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 that of last year, 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.

A década do Congress agreed to was a 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 vetoed 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 $190 billion "omnibus" package (HR 1194), 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 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 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 $83.1 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 12.6 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.

Congress Continued on Page 5

NEC Research Institute Embarks on Second Decade

By C. William Gear and David L. Waltz

The first in 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, postdocs, 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 collaboration.

NEC Continued on Page 7
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 Canny, 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 Bruinsmill, 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 Generic 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 misconceptions detection in 3D learning environments, devising algorithms for real-time planning, developing image processing algorithms for 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 IntelliMedia Initiative, 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 Bruinsmill is Runner-Up in Computing and 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 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
Kelvin Anderson
James Bruce
Thomas Carley
Ada Chan
Elaine Cheong
Dina Demmer-Fushan
James Fogarty
Benjamin Hallen
Theckla Louchios
Eliza Maneva
Kevin O’Neill
Mark Plesko
Monica Rogati
Daniel Scholnick
Mark Senges
Adam Suleman
Gaurav Tewari
Gary Yngve
Dartmouth College
University of Virginia
Carnegie Mellon University
University of Maryland
University of California, Berkeley
University of Maryland
Hunter College of the City University of New York
Virginia Polytechnic Institute and State University
University of Virginia
University of Illinois at Urbana-Champaign
California Institute of Technology
University of British Columbia
Carnegie Mellon University
University of New Mexico
Dartmouth College
University of Pittsburgh
University of Washington
Massachusetts Institute of Technology
Georgia Institute of Technology

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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
Speaker: William A. Wulf
President, National Academy of Engineering

Monday, July 10
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 Wheelan, Xerox Corp.
Steve Socolof, Lucent Technologies

Reshaping Doctoral Education
Chair: Jeffrey Vitter, Duke University

CS/TB 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

PLENARY SESSION II
1:30PM-3:00PM
Impact of the Economic Development Imperative on Universities
Chair: James Foley, Georgia Institute of Technology
Speakers: Rick Adron, 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 Gunton, Indiana University

Government Support for Research in the New Millennium
Chair: 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 Truszczyński, 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 Haber mann Awards will be presented after dinner.

Tuesday, July 11
Break
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

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
[Conference 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
Chair: Sidney Karin, University of California, San Diego
Robert Schradel, University of Colorado at Boulder

Best Practices: Recruiting and Retaining Faculty, Graduate Students, and Researchers
Chair: John Stankovic, University of Virginia

Distance Education/Learning
Chair: John Stankovic, University of Virginia

Government-Sponsored Initiatives on Women and Minorities
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CRA Academic Profiles Survey
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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 registration 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 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 CRAs members but also by other organizations and institutions.

Each January, as a service to our members, CRA publishes a preliminary 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/march95/). 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 (maximum) 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

<table>
<thead>
<tr>
<th>Faculty Rank</th>
<th># Faculty</th>
<th>Minimum</th>
<th>Mean</th>
<th>Maximum</th>
<th>Average of all salaries</th>
<th>Reported Salary Minimum</th>
<th>Reported Salary Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Tenure Teaching Faculty</td>
<td>394</td>
<td>$10,000</td>
<td>$43,382</td>
<td>$98,131</td>
<td>$49,025</td>
<td>$30,575</td>
<td>$56,268</td>
</tr>
<tr>
<td>Assistant</td>
<td>560</td>
<td>$40,000</td>
<td>$60,940</td>
<td>$75,500</td>
<td>$64,279</td>
<td>$54,583</td>
<td>$68,230</td>
</tr>
<tr>
<td>Associate</td>
<td>783</td>
<td>$42,616</td>
<td>$65,843</td>
<td>$90,000</td>
<td>$72,796</td>
<td>$57,877</td>
<td>$80,705</td>
</tr>
<tr>
<td>Full</td>
<td>1062</td>
<td>$45,600</td>
<td>$77,287</td>
<td>$109,625</td>
<td>$102,767</td>
<td>$63,400</td>
<td>$123,873</td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

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

<table>
<thead>
<tr>
<th>Faculty Rank</th>
<th># Faculty</th>
<th>Minimum</th>
<th>Mean</th>
<th>Maximum</th>
<th>Average of all salaries</th>
<th>Reported Salary Minimum</th>
<th>Reported Salary Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Tenure Teaching Faculty</td>
<td>261</td>
<td>$10,000</td>
<td>$39,931</td>
<td>$95,000</td>
<td>$44,679</td>
<td>$30,575</td>
<td>$51,222</td>
</tr>
<tr>
<td>Assistant</td>
<td>337</td>
<td>$40,000</td>
<td>$59,266</td>
<td>$75,500</td>
<td>$62,504</td>
<td>$54,583</td>
<td>$66,013</td>
</tr>
<tr>
<td>Associate</td>
<td>540</td>
<td>$42,616</td>
<td>$63,809</td>
<td>$87,000</td>
<td>$70,541</td>
<td>$57,667</td>
<td>$77,847</td>
</tr>
<tr>
<td>Full</td>
<td>538</td>
<td>$52,896</td>
<td>$75,460</td>
<td>$100,000</td>
<td>$91,285</td>
<td>$63,400</td>
<td>$113,643</td>
</tr>
</tbody>
</table>

January 2000
Following are budget summaries for key research agencies.

**Department of Defense:** For five years running, Congressional appropriators have added money to the DOD's 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 $12.1 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 7.3 percent above last year's level. Despite the overall increases, DARPA requests 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 $32 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.)

**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 $1 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.

**Techwatch:** Following are budget summaries for key research agencies.

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

<table>
<thead>
<tr>
<th>Faculty Rank</th>
<th># Faculty</th>
<th>Reported Salary Minimum</th>
<th>Mean</th>
<th>Maximum</th>
<th>Average of all salaries</th>
<th>Reported Salary Maximum</th>
<th>Mean</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Tenure Teaching Faculty</td>
<td>35</td>
<td>$35,000</td>
<td>$46,952</td>
<td>$70,000</td>
<td>$50,213</td>
<td>$39,008</td>
<td>$54,926</td>
<td>$79,643</td>
</tr>
<tr>
<td>Assistant</td>
<td>78</td>
<td>$46,640</td>
<td>$60,890</td>
<td>$80,916</td>
<td>$64,848</td>
<td>$51,728</td>
<td>$69,112</td>
<td>$90,725</td>
</tr>
<tr>
<td>Associate</td>
<td>118</td>
<td>$53,872</td>
<td>$67,507</td>
<td>$90,000</td>
<td>$76,612</td>
<td>$73,792</td>
<td>$88,929</td>
<td>$120,000</td>
</tr>
<tr>
<td>Full</td>
<td>149</td>
<td>$58,086</td>
<td>$60,112</td>
<td>$109,667</td>
<td>$95,719</td>
<td>$79,712</td>
<td>$118,115</td>
<td>$168,299</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Faculty Rank</th>
<th># Faculty</th>
<th>Reported Salary Minimum</th>
<th>Mean</th>
<th>Maximum</th>
<th>Average of all salaries</th>
<th>Reported Salary Maximum</th>
<th>Mean</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Track</td>
<td>96</td>
<td>$42,000</td>
<td>$64,637</td>
<td>$83,000</td>
<td>$65,418</td>
<td>$60,012</td>
<td>$66,253</td>
<td>$83,000</td>
</tr>
<tr>
<td>Researcher</td>
<td>6</td>
<td>$40,200</td>
<td>$53,733</td>
<td>$80,000</td>
<td>$53,733</td>
<td>$48,000</td>
<td>$56,333</td>
<td>$82,200</td>
</tr>
<tr>
<td>Non-Tenure Teaching Faculty</td>
<td>13</td>
<td>$36,000</td>
<td>$50,555</td>
<td>$66,000</td>
<td>$50,861</td>
<td>$36,000</td>
<td>$51,000</td>
<td>$68,000</td>
</tr>
<tr>
<td>Postdoc</td>
<td>8</td>
<td>$25,000</td>
<td>$34,333</td>
<td>$44,000</td>
<td>$37,666</td>
<td>$35,000</td>
<td>$44,333</td>
<td>$55,000</td>
</tr>
</tbody>
</table>

### Table 8. Average Salary Comparison with 1998 Survey

<table>
<thead>
<tr>
<th>US CS/CE Departments</th>
<th>Canadian CS Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary 1998</td>
<td>Preliminary 1999</td>
</tr>
<tr>
<td>Number Reporting/Surveyed</td>
<td>118/168</td>
</tr>
<tr>
<td>Assistant</td>
<td>Not Reported</td>
</tr>
<tr>
<td>Associate</td>
<td>$60,418</td>
</tr>
<tr>
<td>Full</td>
<td>$66,887</td>
</tr>
<tr>
<td>Preliminary 2000</td>
<td>Preliminary 1999</td>
</tr>
<tr>
<td>Number Reporting/Surveyed</td>
<td>125/178</td>
</tr>
<tr>
<td>Assistant</td>
<td>$48,823</td>
</tr>
<tr>
<td>Associate</td>
<td>$73,081</td>
</tr>
<tr>
<td>Full</td>
<td>$95,426</td>
</tr>
</tbody>
</table>

### Computing Research News

Vol. 12/No. 1/January 2000

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Congress Continued on Page 7
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 authorize 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.

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 1599, FL 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 far, however, as Congress had weary 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 250,000; 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.

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 membership 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:

- conducting the annual CRA Tau Beta Pi Survey.
- developing other surveys (e.g., industrial lab salaries; departmental budgets, space, personnel).
- conducting workshops on critical policy issues in 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 (200-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.

CRA Announces Three June Workshops

for advanced graduate students and early career professionals

in conjunction with the USENIX Annual Technical Conference.

Monday, June 19, 2000
San Diego Marriott Hotel & Marina
San Diego, California
Industrial Careers Workshop

Monday, June 19, 2000
Effective Teaching in Computer Science and Engineering Workshop

Monday, June 19, 2000
Academic Careers Workshop

Tuesday, June 20, 2000

Further details about the workshops and registration will be published in the March edition of Computing Research News, and on the CRA website in February.

http://www.cra.org/main/cra.events.html
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.award.html

Past Distinguished Service Award Recipients:

1999: Bill Joy, Sun Microsystems, and Ken Kennedy, Rice University (co-winners)
1998: Merrill Patrick, National Science Foundation
1997: Anna 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 Griswold, 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

Grace Hopper Celebration of Women in Computing 2000

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

SOME NECI RESEARCH HIGHLIGHTS

- Inquirus, an excellent Web metastarch 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.
- CMR (Giant Magnetoresistance) 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 website at: http://www.neci.nec.com/neci/website/index-page.html.

Photo credit: SC99 Photo by Steve Reed, Oscar and Associates, Chicago, IL.
value of liberal education. It enjoys a national and international excellence in quality, and has been ranked among the top institutions in the United States.

Letters and requests for information may also be sent to macmill.e@brown.edu.

In addition, a URL pointing to the same address a URL pointing to your online research papers.

Applications from women and minorities are particularly sought. Beloit University is an affirmative action/equal opportunity educator and employer.
a two-year appointment which may be extended depending on funding. Research is concerned with designing and building hardware and software components 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 is strongly theoretical in nature, but will also require building hardware, C++ code, and experimentation. A background in geometric algorithms and robotics is a plus. Responsibilities include technical interactions with government agencies and working with graduate and undergraduate students.

Applicants must hold a Ph.D. in Computer Science or a closely related discipline. You will be expected to develop an externally funded research program. Our salaries and startup packages are highly competitive. With recent-four faculty, we offer M.S. and Ph.D. degrees in Computer Science, and our 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, and robotics.

We are seeking candidates who will contribute to the intellectual life of the department and the university by establishing active research groups, teaching core and elective computer science courses to undergraduate and graduate students, and establishing professional connections with some of the multitude of thinking information technology companies in the area.

Applicants must have a doctorate in Computer Science or a closely related discipline at the time of appointment. Review of applications will begin immediately, 4 January 2000, or until the position is filled. AA/EOE.

The search process will continue until all open positions are filled. AJE/EO.

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 externally funded research program. Our salaries and startup packages are highly competitive. With recent four faculty, we offer M.S. and Ph.D. degrees in Computer Science, and our 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, and robotics.

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The search process will continue until all open positions are filled. AJE/EO.
Professional Opportunities

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.

Josiah Henry: the Center for Language and Speech Processing, the Center for Networking and Distributed Systems, the Center for Imaging Science, the Center for Integrated Surgical Systems and Technology, and the Center for Computational Medicine & Bioinformatics.

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 level and excellence in research will be required of all candidates considered.

Johns Hopkins is a private university and will continue until suitable applicants are found.

Loyola University
Computer Science

The Computer Science Department at Loyola University Chicago, a mid-sized Catholic research university located in the heart of Chicago, seeks to fill a tenure-track position in Computer Science at the assistant professor level. The department currently has five full-time faculty members and approximately 50 undergraduate majors. The successful candidate will have overarching teaching responsibilities in the areas of computer science, software development, database management, and computer security. The candidate is expected to participate in the computer science curriculum planning and development. The position is a 9-month, tenure-track appointment with an expected start date in Fall 2000.

Interested applicants should send a letter of application which should include a curriculum vitae, a statement of research interests and teaching philosophy, and letters of reference from three individuals. Send these materials to: Dr. Alphonse F. Mascolo, Department Chair, Computer Science Department, Loyola University, Chicago, IL 60626, phone: 773-508-3274, fax: 773-508-3027, email: mascolo@luc.edu. Review of applications will begin immediately and continue until the position is filled.

The University is an Affirmative Action/Equal Opportunity Employer.

La Salle University
Department of Mathematics and Computer Science

The Department of Computer Science at La Salle University is currently seeking candidates for an open-rank tenure-track position in Computer Science and/or Computer Engineering. The position is beginning in Fall 2000.

La Salle University is a private, Roman Catholic university located in Philadelphia, PA. Established in 1853, La Salle University offers a comprehensive liberal arts education and a wide variety of undergraduate and graduate degree programs.

The successful candidate will be expected to teach computer science courses at the undergraduate and graduate levels. The position requires a Ph.D. in Computer Science or a related field. Preference will be given to candidates with significant research and teaching experience.

La Salle University is an Affirmative Action/Equal Opportunity Employer.

Lehigh University
Department of Electrical Engineering

The Electrical Engineering and Computer Science Department at Lehigh University invites applications for tenure-track positions in Computer Science and Electrical Engineering. Exceptional candidates in Computer Science and Computer Engineering will be encouraged to apply. The department is interested in candidates with research and teaching interests in areas such as networking, multimedia, computer systems, computer architecture, embedded systems, VLSI design, and software systems.

The Electrical Engineering and Computer Science (EECS) department has a strong national reputation within its field and is consistently ranked among the top 100 U.S. Ph.D. programs in Computer Science.

Applications are encouraged in all areas of computer science, but particular interest is in areas of security, networking, databases, and artificial intelligence.

Lehigh University is an Affirmative Action/Equal Opportunity Employer.

Lawrence Technological University
Computer Science

The Computer Science Program at Lawrence Technological University, a private, comprehensive institution, offers a Bachelor of Science degree in Computer Science and a Master of Science degree in Computer Science.

The Department of Computer Science seeks candidates for an Assistant Professor position in Computer Science to begin in Fall 2000. The successful candidate will be expected to teach courses in the areas of computer science, software engineering, programming languages, algorithms, networking and distributed systems, artificial intelligence, databases, and computer security. The candidate will also be expected to engage in research and scholarly activity.

The University is an Equal Opportunity/Affirmative Action Employer.

Lebanon Valley College
Department of Computer Science

Lebanon Valley College is a nationally recognized, private liberal arts institution located in Annville, Pennsylvania, which is just a short drive from the nation’s capital. The college is known for its outstanding faculty and its commitment to high-quality education for all of its students.

The Department of Computer Science seeks qualified candidates for a tenure-track position at the Assistant Professor level in Computer Science. Applicants should have a Ph.D. in Computer Science or a closely related field and should be able to teach and research in a broad range of areas. The successful candidate will also be expected to contribute to the department’s ongoing efforts to develop and maintain a strong and diverse undergraduate program.

Lebanon Valley College is an Affirmative Action/Equal Opportunity Employer.

Kansas State University
Department of Computer Science

The Department of Computer Science at Kansas State University invites applications for a faculty position in the area of Computer Science at the expected start date of Fall 2000. The successful candidate will be expected to teach courses in the area of computer science, including courses in programming languages, algorithms, and data structures. Applicants should have a Ph.D. in Computer Science or a closely related field and should be able to engage in research and scholarly activity. The successful candidate will also be expected to contribute to the department’s ongoing efforts to develop and maintain a strong and diverse undergraduate program.

Applications should be submitted to the Department Chair, Computer Science Department, Kansas State University, Manhattan, KS 66506. Review of applications will begin immediately and continue until a suitable candidate is found.

The University is an Affirmative Action/Equal Opportunity Employer.

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Department of Mathematics and Computer Science

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The Electrical Engineering and Computer Science Department at Lehigh University invites applications for tenure-track positions in Computer Science and Electrical Engineering. Exceptional candidates in Computer Science and Computer Engineering will be encouraged to apply. The department is interested in candidates with research and teaching interests in areas such as networking, multimedia, computer systems, computer architecture, embedded systems, VLSI design, and software systems.

The Electrical Engineering and Computer Science (EECS) department has a strong national reputation within its field and is consistently ranked among the top 100 U.S. Ph.D. programs in Computer Science.

Applications are encouraged in all areas of computer science, but particular interest is in areas of security, networking, databases, and artificial intelligence.

Lehigh University is an Affirmative Action/Equal Opportunity Employer.
Professional Opportunities
Advisors Online

Professional Opportunities Advisors Online

New Mexico State University

Department of Computer Science

The New Mexico State University Department of Computer Science invites applications for one or two tenured-track assistant/associate professor positions in all areas of computer science beginning Fall 2000-2001. Strong commitment to both teaching and research, and a demonstrated interest in diversity is essential; interest in working with women and minority students is also desired. Ph.D. degree in Computer Science or related field is required. ABD candidates will be considered. The successful applicant will have a broad range of research interests and have the ability to attract research funding. Interested candidates should apply by February 1, 2000. Send letter of interest, curriculum vitae, and three letters of recommendation to: Wanda Stoff-Stevens Chair, Computer Science Department Michigan Technological University Houghton, MI 49931-1295 (906) 487-2163

Middle Tennessee State University

Computer Science Department

One or more positions at Assistant/Associate rank. A Ph.D. in Computer Science is required. Evidence of excellence in teaching ability and dissertation potential for research in computer science is required. The successful candidate will be located in Houghton, Michigan. The successful candidate will have an active research program and good oral and written communication skills. Interested applicants should submit a cover letter, curriculum vitae, statement of teaching and research philosophy, and three letters of recommendation to: Wanda Stoff-Steven Chair, Computer Science Department Michigan Technological University Houghton, MI 49931-1295 (906) 487-2163

Michigan Technological University

Department of Computer Science

Tenure Track Faculty Position

Applications in all areas of computer science and engineering (CS/EE) 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, located in one of four Michigan research universities, has over 6,200 students and 420 faculty. The Department has 11 full-time faculty members and well established undergraduate and M.S. programs with excellent students. The Department also has a central role in the multimedia center and the cross-disciplinary CS/EE Ph.D. program. In addition to supporting work in traditional computer science areas, the program focuses research and teaching in the application of computer science to problems in engineering and the sciences. Facilities in the department include a number of Sun Sparc, Digital Alpha and SGI servers and workstations, as well as Linux workstations. Research equipment includes a 128knode Beowulf cluster, a 128knode Sun (84k), and Inxence 2 access. Michigan Technological University is located in Houghton in Michigan’s scenic Upper Peninsula. Surrounded by Lake Superior and nearby forests, the community year-round opportunities. This environment offers a competitive compensation package and a low cost of living in an area of excellent quality of life. Review of applications will continue until the position is filled. Women and minority candidates are particularly encouraged to apply. Candidates should send a resume, three letters of reference, and a list of three references to: Linda Ons, Chair Department of Computer Science Michigan Technological University Houghton, MI 49931 linda@mtu.edu

For more information see our web page http://www.mtsu.edu/~csdept.

Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

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 September 1, 2000. Full position announcement available at www.monm.edu/compdept.

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Professional Opportunities

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 an outstanding 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 operations 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 100 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:

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

Screening of applications begins 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.
Professorial Opportunities

Purdue University
Department of Computer Sciences

Purdue University is an Equal Opportunity/Affirmative Action Employer.

Purdue University invites applications for several permanent faculty positions beginning August 2000. Positions available are at the associate professor level or higher in areas of computer science and its applications. The University is prepared to accommodate candidates in all areas of computer science. Positions in all areas of computer science will be considered while positions are available.

Applicants must have 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 renowned faculty. Research activities in analysis of algorithms, databases, distributed and parallel computing, computer graphics and visualization, systems, and scientific computing. Outstanding 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.

Applications should be submitted to:

Professor Richard J. Schwartz, Chair of the Search Committee
Department of Computer Sciences
Purdue University
West Lafayette, IN 47907

Qualified applicants should send their curriculum vitae, a statement of research and teaching interests, and the names of three references to:

Dr. Richard J. Schwartz, Chair of the Search Committee
Department of Computer Sciences
Purdue University
WEST Lafayette, IN 47907

www.cs.purdue.edu

Purdue University is an Equal Opportunity/Affirmative Action employer.

Professional Opportunities

Oregon State University

The Department of Computer Science at Oregon State University is initiating a search to hire a full time, faculty member to teach in the Software Engineering Technology degree program.

Primary responsibility includes teaching undergraduate courses in the areas of C/C++, Object-Oriented Programming, database systems, and computer industries. Other duties include participation in curriculum and faculty committees, student recruiting and advising, and acquisition of external funding. Successful candidates will be at least a Ph.D. candidate. Teaching experience at the master's degree, Ph.D. desirable, in Computer Science programs and at least three years of software development experience desired.

Initial screening of applications will begin on January 15, 2000, and will continue until a satisfactory candidate is filled. To apply, send a letter of application, current resume, a list of references, and phone numbers of three of the professional references to: Professor J. Metzler, Department Chair, at (541) 885-1484.

Oregon State University

Portland State University

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 candidates in areas in all will be considered. The successful candidate's main campus office and faculty responsibilities will be at the Oregon Graduate Institute. Our teaching load will allow time to maintain quality research and teaching programs and to interact with local industry. The department currently serves approximately 350 undergraduate and 100 graduate students. Further information about the department is available at http://www.cse.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, Intel, and Mentor Graphics, major R&D sites of Oracle and Informix, the former Sequent Computer Systems, and with faculty at the nearby Oregon Graduate Institute. Our teaching load will allow time to maintain quality research and teaching programs and to interact with local industry. The department currently serves approximately 350 undergraduate and 100 graduate students. Further information about the department is available at http://www.cse.pdx.edu.

Portland State University is an Equal Opportunity/Affirmative Action employer.

OIT is an Affirmative Action/Equal Opportunity/Affirmative Action employer.
Professional Opportunities

Rutgers University
Department of Computer Engineering
Faculty Positions

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 four-year college in California. The University enrolls about 4,000 undergraduates and 2,400 graduate students. The Department of Computer Engineering offers B.S., M.S., and Ph.D. degrees in Computer Science. The Department is seeking candidates for a tenure-track faculty position in the area of software engineering. The position will start in Fall 2000.

To apply please submit a curriculum vitae, a brief description of research interests, a statement of teaching philosophy, and the names and addresses of three references to: Dr. Dan Leu, 110 Financial Circle, Room 225; or e-mail: dleu@scu.edu. Santa Clara University is an Equal Opportunity/Affirmative Action employer.

Rutgers University
Department of Computer Science
Faculty Positions

The Department of Computer Science at Rutgers, the State University of New Jersey, invites applications for tenure-track positions at all ranks. Full professor, associate professor, and assistant professor positions will be considered. We are particularly interested in candidates who have or are close to obtaining tenure-track positions in areas that complement current departmental strengths.

The Department of Computer Science at Rutgers University is committed to excellence in teaching, research, and service. Our faculty will teach and counsel undergraduate and graduate students in a wide variety of courses and will develop and deliver new courses and curricula. Our faculty members have strong reputations for academic excellence, and outstanding records of productivity and service. In addition, they actively participate in the development of new programs and in the management of departmental affairs. The Department of Computer Science is located in the Glass Cycling Center, along with the Departments of Electrical Engineering and Computer Science, and the Engineering Research Center. The University shares superb research infrastructure and Science and Engineering Research Center grants, along with national and international agencies, have enabled the departments to continue attracting top talent to the campus.

The New Jersey Institute of Technology, along with the University of Medicine and Dentistry of New Jersey, has a long-standing history of joint programs with both graduate and undergraduate students in computer science. The Department of Computer Science is an active participant in joint programs with the Computer Science Department of New Jersey Institute of Technology. The Department of Computer Science is committed to active participation in this expansion.

In recent years we have successfully recruited world-renowned computer science faculty from such top schools as University of California, Berkeley, Princeton University, University of Washington, Seattle, and several other top institutions.

To apply please submit a curriculum vitae, a brief description of research interests, a statement of teaching philosophy, and the names of at least four references to: Professor Richard L. Rogers, Hiring Chair, Department of Computer Science, Rutgers University, 110 Frelinghuysen Road, Piscataway, NJ 08854-8019. Rutgers University is an Equal Opportunity/Affirmative Action employer.

Send a resume, a statement of research interests, and the names of at least four references to Carol Glasgow, Chair, Department of Computer Science, Rensselaer Polytechnic Institute, Troy, NY 12180-3590.

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

Send 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.

Applications received by January 31, 2000 will receive favorable consideration. Rutgers University is an Equal Opportunity/Affirmative Action employer.

Send a curriculum vitae, a brief description of research interests, a statement of teaching philosophy, and the names of at least four references to Carol Glasgow, Chair, Department of Computer Science, Rensselaer Polytechnic Institute, Troy, NY 12180-3590.

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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 four-year college in California. The University enrolls about 4,000 undergraduates and 2,400 graduate students. The Department of Computer Engineering offers B.S., M.S., and Ph.D. degrees in Computer Science. The Department is seeking candidates for a tenure-track faculty position in the area of software engineering. The position will start in Fall 2000.

To apply please submit a curriculum vitae, a brief description of research interests, a statement of teaching philosophy, and the names of at least four references to: Dr. Dan Leu, 110 Frelinghuysen Road, Piscataway, NJ 08854-8019. Rutgers University is an Equal Opportunity/Affirmative Action employer.

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Rutgers 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 faculty positions at the Assistant Professor level to begin Fall 2000. Candidates must have a doctorate in Computer Science, Computer Engineering, or an equivalent degree. Applicants must have demonstrated excellence in teaching, research, and service.

The Department of Computer Science, with its mission to provide high-quality education to students majoring in Computer Science, invites applications for a tenure-track faculty position to begin in Fall 2000. The successful candidate will be expected to teach courses in one or more of the following areas: software design, computer architecture, Internet-related systems, and distributed and mobile computing.

The Computer Science Department at SWT is an Equal Opportunity/Affirmative Action Employer. Applications from women, minority candidates, and persons with disabilities are encouraged.

Applicants should submit a curriculum vitae, a statement of teaching experience, a description of research interests, and letters of reference to: Prof. Scott Smolka, Search Committee, Department of Computer Science, SUNY at Stony Brook, Stony Brook, NY 11794-4400. Telephone: (516) 632-8457 x470; and have at least three references sent to the same address. Letters may also be sent to: search@cs.sunysb.edu. In addition, please e-mail to the same address a URL pointing to your online resume and publications.

The Computer Science Department invites applications for a visiting position beginning September 2000. The position is initially for one year, but may be renewable. Applications from women, minority candidates, and persons with disabilities are strongly encouraged.

The University at Albany
Department of Computer Science

Applications are invited for tenure-track faculty positions to begin Fall 2000. The successful candidate will be expected to teach courses in one or more of the following areas: software design, computer architecture, Internet-related systems, and distributed and mobile computing.

The Computer Science Department invites applications for a tenure-track faculty position for Fall 2000. The successful candidate will be expected to teach courses in one or more of the following areas: software design, computer architecture, Internet-related systems, and distributed and mobile computing.

The University at Albany is an Equal Opportunity/Affirmative Action Employer. Applications from women, minority candidates, and persons with disabilities are especially welcome.

Stony Brook University
Department of Computer Science

Applications are invited for tenure-track faculty positions in the areas of bioinformatics, quantum computing, computer architecture, and networking. The department has also established strengths in theory and formal methods research areas in the department: database, concurrency/verification, graphics/visualization, logic programming/rewriting, and software and distributed systems, VLSI architectures, and Internet-related systems. Additional information about the research activities of the department can be found at: http://www.cs.sunysb.edu.

Applications for tenure-track faculty positions are invited for four new PhD-track faculty positions for Fall 2000. The department is actively seeking candidates to enhance the overall innovation and promise of the department's research program. The department has also established strengths in theory and formal methods research areas in the department: database, concurrency/verification, graphics/visualization, logic programming/rewriting, and software and distributed systems, VLSI architectures, and Internet-related systems. Additional information about the research activities of the department can be found at: http://www.cs.sunysb.edu.

The Computer Science Department at SUNY Stony Brook has several tenure-track faculty positions for Fall 2000. We are particularly but not exclusively interested in applications from junior faculty members, but will also consider senior faculty members for certain positions. Applications from women, minority candidates, and persons with disabilities are strongly encouraged. Applications and additional information can be found at: http://www.cs.sunysb.edu.

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

Applications for tenure-track faculty positions are invited for Fall 2000. The department has a proven record of excellence in teaching, research, and service.

The Computer Science Department at SUNY Stony Brook has several tenure-track faculty positions for Fall 2000. We are particularly but not exclusively interested in applications from junior faculty members, but will also consider senior faculty members for certain positions. Applications from women, minority candidates, and persons with disabilities are strongly encouraged. Applications and additional information can be found at: http://www.cs.sunysb.edu.

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**SIMON FRASER UNIVERSITY**

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](http://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-char@cs.sfu.ca

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**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:

- **Chair, Department of Computer Science**
- **Assistant Professor of Computer Science**

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.

**School of Computing Science**

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.

- Faculty: Computer Science; Aerospace; Electrical, Mechanical, and Chemical Engineering; Physics
- Candidates must have 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 earned an B.S 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 telephone numbers of three references to:

Dr. Allan Parrish, Chaircomputer Science Search Committee,
Department of Computer Science
Box 870240
The University of Alabama
Tuscaloosa, AL 35487-0290

For additional information, please visit [http://www.cs.ua.edu](http://www.cs.ua.edu).

**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 Associate 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 COAB-accredited B.S degree, and forty MS and Ph.D. students. We expect to grow to fifteen or twenty faculty members within three years. Areas of research emphasis include algorithms, artificial intelligence, database systems, human-computer interfaces, networking, software engineering, and software systems.

Outstanding applicants should send curriculum vitae and names and addresses of at least three references to:

Dr. Allan Parrish, Chair
Computer Science Search Committee
Department of Computer Science
Box 870240
The University of Alabama
Tuscaloosa, AL 35487-0290

For additional information, please visit [http://www.cs.ua.edu](http://www.cs.ua.edu).

**University of Alabama at Birmingham**

Department of Computer and Information Sciences

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.

Located 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, Optimism, 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, bio-medical computing, data mining, and graphics and visualization. Over 16,000 students are pursuing their education on UAB's 250-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 1 million, and is a southeastern center of commerce, communications, and medicine. The city has a pleasant climate all year. A wide variety of cultural, natural, and sports attractions are available in the immediate vicinity.
Professional Opportunities

University of California, Irvine
Department of Information and Computer Science

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. Applicants should have a strong commitment to research and teaching and an outstanding record of research for their level. We seek candidates at all levels. Applications from women, minorities and individuals with disabilities are especially encouraged.

Opportunity/Affirmative Action Employer

UC Davis is responsive to the needs of dual-career and other employees in a diverse community and is committed to achieving the goal of a diverse and inclusive faculty.

Affirmative Action/Equal Opportunity Employer

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

The University of California at Santa Barbara invites applications for faculty positions in Computer Science. The Department of Computer Science, part of the College of Letters and Science, has 110 full-time faculty and 150 Ph.D. students. UC Santa Barbara is part of an emerging cluster of high-quality computer science programs on the West Coast, and offers research and teaching opportunities in the emerging areas of the computer science discipline such as multimedia/computer graphics and animation, knowledge discovery and information retrieval, software engineering, computer-supported cooperative work, and computer security.

The Department of Computer Science, part of an emerging cluster of high-quality computer science programs on the West Coast, offers research and teaching opportunities in the emerging areas of the computer science discipline such as multimedia/computer graphics and animation, knowledge discovery and information retrieval, software engineering, computer-supported cooperative work, and computer security.

Opportunity/Affirmative Action Employer

2000 Computing Research News

January 2000

For more information on the department visit our web page at www.cs.ucr.edu.

Qualify applicants should send a curriculum vitae and the names and addresses of three references to: Faculty Search Committee, Department of Computer Science, University of California, Irvine, Irvine, CA 92697-3425. Applications without such a letter of application and resume will not be considered.

Qualify applicants should send a curriculum vitae and the names and addresses of three references to: Faculty Search Committee, Department of Computer Science, University of California, Irvine, Irvine, CA 92697-3425. Applications without such a letter of application and resume will not be considered.

For more information on the department visit our web page at www.cs.ucr.edu.
University of Colorado at Boulder
Department of Computer Science
Tenure-Track Faculty 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 ranks. The Department has twenty-five faculty, including emeriti, with a substantial portion of its members working in areas of national and international importance such as computer architecture, parallel and distributed computing, networking and telecommunications, computer security, computer systems, software engineering, and software architecture. However, outstanding applicants in all areas are encouraged to apply. Successful candidates must be committed to excellence in both teaching and research. The Department of Computer Science is a growing and highly productive department affiliated with the Texas Center for Parallel Computation (TCCP), the Texas Computation Center (TLC2), and/or the Center for Academic Excellence in Information Security and Assurance (http://oa.cis.udel.edu, see http://www.cs.colorado.edu)

University of Delaware
Computer Science
Tenure-Track Faculty Positions

The Department of Computer Science at the University of Delaware, Newark, DE 19716-3103, is in need of new faculty members. The Department is in the process of a three-year expansion plan that will include the addition of several faculty members. We are centrally located between Philadelphia and Baltimore, with strong connections to our federal and industrial sponsors. University of Delaware is centrally located and Information Distribution, a recent NSF sponsored center for the study of collaboration, is based here. Faculty positions are available immediately and continue until the positions are filled. Inquiries should be addressed to Dr. D. David Saunders, Chair of the Faculty Search Committee, Department of Computer and Information Sciences, University of Delaware, Newark, DE 19716-3103. In addition, candidates should have three to five confidential letters of reference sent directly to the above address or by email to search@cs.udel.edu. Applications will be accepted until the positions are filled; those received by February 1, 2000 are assured full consideration. 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 the time of appointment, a Ph.D. in CS or related areas and demonstrated ability in research and teaching. The department is particularly 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 software engineering.

Our current faculty have research strengths in algorithms, computational geometry, database systems, graphics, networking, system security, network security, optical networks, parallel computer architecture, web technology, parallel distributed processing, and performance modeling. We offer BS and MS degrees in computer science and mathematics, and a joint Ph.D. in Mathematics and Computer Science. For more information contact our web site at http://www.cs.edu.

The University of Denver is a medium-size (8,000 students) private university with a strong emphasis on undergraduate research. Class sizes are small, the teaching load is moderate and the salary is competitive.

The University is located in a metropolitan area and is near downtown Denver; Denver, with its metropolitan area population of 2.5 million, is consistently 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 student body and encourages applications particularly 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 three letters of reference sent to:

Chair, Computer Science Search Committee
Mathematics and Computer Science Department
University of Denver
2440 E. 14th Ave.
Denver, CO 80210-0248

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 all areas of computer science to begin Spring or Fall of 2000. At least one of the appointments is anticipated to be at the level of Associate or Full Professor. Two of the positions are part of the 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 systems, high performance computing, 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 with Ph.D. in Computer Science. The department expects them to continue or initiate research at the intersection of computer science and engineering; particularly information assurance, computer security, computer systems, computer graphics, multimedia, 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 candidates may affiliate with the Texas Center for Computational and Information Science (TCCS), the Texas Learning and Computation Center (TLCC), and/or the Virtual Environments Research Institute (VERI). TCSC, TLCC, VERI, and the department have a substantial infrastructure to support both teaching and research activities (see www.cs.uga.edu, www.cc.gatech.edu, and www.texas.uch.edu). UH, together with Rice University, Baylor College of Medicine, and Texas A&M, operates a regional OC-12 network connected to the Texas GigOpt. UH is also an Internet2 member.

Applications are invited from candidates whose research complements existing strengths in computer science to begin Spring or Fall of 2000. The minimum requirements are, by the time of appointment, a Ph.D. in Electrical or Computer Engineering, or Computer Science. Responsibilities include graduate and undergraduate teaching, supervising Ph.D. and M.S. theses, and developing an externally funded research program. The University of Georgia 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 (http://www.cc.gatech.edu) through both the Texas Center for Parallel Computation (Rice) and both NSF Fellowships for Advanced Computational Inquiries. 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 mission and has established itself as an important research center within the nation. The department’s major research areas include information assurance, particularly information security, and the department is a leader in one of only seven national Centers of Academic Excellence in Information Security and Assurance Education (http://www.nsa.gov/iae).

Letters of nomination and applications should be sent either in hard copy or electronic form to: search@cs.uidaho.edu. Searches Committee, Department of Computer Science, University of Idaho, Moscow, ID 83844-1015. Applications should include a letter of interest, identifying the qualifications identified above, a current curriculum vitae, a statement of teaching and research interests and a list of at least three references. Review of applications will begin February 10, 2000, and will continue until the positions are filled.

University of Houston
Department of Electrical and Computer Engineering
Tenure-Track Faculty Positions

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 science. The position is at the level of Assistant Professor beginning August 15, 2000, or other dates as requested by the candidate. UH operates a regional OC-12 network connected to the Texas GigOpt. UH is an Internet2 member. The Department of Electrical and Computer Engineering at the University of Houston, founded in 1874, is one of only seven national Centers of Academic Excellence in Information Security and Assurance Education (http://www.nsa.gov/iae).
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, research capability, and potential to achieve national visibility through accomplishments in research, to pursue external grants and contracts, and to supervise graduate students. Faculty must teach at the graduate level and offer a continuing research seminar.

Positions subject to funding approval. To enrich education through equal opportunity employer and especially persons with disabilities, the University of Idaho invites nominations and applications from outstanding candidates with backgrounds in the area of information security and assurance, particularly information security, computer assurance, particularly information security, and assurance, particularly information security, computer assurance, and software assurance. The Department of Computer Science and Engineering at the University of Idaho, an Equal Opportunity/AA employer, is an affirmative action employer. Women and members of minority groups are encouraged to apply.

University of Kentucky
Department of Computer Science
Faculty and Research Scientist Positions
The University of Kentucky Department of Computer Science invites applications for two faculty positions beginning August 1, 2000. These positions are highly competitive along with excellent compensation. Applicants should have a Ph.D. in Computer Science or related field with a strong research record and an earned doctorate in Computer Science or related field. The successful candidate must have demonstrated promise to achieve national visibility through accomplishments in research, contract and grant funding, publications, teaching and supervising graduate students. Faculty must teach at the graduate level and offer a continuing research seminar.

Positions subject to funding approval. University of Kentucky is an Equal Opportunity/AA employer, and especially encourages members of minority groups to apply.

University of Louisiana at Lafayette
Center for Advanced Computer Science
Positions in Network and Security
The Center for Advanced Computer Science is a graduate research unit, of 19 faculty, with over 55 Ph.D. students. The Center has been selected by the University and corporate sponsors to provide labs and office space for faculty, staff, and visiting researchers from our corporate sponsors. The Center for Advanced Computer Science is part of the College of Engineering at the University of Kentucky and has offices BS, MS, and Ph.D. degrees, with approximately 50 students currently enrolled. The department has just completed 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. University of Idaho is an equal opportunity employer and especially encourages members of minority groups to apply.

University of Miami
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 field with a strong research record and an earned doctorate in Computer Science or related field. The successful candidate must have demonstrated promise to achieve national visibility through accomplishments in research, contract and grant funding, publications, teaching and supervising graduate students. Faculty must teach at the graduate level and offer a continuing research seminar.

University of Miami is a non-smoking environment.

University of Missouri-Columbia
Department of Computer Engineering
Fellowships in Computer Engineering
The Department of Computer Engineering at the University of Missouri-Columbia is currently recruiting seven new faculty positions in the areas of computer technology and computer engineering. These positions will be located in the Center for Advanced Networking, a graduate research unit, of 19 faculty, with over 55 Ph.D. students. The Center has been selected by the University and corporate sponsors to provide labs and office space for faculty, staff, and visiting researchers from our corporate sponsors. The Center for Advanced Networking is part of the College of Engineering at the University of Kentucky and has offices BS, MS, and Ph.D. degrees, with approximately 50 students currently enrolled. The department has just completed 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. University of Idaho is an equal opportunity employer and especially encourages members of minority groups to apply.

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University of North Dakota

The John D. Oleahp School of Aeronautics Science invites applications for a position in research of candidates for:

Scientific Computing Research Associate

Lead the design and implementation of data acquisition, archiving, distribution system for satellite imagery and valued added data. Integrate an Internet based system to enable access via World Wide Web. Develop and test new technologies that require computer science expertise.

UND is an Equal Opportunity/ Affirmative Action Employer. Interested individuals should send a curriculum vitae and three letters of recommendation to:

Search Committee for Scientific Computing Research Associate

University of North Texas

Department of Computer Sciences

The Department of Computer Sciences at the University of North Texas invites applications for a Lecturer position starting Fall 2000. A Ph.D. in Computer Science or a related field, a strong teaching record and experience in undergraduate teaching are desirable. Experience in graduate teaching is also desirable. Services duties include teaching, research, and service.

The Department of Computer Sciences at the University of North Texas is a medium-sized computer science department with undergraduate and graduate students. The Department has a strong research focus in the areas of artificial intelligence, computer graphics, data compression, image processing, computer security, and software engineering. The University of North Texas is located approximately 40 miles north of the Dallas-Fort Worth area. The University is an Affirmative Action/Equal Opportunity/AADA Institution.

University of Pennsylvania

Department of Computer and Information Science

Lecturer Position

The University of Pennsylvania invites applications for a position in Computer Science, to start July 1, 2000. This position is for one year and is renewable annually up to three years. Applicants will be expected to teach courses on relevant topics to undergraduate and graduate students. The appointee must be qualified for an appointment as a Lecturer.

Applications are requested to be submitted by January 15, 2000. The position will remain open until filled. Questions can be addressed to: facsearch@cis.upenn.edu

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

University of Pittsburgh

Department of Computer Science

Full-time, tenure-line Assistant Professor or Assistant Professor of the Practice position in Computer Science is available to begin immediately. The University of Pittsburgh is a public institution in a major metropolitan area. The Department has a strong research focus in the areas of computers and networks. The University is an affirmative action/equal opportunity employer.

Applications are invited for at least one tenure-track position in computer science, beginning Fall 2000. Applicants should send a letter describing their research, a vita, and three letters of recommendation. Application deadlines are November 1, 2000; however, applications will be considered until the position is filled. Questions should be sent to: Robert Thomas, Chair, Department of Computer Science, 3015になってデータベースに保存してください。
The University of Southern California Department of Computer Science
The Department of Computer Science at the University of Southern California invites applications from outstanding candidates for tenure-track positions at all levels. Areas include but are not limited to: programming languages and compilers, computer architecture, computer security, computer networks, computer systems, and software engineering. Applicants must have a Ph.D. or equivalent degree in Computer Science or a closely related field and must have demonstrated excellence in both teaching and research. The Department is particularly interested in candidates who have a strong interest in teaching at the undergraduate level. The University of Southern California is an Equal Opportunity/Affirmative Action employer and encourages applications from women and minorities.

The University of Texas at Austin Department of Computer Sciences
The Department of Computer Sciences at the University of Texas at Austin invites applications for tenured-track positions at all levels. The Department is especially interested in candidates with research interests in the areas of algorithms, theory, programming languages, computer architecture, computer networking, distributed systems, security, and software engineering. The University of Texas at Austin is an Equal Opportunity/Affirmative Action employer and encourages applications from women and minorities.

The University of Toronto Department of Computer Science
The Department of Computer Science at the University of Toronto invites applications for tenure-stream positions at all levels, including assistant professor, associate professor, and professor. We seek candidates with a strong research record and a commitment to excellence in teaching. The Department is particularly interested in candidates whose research and teaching interests are complementary to those of the Machine Learning and Data Management areas. Applications are invited from candidates who have a Ph.D. or equivalent degree in Computer Science or a closely related field. The University of Toronto is an equal opportunity employer with a strong commitment to diversity. Please specify in your application if you are a visible minority, aboriginal person, or person with a disability.

The University of Virginia Department of Computer Science
The University of Virginia Department of Computer Science invites applications for an assistant professor position. The University of Virginia Department of Computer Science is an Equal Opportunity/Affirmative Action employer and encourages applications from women and minorities.

The University of Wisconsin–Madison Computer Science Department
The Computer Science Department at the University of Wisconsin–Madison invites applications for an assistant professor position. The University of Wisconsin–Madison Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

Vanderbilt University Department of Computer Science
The Department of Computer Science at Vanderbilt University invites applications for a tenure-track position at the assistant professor level in computer science. The University of Vanderbilt is an equal opportunity educator and employer, and encourages applications from women and minorities.

Virginia Tech Department of Computer Science
The Department of Computer Science at Virginia Tech invites applications for a tenured/tenure-track faculty position at the assistant professor level. The University of Virginia Tech is an equal opportunity educator and employer, and encourages applications from women and minorities.

Washington University in St. Louis Department of Computer Science
The Department of Computer Science at Washington University in St. Louis invites applications for a tenure-track position at the assistant professor level. The University of Washington University in St. Louis is an equal opportunity educator and employer, and encourages applications from women and minorities.

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. The University of California, Los Angeles Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of California, San Diego Department of Computer Science
The Department of Computer Science at the University of California, San Diego invites applications for tenure-track positions at all levels. The University of California, San Diego Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of California, Santa Barbara Department of Computer Science
The Department of Computer Science at the University of California, Santa Barbara invites applications for tenure-track positions at all levels. The University of California, Santa Barbara Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of California, San Francisco Department of Computer Science
The Department of Computer Science at the University of California, San Francisco invites applications for tenure-track positions at all levels. The University of California, San Francisco Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Colorado Boulder Department of Computer Science
The Department of Computer Science at the University of Colorado Boulder invites applications for a tenure-track position at the assistant professor level. The University of Colorado Boulder Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Florida Department of Computer Science
The Department of Computer Science at the University of Florida invites applications for a tenure-track position at the assistant professor level. The University of Florida Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Houston Department of Computer Science
The Department of Computer Science at the University of Houston invites applications for a tenure-track position at the assistant professor level. The University of Houston Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Illinois at Chicago Department of Computer Science
The Department of Computer Science at the University of Illinois at Chicago invites applications for a tenure-track position at the assistant professor level. The University of Illinois at Chicago Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Iowa Department of Computer Science
The Department of Computer Science at the University of Iowa invites applications for a tenure-track position at the assistant professor level. The University of Iowa Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Kansas Department of Computer Science
The Department of Computer Science at the University of Kansas invites applications for a tenure-track position at the assistant professor level. The University of Kansas Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Kentucky Department of Computer Science
The Department of Computer Science at the University of Kentucky invites applications for a tenure-track position at the assistant professor level. The University of Kentucky Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Kentucky Department of Electrical and Computer Engineering
The Department of Electrical and Computer Engineering at the University of Kentucky invites applications for a tenure-track position at the assistant professor level. The University of Kentucky Department of Electrical and Computer Engineering is committed to increasing diversity and encourages applications from women and minorities.

University of Maryland College Park Department of Computer Science
The Department of Computer Science at the University of Maryland College Park invites applications for a tenure-track position at the assistant professor level. The University of Maryland College Park Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Michigan Department of Computer Science
The Department of Computer Science at the University of Michigan invites applications for a tenure-track position at the assistant professor level. The University of Michigan Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Minnesota Department of Computer Science
The Department of Computer Science at the University of Minnesota invites applications for a tenure-track position at the assistant professor level. The University of Minnesota Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Missouri Department of Computer Science
The Department of Computer Science at the University of Missouri invites applications for a tenure-track position at the assistant professor level. The University of Missouri Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of North Carolina at Charlotte Department of Computer Science
The Department of Computer Science at the University of North Carolina at Charlotte invites applications for a tenure-track position at the assistant professor level. The University of North Carolina at Charlotte Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of North Carolina at Chapel Hill Department of Computer Science
The Department of Computer Science at the University of North Carolina at Chapel Hill invites applications for a tenure-track position at the assistant professor level. The University of North Carolina at Chapel Hill Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Oregon Department of Computer Science
The Department of Computer Science at the University of Oregon invites applications for a tenure-track position at the assistant professor level. The University of Oregon Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Pennsylvania Department of Computer Science
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University of Pittsburgh Department of Computer Science
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University of Rochester Department of Computer Science
The Department of Computer Science at the University of Rochester invites applications for a tenure-track position at the assistant professor level. The University of Rochester Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Southern California Department of Computer Science
The Department of Computer Science at the University of Southern California invites applications for tenured-track positions at all levels. The Department is especially interested in candidates with research interests in the areas of computer architecture, computer networks, distributed systems, software engineering, and computer security. The University of Southern California Department of Computer Science is an Equal Opportunity/Affirmative Action employer and encourages applications from women and minorities.

University of Texas at Austin Department of Computer Sciences
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University of Utah Department of Computer Science
The Department of Computer Science at the University of Utah invites applications for a tenure-track position at the assistant professor level. The University of Utah Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Washington Department of Computer Science
The Department of Computer Science at the University of Washington invites applications for a tenure-track position at the assistant professor level. The University of Washington Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Wisconsin-Madison Department of Computer Science
The Department of Computer Science at the University of Wisconsin-Madison invites applications for a tenure-track position at the assistant professor level. The University of Wisconsin-Madison Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Wisconsin-Milwaukee Department of Computer Science
The Department of Computer Science at the University of Wisconsin-Milwaukee invites applications for a tenure-track position at the assistant professor level. The University of Wisconsin-Milwaukee Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.

University of Wisconsin-Madison Department of Electrical and Computer Engineering
The Department of Electrical and Computer Engineering at the University of Wisconsin-Madison invites applications for a tenure-track position at the assistant professor level. The University of Wisconsin-Madison Department of Electrical and Computer Engineering is committed to increasing diversity and encourages applications from women and minorities.

University of Wisconsin-Milwaukee Department of Computer Science
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University of Wisconsin-Madison Department of Computer Science
The Department of Computer Science at the University of Wisconsin-Madison invites applications for a tenure-track position at the assistant professor level. The University of Wisconsin-Madison Department of Computer Science is committed to increasing diversity and encourages applications from women and minorities.
The undergraduate degree program stresses development of competence 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 research 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 relationships to our brand-new, permanent campus prior to the next academic year.

APPROPRIATIONS AND DUTIES

Candidates will have a doctorate (notably those to be hired at a rank that is the equivalent of associate professor) in computer science consistent with the qualifications of the chair position. Applicants are also expected to advertise during their internship with industry/community partners. A determination of rank and tenure in the professor, associate or full professor will be communicated with the qualifications of the interview.

APPLICATION INFORMATION

All applications must be received before March 1, 2000 will be considered. Inquiries and nominations for the tenure-track positions must have a Ph.D. degree in electrical engineering, computer engineering, or computer science. Exceptional candidates should have a history of significant and sustained research and are encouraged to apply.

Applications will be accepted on-line at http://www.cs.uwm.edu. Applications and nominations for the position of Associate Professor may be sent to: Faculty Recruiting Committee, Computer Sciences Department, University of Wisconsin-Madison, 1221 West Dayton St., Madison, WI 53706. Applications 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. Applications are reviewed on a continuing basis. Please note that the department may be found at http://www.cs.uwm.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 at least three references to: Faculty Recruiting Committee, Computer Sciences Department, University of Wisconsin-Madison, 1221 West Dayton St., Madison, WI 53706.

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Online applications and nominations for the position should include a curriculum vita and the names and addresses of at least three references to Dr. William H. Russel, Search Committee Chair, Department of Computer Science, Wayne State University, Detroit, Michigan 48202.

Applications will be considered as they are received. Those received after February 1, 2000, may not receive full consideration. The Department plans to expand its size from the Electrical and Computer Engineering, the Computer Science Department is emerging as one of the prominent computer science departments in the nation, and its location in the midst of a dedicated, in the role of an assistant professor, position in the Department of Electrical and Computer Engineering at the University of Massachusetts, Amherst.

Please see the web page at www.cs.wpi.edu for more information. Please send all inquiries and application materials to: Professor Bill Hase, Chair, Selection Advisory Committee, Computer Science Department, Wayne State University, Detroit, Michigan 48202.

Worcester Polytechnic Institute
Computer Science Department

The position should be filled as soon as possible. A Ph.D. in Computer Science or a closely related field is required, and the successful candidate will be expected to conduct research and teach courses at all levels. Full Professor, Chair, Department of Computer Science, Computer Science Department, Wayne State University.

To the diverse cultural and recreational resources of a major city, with the excitement and challenges of a research-oriented institution, the School, the Department is committed to providing the kind of resources and environment that will enable its members to flourish intellectually. Wayne State University is an Equal Opportunity/Affirmative Action employer.

Wayne State University
Department of Computer Science and Engineering

Wayne State University is an Equal Opportunity, Affirmative Action Employer.

Xerox Palo Alto Research Center

Xerox Palo Alto Research Center is one of the world’s leading research laboratories. Its mission is to help companies develop products and processes that are better and cheaper by identifying the underlying scientific principles and developing methods to apply them. The Systems and Practices Laboratory is looking for senior and junior researchers committed to advancing the state of the art in knowledge representation and cooperative computing systems.

Romans, Chairman, Department of Computer Science, Campus Box 1045, Washington University, One Brookings Drive, St. Louis, MO 63130-4999.

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.

For more information on our depart- ment, please visit our website 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. Carolin Romans, Chairman, Department of Computer Science, Campus Box 1045, Washington University, One Brookings Drive, St. Louis, MO 63130-4999.

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 Chair, Department of Computer Science

The Computer Science Department of the University of British Columbia, one of the largest computer science departments in Canada, has approximately 2,700 students and 130 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 is an Equal Opportunity, Affirmative Action Employer.

Worcester Polytechnic Institute

Computer Science Department

Worcester is also the site of nine other colleges and universities, including the Medical School of the University of Massachusetts. WPI is closely affiliated with high-tech companies (along the I-495 corridor); it is four miles from a thriving high-technology industrial park centered on the WPI Plan. Opportunities for undergraduate industry internships are encouraged with Yale’s nearby location to Cambridge, Massachusetts, and its proximity to major high-technology companies.WPI is the site of several annual conferences and workshops.

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 a strong commitment to the diverse cultural and recreational resources of a major city, with the excitement and challenges of a research-oriented institution, the School, the Department is committed to providing the kind of resources and environment that will enable its members to flourish intellectually. Wayne State University is an Equal Opportunity/Affirmative Action employer.