of Computer Science, University of Kentucky, Lexington, KY 40506-0046, diane@cs.engr.uky.edu, Fax: (606) 323-1971

For more information, please, visit http://www.cs.engr.uky.edu.

An Equal Opportunity/Affirmative Action employer

University of Louisiana at Lafayette
(formerly University of Southwestern Louisiana)
The Center for Advanced Computer Studies
Faculty Positions
Graduate Fellowships

Candidates with a strong research record and an earned doctorate in computer science or computer engineering are invited to apply for two tenure track assistant professor positions starting August 21, 2000.

Target areas include computer networks, communications, programming languages, and software engineering. Consideration will also be given to outstanding candidates in other areas. The

candidate must have demonstrated potential to achieve national visibility through accomplishments in research contract and grant funding, publications, teaching and supervising graduate students.

Faculty teach mostly at the graduate-level and offer a continuing research seminar.

State and university funds are available to support research initiation efforts. External grants/contracts from federal and state agencies support the Center's ongoing research (over $4.5M in 1998-99). Salaries are competitive along with excellent support directed towards the attainment of our faculty's professional goals. The Center's colloquium series brings many world known professionals to our campus each year.

FELLOWSHIPS: A number of Ph.D. fellowships, valued at up to $18,000 per year including tuition and most fees, are available. They provide support for up to four years of study towards the Ph.D. in computer science or computer engineering. Eligible candidates must be U.S. citizens or must have earned an MS degree from a U.S. or Canadian university. Recipients also receive preference of low-cost campus housing.

THE CENTER: The Center is primarily a graduate research unit, of 19 faculty, with programs leading to MS/Ph.D. degrees in computer science and computer engineering. Approximately 175 graduate students are enrolled in these programs, including over 55 Ph.D. students. The Center has state-of-the-art research and instructional computing facilities, consisting of several networks of SUN workstations and other high performance platforms. In addition, the Center has dedicated research laboratories in Computer Vision and Pattern Recognition, Intelligent Robotic Systems, Software Research, VLSI Design, Automated Reasoning, Multimedia Applications, Wireless Communication, Mobile Information Technologies, Internet Computing, and NASA Regional Applications Center (RAC). Related university programs include the CSAB accredited undergraduate program in Computer Science Department, and the ABET accredited undergraduate program in Electrical and Computer Engineering Department. Additional information about the Center may be obtained at http://www.cacs.louisiana.edu/.

THE UNIVERSITY: The University of Louisiana at Lafayette is the second largest university in the state of Louisiana, with enrollment of about 17,000 students. It is a Doctoral II university. Additional information may be obtained at http://www.louisiana.edu/. The University is located in Lafayette, the capital of Acadiana, which is characterized by its Cajun music and food, and joie de vivre atmosphere. The city, with its population of over 100,000, provides many recreational and cultural opportunities. Lafayette is located approximately 120 miles west of New Orleans.

The search committee will begin reviewing applications on March 1, 2000, and continue until the position is filled. Candidates should send a letter of intent, curriculum vitae, statement of research and teaching interests, and names, addresses and telephone numbers of at least four references. Additional materials, of the candidate's choice, may also be sent to:

Dr. Magdy A. Bayoumi, Director
The Center for Advanced Computer Studies
University of Louisiana at Lafayette
Lafayette, LA 70504-4330
Tel: 337.482.6284; Fax: 337.482.5791
The University is an Affirmative Action/Equal Opportunity Employer.

University of Massachusetts, Amherst
Department of Computer Science
Faculty and Research Scientist Positions

We invite applications for tenure-track faculty positions at the assistant professor level. Applicants must have a Ph.D. in Computer Science or related area and should show evidence of exceptional research promise. Our primary interest is in candidates whose research interests are in artificial intelligence and/or in systems areas (e.g., architecture, language implementation, embedded systems, and geographically distributed, heterogeneous, and configurable computing), although candidates in others areas will also be

considered. We particularly welcome candidates who would thrive in a collaborative environment in which research projects often span several research groups.

The Department of Computer Science has thirty-nine tenure and research track faculty and one hundred and sixty Ph.D. students with broad interdisciplinary research interests. The department has just moved into a new state-of-the-art facility. In addition to the positions advertised here, we expect to have more openings in subsequent years. Please see http://www.cs.umass.edu for more information. Applications should reference search R06811.

We also invite applications for Research Scientist (search R06810), Postdoctoral Research Associate (search R06812) and Research Fellow (also search R06812) positions in all areas of Computer Science. Applicants should have a Ph.D. in Computer Science or related area (or an M.S. plus equivalent experience), and should show evidence of exceptional research promise. These positions are grant-funded; re-appointments will be contingent upon continued funding.

To apply, send a letter with your vitae and names of at least three references to:
Search (fill in number from above)
c/o Chair of Faculty Recruiting
Department of Computer Science
University of Massachusetts
Amherst, MA 01003-4610
Review of applications begins January 1, 2000, and will continue until available positions are filled. Salary commensurate with education and experience; comprehensive benefits package. Positions available subject to funding. The University of Massachusetts is an Affirmative Action/Equal Opportunity employer. Women and members of minority groups are encouraged to apply.

University of Miami
College of Arts and Sciences
Computer Science

Applications and nominations are invited to fill five tenure-track faculty positions for a proposed new Department of Computer Science beginning in Fall 2000. Minimum qualifications include Ph.D. in Computer Science or related field. Responsibilities will include teaching at the undergraduate and graduate levels, mentoring graduate students, as well as scholarly research and publication. Rank and salary commensurate with qualifications. Successful applicants will have college-level teaching experience, demonstrated research potential appropriate to a Group I research university, and the desire to shape the future of computer science at the University of Miami. Send letter of application or nomination along with current curriculum vitae, including the names of three references to:

Victor Milenkovic, Chairperson
Computer Science Faculty Search Committee
Department of Mathematics and Computer Science
University of Miami
P.O. Box 249085
Coral Gables, Florida 33124-4250
Or via e-mail to cssearch@cs.miami.edu; include URL of supporting material.

Review of applications will begin immediately and continue until positions are filled. For further information, visit http://www.cs.miami.edu. Women and minorities are encouraged to apply.

The University is an Affirmative Action/Equal Opportunity Employer.

University of Missouri-Columbia
Department of Computer Engineering & Computer Science

Under the IT Mission Enhancement Program, the Department of Computer Engineering & Computer Science of the University of Missouri-Columbia is recruiting seven new faculty positions. These positions will be at the assistant professor level in human-computer interface, natural language processing, medical imaging, spatial reasoning, digital libraries, social computing, and computer security/cryptography.

These positions will be located in the department, but are required to interact with various departments and research projects in applied IT areas. The Depart-

Professional Opportunities

ment of Computer Engineering & Computer Science has established several outstanding federally and industrially funded research programs. The applied IT areas to be recruited are targeted at existing strengths of the department and ongoing collaboration with other colleges.

Candidates must have an excellent research record and potential, strong interest in collaboration, and teaching capability of undergraduate and graduate computer science courses. Please send a resume, a statement of research and teaching plan, and three references to: Faculty Search Committee, Department of Computer Engineering & Computer Science, University of Missouri-Columbia, Room 201 EBW, Columbia, MO 65211-2060. Immigration status of non U.S. citizens should be stated. The University of Missouri is an Affirmative Action/Equal Opportunity/ ADA Institution.

University of North Dakota
The John D Odegard School of Aerospace Sciences at UND in Grand Forks ND, is in search of candidates for:
Scientific Computing Research Associate

Lead the design and implementation of data acquisition, archive, distribution system for satellite imagery and value-added datasets. Integrate an Internet based solution with regional, national networks. Design & operate advanced RS/GIS lab. Research trends, standards, tools; implement new technologies; perform sys admin.

Qualifications: BS reqd, advanced pref in CS/EE/relevant sci/tech. Pgmg skills/exp. in devt & impl. of data acq & distr. systems. Knowledge of hi-perf. computing & networks, industry trends, available technologies. Sys admin skills for heterogeneous systems (UNIX, Linux, NT, Windows, Mac) highly desirable.

This is an outstanding opportunity to work with scientific research group in state-of-the-art facilities, which include NOAA ground stations, RS/GIS labs, Cray J90. To apply, see http://www.umac.org, or contact Mr. Gary Ebel, Odegard School of Aerospace Sciences, Box 9007, Grand Forks, ND 58202-9007, (701) 777-2913, (701) 777-3016 fax, ebel@aero.und.edu.

UND is an Equal Opportunity/ Affirmative Action Employer.

University of North Texas
Department of Computer Sciences

The Department of Computer Sciences at the University of North Texas invites applications and nominations for the Chair position starting Fall 2000. A Ph.D. in Computer Science or a related field, a strong commitment to excellence in undergraduate and graduate teaching, well-established research program, successful grant activities as well as leadership skills are required. Candidates for this position must be qualified for an appointment as a Full Professor. Prior administrative experience is preferred. Candidates are expected to develop a long term relationship with the area industries and bring visibility to the department both internally and externally.

With over 800 regular faculty and over 26,000 students, one-third graduate students, UNT is one of the largest state-supported universities in Texas. Located 40 miles north of the Dallas-Fort Worth metroplex and surrounded by high-tech industries, Denton combines a small town atmosphere with the advantages of a major metropolitan area. Opportunities for consulting and joint research with industry are excellent.

The department currently consists of 16 faculty, and offers BS/MS/PhD programs to approximately 800 undergraduate majors and 150 graduate students. Current faculty research interests include algorithms, architecture, artificial intelligence, data compression, databases, distributed computing, graph theory, neural networks, high-speed networking, scientific computing, simulation, and VLSI Persons interested should submit a curriculum vitae including the names, addresses, telephone numbers and e-mail addresses of at least five references, to:
Chair Search Committee
Department of Computer Sciences
University of North Texas
P.O. Box 311366
Denton, TX 76203-1366
Tel: (940) 565-2767
FAX: (940) 565-2799

For E-mail inquiry, please contact search@cs.unt.edu.

Screening of applications will start immediately and will continue until the search is complete.

UNT is an Affirmative Action/Equal Opportunity Employer and encourages applications/nominations from women and members of minority groups.

University of Pennsylvania
Department of Computer and Information Science
Lecturer Positions

The University of Pennsylvania invites applicants for the position of Lecturer in Computer Science, to start July 1, 2000. Lecturer duties include undergraduate and masters level teaching. The position is for one year and is renewable annually up to three years.

Successful applicants will find Penn to be a stimulating environment conducive to professional growth. In Spring 2000, groundbreaking will take place on a new $15 Million Computer Science Building. The Department of Computer and Information Science is embarking on a strategic plan for growth over the next five years. We seek to expand and broaden both the applied and theoretical sides of our research and teaching program, building on existing strengths in algorithms and computational biology, computer graphics and animation, computer vision and robotics, databases, logic and computation, natural language processing, networks and distributed systems, programming languages, and real time systems.

The University of Pennsylvania is an Ivy League University located near the center of Philadelphia the 5th largest city in the United States. Within walking distance of each other are the Schools of Arts and Sciences, Engineering, Medicine, Nursing, Law, Business and Fine Arts. The University campus and its surroundings in Philadelphia benefit from a rich diversity of cultural opportunities as well as attractive urban and suburban residential neighborhoods.

To apply, please complete the form located on the Faculty Recruitment Website at: http://www.cis.upenn.edu/positions/faculty_application.html.

Electronic applications are strongly preferred, but hard-copy applications (including the names of at least three references) may alternatively be sent to:
Chair, Lecturer Search Committee
Department of Computer and Information Science
School of Engineering and Applied Science
University of Pennsylvania
Philadelphia, PA 19104-6389
Applications should be received by January 15, 2000 to be assured full consideration. Applications will be accepted until the position is filled. Questions can be addressed to faculty-search@central.cis.upenn.edu.

The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. The Penn CIS Faculty is sensitive to "two body problems" and would be pleased to assist with opportunities in the Philadelphia region.

University of Pennsylvania
Department of Computer and Information Science
Faculty Positions

The University of Pennsylvania invites applicants for tenure-track Appointments in both experimental and theoretical computer science to start July 1, 2000. Faculty duties include both research and undergraduate and graduate teaching.

Successful applicants will find Penn to be a stimulating environment conducive to professional growth. In Spring 2000, groundbreaking will take place on a new $15 Million Computer Science Building. The Department of Computer and Information Science is embarking on a strategic plan to add a significant number of tenure-track faculty over the next five years. We seek to expand and broaden both the applied and theoretical sides of our research and teaching program, building on existing strengths in algorithms and computational biology, computer graphics and animation, computer vision and robotics, databases, logic and

computation, natural language processing, networks and distributed systems, software systems, programming languages, and real time systems.

The University of Pennsylvania is an Ivy League University located near the center of Philadelphia the 5th largest city in the US. Within walking distance of each other are its Schools of Arts and Sciences, Engineering, Medicine, Nursing, Law, Business and Fine Arts. The University campus and its surroundings in Philadelphia benefit from a rich diversity of cultural opportunities as well as attractive urban and suburban residential neighborhoods.

To apply, please complete the form located on the Faculty Recruitment Web Site at: http://www.cis.upenn.edu/positions/faculty_application.html.

Electronic applications are strongly preferred, but hard-copy applications (including the names of at least three references) may alternatively be sent to:
Chair, Faculty Search Committee
Department of Computer and Information Science
School of Engineering and Applied Science
University of Pennsylvania
Philadelphia, PA 19104-6389
Applications should be received by January 15, 2000 to be assured full consideration.

Applications will be accepted until the position is filled.

Questions can be addressed to faculty-search@central.cis.upenn.edu.

The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

The Penn CIS Faculty is sensitive to "two body problems" and would be pleased to assist with opportunities in the Philadelphia region.

University of Pittsburgh
Department of Computer Science

The Department of Computer Science at the University of Pittsburgh invites applications for two tenure-track positions at the rank of Assistant Professor and one non-tenure-track position at the rank of Lecturer.The three positions would begin with the Fall Term, 2000.

Outstanding candidates are sought in (1) the area of artificial intelligence for one of the Assistant Professor positions and (2) the area of programming languages and analysis for the second Assistant Professor position. Responsibilities include research, supervision of graduate student research (Ph.D. and MS), and graduate and undergraduate teaching. Candidates should have a Ph.D. in Computer Science and demonstrate exceptional research potential and teaching ability.

The Lecturer position is to be filled by an outstanding teacher. Besides teaching of undergraduate courses, responsibilities include direction of the Undergraduate Programs Office. Candidates for this position should preferably have a Ph.D., although applicants with an MS in Computer Science and with other suitable qualifications in advising of students and in curriculum design and management will be considered.

The Department currently has 22 full-time faculty members and provides a stimulating environment for research and teaching that results in strong graduate and undergraduate programs. In particular, the Department already has strengths in artificial intelligence and in programming languages. Other areas of strength in the Department include algorithms & theory, parallel & distributed systems, and software systems & engineering. Departmental resources include extensive computing facilities of over 250 workstations and personal computers with multimedia capabilities and specialized networks and devices. Faculty members also have network access to additional high performance computing platforms provided by the general computing facilities of the University as well as by the Pittsburgh Supercomputer Center (of which the University of Pittsburgh is a founding member). For further information about the Department please see http://www.cs.pitt.edu.

Applications should include a curriculum vitae, identification of which of the above-described three positions is being sought, a statement of research and teaching interests, and names and addresses

of at least three references. They should be sent to: Professor Siegfried Treu, Chair, Department of Computer Science, University of Pittsburgh, Pittsburgh, PA 15260. Please direct your inquiries to faculty-search@cs.pitt.edu. To ensure full consideration, applications must be received by January 28, 2000.

The University of Pittsburgh is an affirmative action, equal opportunity employer. Women and members of minority groups who are underrepresented in academia are especially encouraged to apply.

University of Puget Sound
Department of Mathematics and Computer Science

University of Puget Sound, Department of Mathematics and Computer Science. Full-time, tenure-line Assistant Professor; begins Fall Term 2000. Teach junior/senior-level courses in architecture and operating systems and possibly other areas, along with introductory computer science courses. Three courses/semester. Requires Ph.D. (ABD considered) in computer science or a closely related field, and commitment to undergraduate teaching and liberal arts education. Preference will be given to candidates whose research interests can incorporate or generate undergraduate research projects. Interested individuals are encouraged to submit application materials postmarked no later than February 7, 2000 to ensure consideration. Send interest letter, curriculum vitae and three reference letters to: Computer Science Search, University of Puget Sound, P.O. Box 7297, Tacoma, WA 98407. An Equal Opportunity, Affirmative Action Educator/Employer.

University of Richmond
Mathematics & Computer Science Department

Applications are invited for a new tenure track position at the Assistant Professor level beginning Fall 2000. A Ph.D. in Computer Science is required. Candidates should have a commitment to excellence in undergraduate teaching together with the ability to maintain an active research program, preferably involving undergraduate students.

The University of Richmond is a predominately undergraduate, highly selective, private institution enrolling 3,500 students in schools of Arts and Sciences, Business, Leadership Studies, Law, and Continuing Studies.

Applicants should provide a current curriculum vitae, a statement detailing teaching philosophy and research interests, and copies of graduate and undergraduate transcripts to Dr. Lewis Barnett, Math & CS Dept., University of Richmond, VA 23173. Applicants should also arrange for three letters of recommendation to be sent to Dr. Barnett. Electronic submissions are acceptable in Postscript, PDF, or common word processor formats. (Send to lbarnett@richmond.edu)

Additional information may be found on the Web at http://www.mathcs.richmond.edu/csjobs/

Consideration of completed applications will begin immediately and continue until the position is filled. Applications completed by mid-January are guaranteed to receive full consideration. The University of Richmond is an Equal Opportunity Employer. Women and minorities are especially encouraged to apply.

University of South Carolina
Department of Computer Science
Assistant Professor of Computer Science

Applications are invited for at least one tenure-track position in computational science, one of two focus areas of development for the Department of Computer Science. Representative areas in computational science include bioinformatics, visualization, scientific data analysis, modeling, and simulation. The other departmental focus area for growth is forensic computing. Candidates should have a doctorate in Computer Science or a related discipline.

The Department has about 500 undergraduate majors and more than 100 graduate students and offers BS, MS, and Ph.D. degrees. The University of South Carolina has an enrollment of more than

Professional Opportunities

26,000 students and is the comprehensive graduate institution in South Carolina. Columbia is the state capital and is the technology center of the state. For more information, see http://www.cs.sc.edu.

Applicants should submit a curriculum vitae, letters preferred, along with the names and addresses of three references to: Search Committee, Department of Computer Science, University of South Carolina, Columbia, SC 29208. Applicants will be accepted until positions are filled. Foreign nationals should indicate current U.S. immigration status.

The University of South Carolina is an Equal Opportunity/Affirmative Action employer.

University of Southern California

University of Southern California COMPUTER SCIENCE (http://www. usc.edu/dept/cs/) invites applications for tenure-track positions from outstanding candidates. Areas include Embedded/Real Time Operating Systems; Databases and Information Management; Genomic Algorithms/DNA Computation; Neural Computation/ Neuroinformatics; and Machine Learning. Exceptional candidates in other areas may also be considered. Please send a comprehensive resume, a list of references, and a statement of goals to: Paulina Tagle, Computer Science, USC SAL 300, Los Angeles, CA 90089-0781 (paulina@pollux.usc.edu). USC is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

University of Southern California
Department of Electrical Engineering-Systems

The Department of Electrical Engineering-Systems of the University of Southern California invites applications from outstanding candidates for tenure-track positions at all faculty levels. Areas of interest to the department are circuit design and VLSI, communications, computer/communication networks, computer engineering, signal processing, and controls with biomedical applications.

Exceptional candidates in all areas will be considered. Applications must include a comprehensive resume, a list of three to five professional references, and a letter of interest indicating clearly the position being sought. The applicant is responsible for soliciting the reference letters to be sent directly to the address below. Senior level applicants should have demonstrated leadership ability in building a strong research program and have a distinguished teaching and research record. Please send material to:
Chairman, EE-Systems Search
Committee
USC EEB 100
Los Angeles, CA 90089-2560
USC is an Equal Opportunity/ Affirmative Action Employer and encourages applications from women and minorities.

The University of Tennessee
Department of Computer Science

The Department of Computer Science seeks to fill a tenure-track faculty position at the rank of Assistant Professor beginning Fall 2000. Applicants should have a strong interest in research, preferably in the area of distributed databases or software engineering, but all major fields in computer science may be considered. Applicants must have a doctoral degree in computer science or a related area.

The Department has numerous, fully networked workstations (SUN, IBM, SGI, DEC) for students and faculty. In addition, the department has parallel computers of various architectures available in-house, as well as an ATM-connected cluster of high-performance workstations and two Myrinet-connected clusters of Pentium processors. NSF has just awarded the department a $2 million grant to establish a campus-wide computational grid for research on middleware and applications. The department is or has been a member of several national consortia including the NSF Science and Technology Center for Research in Parallel Computing, the DOE Partnership in Computational Science, and NSF's National Partnership for Advanced Computational Infrastructure. Faculty members collaborate with scientists at the Oak Ridge National Laboratory and have access to their facilities.

Please respond to search@cs.utk.edu. The mailing address is Search Coordinator, Department of Computer Science, 107 Ayres Hall, The University of Tennessee, Knoxville, TN 37996-1301. Additional information about the department is available from URL http://www.cs.utk.edu.

UTK is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services.

University of Texas at Austin
Department of Computer Sciences

The Department of Computer Sciences of the University of Texas at Austin invites applications for tenure-track positions. We are particularly interested in candidates at the assistant professor level in the areas of systems, intelligent robotics, or natural language, but excellent candidates in all areas and at all levels will be seriously considered. All tenure-track positions require a Ph.D. or equivalent degree in Computer Science or a related area at the time of employment. Successful candidates are expected to pursue an active research program, perform both graduate and undergraduate teaching, and supervise graduate students.

The department is ranked among the top ten computer science departments in the country. It has thirty-six tenure-track faculty members across all areas of computer science and participates in the University's Computational and Applied Mathematics interdisciplinary program. Austin, the capital of Texas, is located on the Colorado River, at the edge of the Texas Hill Country, and is famous for its live music and outdoor recreation. Austin is also a center for high-technology industry, including companies such as IBM, Dell, Motorola, Sematech, AMD, MCC, Tivoli, Trilogy, Dejanews, and Origin Systems. For more information please see the department webpage, http://www.cs.utexas.edu/.

For instructions on submitting an application, please see: http://www.cs.utexas.edu/faculty-search or send e-mail to faculty-search@cs.utexas.edu. Inquiries about your application should also be directed to faculty-search@cs.utexas.edu

Evaluation of applications will be done throughout the academic year until available positions are filled. Candidates are encouraged to apply early; applications received after January 14, 2000 will only be considered if positions remain available. Women and minority candidates are especially encouraged to apply. The University of Texas is an Equal Opportunity Employer.

University of Toronto
Department of Electrical and Computer Engineering
Endowed Chair and Faculty Positions

We are proud to announce the Jeff Skoll Endowment and the establishment of a new Endowed Chair in Computer Networks and Innovation. The Faculty of Applied Science and Engineering and the Rotman School of Management are also jointly introducing the Jeff Skoll B.A.Sc./MBA program, which enables students to combine an MBA degree with their engineering degree.

The Department is undergoing a major expansion and is inviting applications for faculty positions as described below.
Endowed Chair in Computer Networks and Innovation

The mandate of the Chair is to provide leadership in building a first-class academic environment for research and teaching in their respective fields, and in promoting entrepreneurship and business skills among students.

Applications are invited from individuals with an outstanding record of research and who have a strong interest in and commitment to teaching at the undergraduate and graduate levels. Areas of interest for the Networks Chair include all aspects of communications networks, architecture, management, protocols, switching, and applications.
Assistant Professor Positions in Software

As part of the Department's expansion, computer software is one of the areas targeted for substantial growth. Applications are invited for tenure-stream Assistant Professor positions in all aspects of computer software, including software engineering, operating systems, compilers, databases, and mobile computing. Experience in designing, building, and testing large software systems will be a definite asset.
Assistant Professor Positions in Architecture and Hardware and Systems

Applications are also invited for tenure-stream Assistant Professor positions in all other areas of computer engineering, including but not limited to architecture, distributed systems, embedded systems, VLSI systems, and multimedia.

The Department of Electrical and Computer Engineering at the University of Toronto offers an excellent environment for research and education at the graduate and undergraduate levels, and consistently ranks among the top 10 departments in its field in North America. It attracts outstanding students, has excellent research facilities, and is ideally located in the middle of a vibrant metropolitan city. Additional information can be found on the departmental webpage www.ece.toronto.edu.

All positions involve research and teaching at the undergraduate and graduate levels. A Ph.D. degree is required, normally in Electrical Engineering, Computer Engineering, or Computer Science.

Applicants should send a curriculum vitae and a list of at least three references to: Professor Safwat G. Zaky, Chair, Department of Electrical and Computer Engineering, University of Toronto, 10 King's College Road, Toronto, Ontario, M5S 3G4, Canada. The search will continue until the positions are filled. To ensure consideration, please respond by November 30, 1999.

The University of Toronto is committed to employment equity and encourages applications from women, visible minorities, aboriginal people and physically challenged persons. Qualified Canadians and non-Canadians are encouraged to apply.

University of Toronto
Department of Computer Science

The Department of Computer Science invites applications for several tenure-track and tenured positions at all levels, and in all three campuses of the University of Toronto: St. George (downtown), Scarborough (East) and Erindale (West). The department is an international leader in Computer Science research and education, and is currently undergoing a significant expansion in faculty and research resources.

Excellence in research and teaching is of prime importance to us. We will consider applicants in a wide range of areas within computer science; we are, however, especially interested in computer networks, computer architecture, and all aspects of software engineering and systems, including operating systems, distributed systems, programming systems, database systems, computer graphics and human-computer interaction. We are also interested in the interactions of computer science with other disciplines, especially biology, medicine and finance. Salaries are competitive with our North American peers and will be determined according to the successful applicants' experience and qualifications.

Toronto is a vibrant and cosmopolitan city, one of the most desirable in the world in which to work and live. It is also a major centre for advanced technology and the computer industry with which the department enjoys strong interactions.

Applications, which should include a curriculum vitae, a list of publications, and the names and addresses of at least three references, and may additionally include a research and teaching statement and other supporting documentation, should be sent by email (text, postscript or PDF only, please) to faculty-search@cs.toronto.edu or, if that is not possible, by post to
Faculty Recruiting Committee Chair
Department of Computer Science
University of Toronto
Toronto, Ontario M5S 3G4 Canada
The deadline for applications is January 31, 2000. We will consider applications as they arrive and we encourage early applications.

The University of Toronto is committed to employment equity and especially encourages applications from women, members of visible minorities, native persons and persons with disabilities. Qualified Canadians and non-Canadians are encouraged to apply.

University of Toronto
Department of Computer Science
Department of Electrical and Computer Engineering
Bell Canada Endowed Chair in Software Engineering

The Departments of Computer Science and Electrical and Computer Engineering at the University of Toronto invite applications for the Bell Canada Endowed Chair in Software Engineering. The mandate for the holder of this chair is to provide leadership in building a first-class academic environment for research and teaching in software engineering and systems. This chair is part of a larger joint initiative between Bell Canada and the University of Toronto that encompasses three additional endowed chairs in related fields and will receive substantial research funding from Bell Canada and the Government of Ontario.

We seek applications from individuals with an outstanding record of research who also have a strong interest in and commitment to teaching at the undergraduate and graduate levels. The chair is open to all areas of research in software systems including (but not limited to) software engineering, operating systems, distributed systems, and programming systems.

Both departments are international leaders in teaching and research in their respective disciplines. Toronto is a vibrant and cosmopolitan city, one of the most desirable in the world in which to work and live. It is also a major centre for advanced technology and the computer industry with which both departments enjoy strong interactions.

Applications, which should include a curriculum vitae, a list of publications, and the names and addresses of at least three references, and may additionally include a research and teaching statement and other supporting documentation, should be sent by email (text, postscript or PDF only, please) to joint-chair-search@cs.toronto.edu or, if that is not possible, by post to
Joint Chair Search Committee
c/o Mei Sum Kwan
Department of Electrical and
Computer Engineering
University of Toronto
10 King's College Road
Toronto, Ontario M5S 3G4
Canada
The search will continue until the position is filled. To ensure consideration, please respond by January 31, 2000.

The University of Toronto is committed to employment equity and especially encourages applications from women, members of visible minorities, native persons and persons with disabilities. Qualified Canadians and non-Canadians are encouraged to apply.

University of Utah
Department of Computer Science

The University of Utah's Department of Computer Science seeks applicants for tenure-track faculty positions at either the Assistant or Associate Professor level. The department places a strong emphasis on interdisciplinary, multi-investigator research activities addressing large-scale problems of significant impact. Both research areas and course offerings benefit from the quality and breadth of our faculty and emphasize a balance of theoretical foundations and practical engineering.

Our recruiting emphasis is in systems, networking, languages, and artificial intelligence, but we will consider strong candidates in all areas of computer science. Applicants should have earned a Ph.D. in Computer Science or a closely related field.

The University of Utah is located in Salt Lake City, the hub of a large metropolitan area with excellent cultural facilities and unsurpassed opportunities for outdoor

Professional Opportunities

recreation only a few minutes drive away. Additional information about the department can be found at http://www.cs.utah.edu.

Please send curriculum vitae, a research goals statement, a teaching goals statement, and names and addresses of at least four references to: Faculty Recruiting Committee, c/o Shawn Darby, Department of Computer Science, 50 So. Central Campus Drive, Rm 3190 MEB, University of Utah, Salt Lake City, UT 84112-9205.

The University of Utah is an Equal Opportunity/Affirmative Action Employer and encourages nominations and applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

University of Washington
Department of Computer Science & Engineering
Several Faculty Openings

The University of Washington's Department of Computer Science & Engineering has several open positions in a wide variety of technical areas in both Computer Science and Computer Engineering, and at all professional levels.

Most CS&E research areas are of interest, but especially those that broaden the department in emerging areas or that strengthen existing areas that are below critical mass. A moderate teaching load allows time for quality research and close involvement with students. We expect candidates to have a strong commitment both to research and to teaching.

The department is primarily seeking individuals at the Assistant Professor rank; however, under unusual circumstances and commensurate with the qualifications of the individuals, appointments may be made at the rank of Associate Professor or Professor. We are also seeking non-tenured Research Assistant Professors and Lecturers. Applicants for the tenure-track and research positions must have earned a doctorate by the date of appointment; those for the lecturer position must have earned at least a Master's degree by the date of appointment.

Information about the department can be found on the web at www.cs.washington.edu. Applications received before March 1, 2000 will be given priority consideration. Please send a letter of application, a resume, statement of research and teaching interests, and the names of four references to:

Faculty Recruiting Committee
Computer Science & Engineering
University of Washington
Box 352350
Seattle, WA 98195-2350

The University of Washington is building a culturally diverse faculty and encourages applications from female and minority candidates. AA/EOE.

University of Washington, Bothell
Computing and Software Systems
http://www.bothell.washington.edu/
Assistant, Associate & Full Professor Positions

Innovative and *growing* computer science program has multiple openings for tenured/tenure-track faculty. The Computing & Software Systems (CSS) program at the University of Washington, Bothell (UWB) offers opportunities to:
● Collaborate with local high-tech companies on applied research projects;
● Teach state-of-the-art, interdisciplinary computing courses;
● Expand program options for undergraduates (e.g., embedded systems, graphics design); and
● Participate in designing a new Master's degree program in CSS.

Candidates with at least three years of research, teaching and/or related work experience in the following areas are encouraged to apply:

Object-oriented programming, software engineering, networking, HW/SW architecture, embedded systems, operating systems, HCI, database design/development, process reengineering, technology management, artificial intelligence, electronic commerce and other computing-related disciplines.

The CSS Program, in its fourth year of existence, emphasizes and rewards interdisciplinary scholarship and a balance between education, research and service.

The undergraduate degree program stresses development of competencies associated with life-long learning, critical thinking, problem-solving, communication and management — as well as contemporary programming and technical skills. Situated in the midst of the Northwest's technology corridor, UWB offers opportunities for collaborative work with industry. The University of Washington, Bothell is part of the three-campus University of Washington — one of the premier institutions of higher education in the US. UWB will also enjoy relocating to our brand-new, permanent campus prior to the next academic year.

QUALIFICATIONS AND DUTIES

Candidates will have a doctorate (required prior to date of appointment) in a relevant field. Successful candidates will be expected to teach a variety of courses, conduct scholarly research, and contribute to program and institution building in this innovative, interdisciplinary environment. Faculty are also expected to advise students during their internship with industry/community partners. A determination of rank and tenure at the assistant, associate or full professor will be commensurate with the qualifications of the individual.

APPLICATION INFORMATION

Please send a cover letter, statement of teaching philosophy, evidence of teaching effectiveness, sample course syllabus, statement of research interests and vita. Also, please arrange for three letters of reference to be sent to the CSS Search Committee.

The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The positions will remain open until they are filled; however, potential candidates are urged to submit their applications as soon as possible for immediate review.

Send applications and/or inquiries to: CSS Search Committee, University of Washington, 22011 26th Avenue SE, Bothell, WA 98021-4900

The University of Washington is an Equal Opportunity/Affirmative Action Employer

University of Wisconsin-Milwaukee
Department of Electrical Engineering and Computer Science

The Department of Electrical Engineering and Computer Science at the University of Wisconsin-Milwaukee is seeking qualified candidates to fill several tenure-track faculty positions at the assistant professor level in computer graphics, networks, and software and systems. Candidates should have outstanding promise and a strong commitment to both research and teaching. Exceptional candidates in other areas of computer science consistent with the needs of the department, as well as outstanding senior candidates, may also be considered.

The Department offers BS, MS and Ph.D. programs, and current faculty research interests include artificial intelligence, computational geometry, computer graphics, cryptography and data security, distributed systems, and programming languages and software systems. We are committed to continuing the development of computer science at UWM and establishing it as an outstanding program. UWM is located in a pleasant residential neighborhood near the shores of Lake Michigan. Additional information on the Department and UWM may be obtained from http://www.cs.uwm.edu.

Applicants should send a curriculum vitae along with the names of at least three references to: Professor Ichiro Suzuki, Department of Electrical Engineering and Computer Science, University of Wisconsin-Milwaukee, P.O. Box 784, Milwaukee, WI 53201. E-mail: suzuki@cs.uwm.edu, Tel. 414-229-3718. Applications must be postmarked or E-mailed by February 1, 2000.

UWM is an Equal Opportunity/Affirmative Action Employer. The names of those who have not requested that their identities be withheld and the names of all finalists will be released on request.

University of Wisconsin-Madison
Computer Sciences Department
Faculty Positions

The Computer Sciences Department at the University of Wisconsin-Madison has

embarked on a multi-year effort to significantly enhance the strengths of the department. As a part of this endeavor, we hired four new faculty for the 1999-2000 academic year, and have multiple faculty positions available through August 2000.

We invite applications from outstanding candidates in all areas of Computer Science. Applications from candidates in the areas of computer graphics and networking are especially encouraged. Applicants should have a Ph.D. in Computer Science or in a closely related field with demonstrated strength in scholarly research. The positions are at the Assistant Professor level, but exceptional candidates at the senior (Associate or Full Professor) level will also be considered. Successful candidates will be expected to teach at the undergraduate and graduate level, in addition to establishing a significant and highly-visible research program. Further information about the department may be found at http://www.cs.wisc.edu/.

Applicants should submit a curriculum vitae, statement of research objectives, sample publications, and arrange for at least three letters of reference to be sent directly to:

Chair, Faculty Recruiting Committee
Computer Sciences Department
University of Wisconsin-Madison
1210 West Dayton St.
Madison, WI 53706

Applicants are encouraged to submit their applications as soon as possible, but no later than February 15, 2000.

The University is an Equal Opportunity/Affirmative Action employer and encourages women and minorities to apply. Unless confidentiality is requested in writing, information regarding the applicants must be released on request.

Finalists cannot be guaranteed confidentiality.

Vanderbilt University
Department of Electrical Engineering and Computer Science
Nashville, TN

We invite applications for a tenure-track faculty position at all levels. Our primary target area is computer systems, including networks, operating systems, distributed computing, real-time and embedded systems, software engineering, and databases. However, excellent applications in all areas of computer science and engineering will be considered. Applicants should have a Doctorate or equivalent in Computer Science, Computer Engineering, or a closely related discipline. Candidates are expected to develop a strong research program and maintain excellence in teaching.

The EECS department currently has thirty-one faculty members with a broad range of research interests. The department enrolls approximately 400 undergraduate students in three accredited programs: computer engineering, computer science, and electrical engineering, and about 200 graduate students in electrical engineering, computer science, and the interdisciplinary program in computer engineering. In addition, three research centers associated with the department: the Institute for Software Integrated Systems (ISIS), Center for Asynchronous Learning Networks (ALN), and the Center for Intelligent Systems (CIS) encourage and provide ample opportunities for innovative interdisciplinary research. Vanderbilt University is a founding institute for the Internet2 project. For more information about the department and the school, please visit our website at http://www.vuse.vanderbilt.edu.

Applicants should send a resume, a complete publication list, copies of three representative publications, and the names, addresses (postal and e-mail) and telephone numbers of five references. In addition, each applicant is required to submit a one page professional statement describing his or her goals in research and teaching. The application package should be mailed to the Faculty Search Committee, Department of Electrical Engineering and Computer Science, Vanderbilt University, Box 1679 Sta B, Nashville, TN, 37235-1840. Electronic submissions and inquiries may be made to eecs-search@vuse.vanderbilt.edu. Review of applications will begin December 1, 1999, and continue until the position is filled.

Vanderbilt University is an Equal Opportunity Employer.

Washington State University
Director, School of EECS

Director-The School of Electrical Engineering and Computer Science at Washington State University is soliciting applications and nominations for the position of Director of the School. Candidates must (1) possess a Ph.D. degree in electrical engineering, computer engineering, computer science or a related discipline, (2) demonstrate outstanding leadership, (3) have an international research reputation, (4) have a clear vision of the growth and development needed to enhance excellence in both teaching and research, (5) possess good communication skills and the ability to motivate people, (6) aggressively promote the school to universities, industry, and government, (7) be committed to the promotion of faculty research activities, and (8) take the lead in the continued development of a diverse work force.

The School of Electrical Engineering and Computer Science is the largest of five engineering departments in the College of Engineering and Architecture at Washington State University. The School is represented on WSU's four campuses: the main campus at Pullman and three branches at Richland, Spokane and Vancouver. It presently has 40 full-time faculty and is expected to grow to 44 in the near future. Student enrollment consists of 695 undergraduates and 120 graduates. It awards B.S., M.S. and Ph.D. degrees in electrical engineering and computer science, B.S. in computer engineering and a B.A. in computer science. Currently the annual external research budget is over $4 million with half the funding coming from the federal government and the remainder from other sources. The total school budget exceeds $8.75 million per year. Major areas of research include energy systems, solid state electronics, communications and signal processing, electromagnetics, control systems, embedded systems, computer engineering, algorithmics, graphics, distributed systems, knowledge discovery and databases, and computer networks. The School has endowed chair positions in software engineering and computer engineering, and various distinguished professorships. Two NSF IUCRC centers are housed in EECS, one for Design of Analog-Digital Integrated Circuits and another for Power Engineering. In addition, there are several other strong research groups in electrical engineering and computer science.

Washington State University was established in 1891 as a land grant college located in the beautiful rolling hills of Eastern Washington. It is classified as a Carnegie Research I University and is one of the largest residential universities west of the Mississippi with an enrollment of over 18,000 at the main campus in Pullman. Pullman's small town atmosphere is enriched by the academic and cultural offerings of the university. It has an outstanding public school system, and recreational and outdoor activities are available year-round.

Applications and nominations should be sent to EECS Director Search Committee, School of Electrical Engineering and Computer Science, Washington State University, Pullman, WA 99164-2752. Screening of applicants will begin February 15, 2000 and continue until the position is filled.

Washington State University is an Equal Opportunity/Affirmative Action educator and employer

Washington University in Saint Louis
Department of Computer Science

Applications are invited for tenure-track faculty positions at the Assistant, Associate and Full Professor levels. Applicants should hold a doctorate in Computer Science or a closely related field, have a record of accomplishment in research, and demonstrate a strong commitment to teaching.

Washington University is a leading private national university recognized for its world class intellectual contributions (20 Nobel Prize Laureates have been associated with the University), its

Vanderbilt University is an Equal Opportunity Employer.

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exceptional resources (an endowment of $2.8 billion, among the largest in the nation), and its location in the midst of a delightful residential community which places much value on education and culture. With annual external research funding in the range of $6.3 million, Computer Science is emerging as one of the preeminent departments in the University and the School of Engineering and Applied Science. Over the next several years, the Department plans to expand its size from 16 to 20 regular faculty. This aggressive growth pattern will be accompanied by commensurate increases in departmental resources.

The Department seeks outstanding candidates likely to develop synergistic relationships with existing areas of excellence within the department: networking and communications; distributed computing and object-oriented software technologies; graphics, visualization, and human interfaces; artificial intelligence; computer architecture and engineering; theoretical computer science, algorithms, and programming languages; and computational science with emphasis on biomedical applications. Candidates with a strong background in electronic commerce, embedded systems design, graphics and visualization, and distributed databases will receive special consideration. With the strong backing of the University and the School, the Department is committed to making significant investments in promising new areas of study and to providing the kind of resources and environment that will enable new faculty members to flourish intellectually. Academic couples seeking to co-locate are strongly encouraged to apply. Research groups in search of a highly supportive institutional environment may also want to consider relocating to Washington University.

For more information on our department, see our World Wide Web page at http://www.cs.wustl.edu.

Qualified applicants should send a curriculum vita and the names and addresses of at least three references to Dr. Catalin Roman, Chairman, Department of Computer Science, Campus Box 1045, Washington University, One Brookings Drive, St. Louis, MO 63130-4899.

Applications will be considered as they are received. Those received after February 1, 2000, may not receive full consideration. Washington University is an equal opportunity/affirmative action employer.

Wayne State University
Chair, Department of Computer Science

The Department of Computer Science at Wayne State University invites applications and nominations for the position of department chair. The Department of Computer Science, one of nine departments of the College of Science, currently has thirteen faculty members, approximately 350 graduate students and 300 undergraduate majors. It offers B.S., M.S. and Ph.D. degrees. Federal agencies as well as industries support a variety of research programs within the Department.

Wayne State University, located in Detroit's cultural center, is a national, comprehensive research university (Carnegie I) serving 32,000 students. The University has made a strong commitment to information technology and academic computing.

The Chair will provide leadership in building and enhancing the Department's research and teaching programs and play a leading role in campus-wide initiatives in information technology. Candidates should have a strong research record and leadership skills. A Ph.D. in Computer Science or a closely related field is required. Women and minorities are particularly encouraged to apply.

Persons wishing to be considered for the position should include a curriculum vitae and the names of at least three professional references.

Please send all inquiries and application materials to:
Professor Bill Hase, Chair, Selection Advisory Committee
C/O Office of the Dean
College of Science
2155 Old Main
Wayne State University
Detroit, Michigan 48202

Wayne State University is an Equal Opportunity, Affirmative Employer.

Wichita State University
Computer Science Department

Applications are invited for one or more tenure-eligible assistant professor positions in the Computer Science Department. The closing date for all applications is February 1, 2000 or the first of the month thereafter, until the positions are filled. Anticipated starting date is August 18, 2000.

Required qualifications for the position(s) are: Ph.D. in Computer Science (or a closely related area), and demonstrated potential for research, teaching and scholarship. Preference will be given to candidates who can teach courses in the areas of Information Systems, Internet Applications, and Software Systems, and who can also collaborate with existing faculty in research. The research interests of the department include algorithms, automated theorem proving, complexity theory, computational biology, computer-aided design, databases, object-oriented systems, and programming languages. The department has recently had research grants from NSF, DoD, Boeing, etc. For more information about the department, see the web page at www.cs.twsu.edu.

Letters of application including a resume and the names, addresses, phone numbers, and e-mail addresses (if available) of at least three references should be sent to: Search Committee, Department of Computer Science, Wichita State University, Wichita, Kansas 67260-0083.

Wichita State University is an AA/EOE.

We encourage applications from women and minority candidates.

Worcester Polytechnic Institute
Computer Science Department

The Computer Science Department of WPI invites applications for one, and possibly two, tenure-track positions beginning August 2000. Candidates should have a Ph.D. in Computer Science or a closely related field, and strength in both research and teaching. Preference will be given to candidates at the assistant professor level in the area of Software Engineering/Programming Languages. We are also interested in excellent candidates at ALL ranks who complement and enhance our existing research in artificial intelligence, databases, systems/networks, theory, image science and information systems.

The department grants the BS, MS and Ph.D. degrees in Computer Science, and has a Computer and Communications Networks graduate program, jointly with the Electrical and Computer Engineering Department.

The department offers a collegial, supportive environment, with mechanisms established to encourage interdisciplinary activities.

The Department is in a strong growth phase, with nineteen tenure-track faculty, and plans to hire several more over the next few years. The department has a large variety of computing resources, and is committed to providing the most advanced software and hardware environment for both research and teaching. WPI, the nation's third oldest college of engineering and science, has approximately 2,700 undergraduates and over 1,000 full- and part-time graduate students, with over 200 tenure-track faculty. WPI's innovative, project-based undergraduate program, the WPI plan, offers students an unusual, exciting, and academically challenging alternative to traditional curricula. WPI has initiated a process to enhance the role of graduate studies and research.

For further information about the university please see http://www.wpi.edu

The departmental website is at http://www.cs.wpi.edu

The WPI campus is situated in the heart of Worcester, close to many of the city's major cultural attractions, including the American Antiquarian Society, the Worcester Art Museum and several major music performance venues. Worcester, the second-largest city in New England, is forty miles west of Boston. The city offers access to the diverse cultural and recreational resources of a major city, with the possibility of a relaxed lifestyle.

Worcester is also the seat of nine other colleges and universities, including the Medical School of the University of Massachusetts. WPI is close to numerous hitech companies (along the I-495 corridor); it is three miles from a thriving biotechnology industrial park and offers ample opportunities for industrial interaction.

To apply, submit a letter of application, resume, and the names, postal addresses, and e-mail addresses of three references to:
Recruiting Committee
Computer Science Department
WPI, 100 Institute Road,
Worcester, MA 01609-2280

Questions about the hiring process, as well as electronic applications (in post-script, ASCII or MS Word) should be addressed to: recruit@cs.wpi.edu

To enrich education through diversity, WPI is an Equal Opportunity/Affirmative Action employer.

Xerox Palo Alto Research Center
Systems and Practices Laboratory

The Systems and Practices Laboratory at Xerox's Palo Alto Research Center is looking for senior and junior researchers committed to advancing the state of the art in knowledge representation and reasoning systems.

We are assembling a research team to develop reasoning systems for specific domains that take as input the context of a task and the content of the domain. The team will also explore alternatives for effectively interacting with and supporting existing community work practices.

Critical areas of expertise include knowledge representation systems, natural language interpretation, model-based and probabilistic reasoning, learning, and programming ability (e.g., Lisp and/or Java). Successful candidates will have a Ph.D. (or commensurate experience) in artificial intelligence or a related field.

Researchers will be working in an energetic multi-disciplinary team seeking to solve both basic research problems around semi-automatic knowledge structuring, and to find ways of applying this in the context of a real community and knowledge base.

How to Apply:

Please submit a cover letter explaining your interest in this project, a resume, and reprints of any applicable publications (or URLs thereto). Also, please have references sent to us from at least two people who are qualified to evaluate your work and potential. We prefer e-mail as a mode of communication wherever possible.

Direct all materials to:
serajobs@parc.xerox.com
SPL/SERA Administrator
Xerox Palo Alto Research Center
3333 Coyote Hill Road
Palo Alto, CA 94304
Fax: 650-812-4334

Applications will be acknowledged, by e-mail if possible, and each applicant will be notified individually as soon as a decision has been reached on the applications. Applications will be processed in the order received, and positions will be filled as suitable candidates are identified, so please submit your information as soon as possible.

Yale University
Computer Science Department

The Yale Computer Science Department is looking for highly qualified candidates for junior faculty positions beginning in the 2000-2001 academic year. We seek to expand and broaden both the applied and theoretical sides of our research and teaching program, building on existing strengths in applied discrete mathematics, combinatorial optimization, compilers, complexity theory, computer vision and robotics, cryptography and security, distributed computing, coordination languages, formal methods and logic, functional programming languages, high-performance scientific computing, medical applications, network protocols, numerical methods, and parallel architectures. Other areas of particular interest include computational biology, computational neuroscience, computational geometry, computer graphics and visualization, databases, digital libraries, human-computer interaction, multimedia, networking and communications, real-time systems, and software engineering.

Applicants are expected to excel in both research and teaching. They will find many opportunities for research collaborations both inside and outside of the Computer Science department. Interdisciplinary activities are encouraged with Yale's many world-class research groups in computationally-active fields such as biology, chemistry, economics, engineering, geophysics, mathematics, medicine, psychology, physics, and statistics. Yale is known for excellence in teaching, and applicants will have the opportunity to teach bright students in relatively small graduate and undergraduate classes.

Candidates should hold a Ph.D. in Computer Science or related discipline. Applications submitted by February 1, 2000 will be given highest priority. Qualified women and minority candidates are encouraged to apply. Yale is an Equal Opportunity/Affirmative Action employer. Our homepage may be found at www.cs.yale.edu.

Send curriculum vitae and have at least three letters of reference sent to:
Faculty Recruiting Committee, Department of Computer Science, Yale University, P.O. Box 208285, New Haven, CT 06520-8285.

Transitions

Effective January 3, **Rick Adrion** of the University of Massachusetts at Amherst became Director of CISE's EIA Division at the National Science Foundation. His initial appointment is for 2 years on an IPA assignment from UMass. He replaces John Cherniavsky who moved to NSF/EHR as Senior Science Officer, and Michael Foster who was acting Division Director. Dr. Foster will remain in EIA to direct new initiatives.

Anne Condon has moved to the Department of Computer Science at the University of British Columbia. Professor Condon, who co-chairs CRA's Committee on the Status of Women in Computing Research (CRA-W), was formerly at the University of Wisconsin.

James Foley, board member and Treasurer of CRA, was recently named Executive Director of the State of Georgia's Economic Development Initiative called the "Yamacraw Mission." The Yamacraw Mission is designed to attract chip design and broadband communications companies to Georgia. Professor Foley, formerly Chairman and CEO of Mitsubishi Electric Research in Cambridge, Mass., is on assignment to the state from a faculty position in the College of Computing and the Department of Electrical and Computer Engineering at the Georgia Institute of Technology.

Mary Jean Harrold has moved to the Georgia Institute of Technology College of Computing, effective January 1, 2000. Professor Harrold, formerly at Ohio State University, chairs CRA's Distributed Mentor Program.

Shankar Sastry is the new Director of the Information Technology Office at DARPA, replacing David Tennenhouse. Dr. Shankar was formerly Director of the Electronics Research Laboratory and Professor of Electrical Engineering and Computer Science at UC Berkeley.