Digital Government Fellow Speaks at SuperComputing 2000

By Geoffrey M. Voelker

At the SuperComputing 2000 conference in November, I presented a talk entitled, "On the Scale and Performance of Cooperative Web Proxy Caching." I gave this talk to inaugurate the Computing Research Association/San Diego Supercomputer Center Digital Government Fellowship Program.

The program is supported by the National Science Foundation's Digital Government Program, and is intended to build ties between academic and industrial computing research communities, as well as among information technology workers in federal, state, and local governments. In this article, I describe research to investigate techniques for improving the performance of large-scale, wide-area Web-based information services such as those envisioned in the Digital Government Program.

As described in the report from the 1998 Digital Government Workshop [1], the NSF Digital Government Program is a very broad, multidisciplinary initiative to foster research and collaboration for using information technology to transform public services at all levels of government. Whether digital government results in transformations in public service as convenient as downloading tax forms from the IRS website, as immediate as viewing webcasts of city council meetings or congressional hearings, or as sensational as electronic voting in presidential elections, the systems supporting current and future digital government services will continue to grow in complexity and scale. Given the increasing interdependence among government agencies at the local, state, and federal levels, as well as among the public, private, and non-profit sectors, the systems providing digital government services will be distributed among many organizations and geographic sites spanning the national internetwork. Furthermore, as government services move online, citizens expect those distributed government services to have the same quality, performance, and convenience of private online services. Given the complexities of the systems providing digital government services, delivering performance for these systems is a key challenge.

One goal of my research is to investigate techniques for improving the performance of large-scale, wide-area Web-based information services such as those envisioned in the Digital Government Program. In particular, the research that I presented in the talk explores the potential for large-scale cooperative Web caching systems to improve Web performance. This research was in collaboration with Alec Wolman, Hank Levy, Anna Karlin and others at the University of Washington.

Internet proxy caching has become a commonplace approach for improving the performance of Web browsers. Typically, the proxy sits in front of an entire company or organization. By caching requests for a group of users, a proxy can quickly return documents previously accessed by other clients. Ultimately, though, the hit rate of the proxy is a function of the size of the population it manages—a size often dictated by political, organizational, or geographic considerations. A compelling question, then, is whether multiple proxies should cooperate with each other in order to increase total client population, improve hit ratios, and reduce document-access latency. Whether such cooperative proxy caching is a useful architecture for improving performance depends on a number of factors. These factors include the sharing patterns of documents across organizations, the ratio of inter-proxy communication time to server fetch time, and the scale at which cooperation is undertaken.

Several cooperative Web caching architectures and protocols have been proposed in the research community for building large-scale distributed caching systems. However, few studies have examined cooperative Web caching from a systemic viewpoint. As a result, we know neither the environments in which cooperative caching is useful (if any) nor its potential performance benefits. Answering such questions has been difficult in the past because studying proxy cooperation requires simultaneous traces from multiple proxies.

In our work, we take a two-pronged approach to exploring the limits and potentials of cooperative proxy caching. As the first approach, we collect and analyze traces from two environments: the University of Washington and the Microsoft Corporation. These traces enable us to investigate the performance benefits of cooperative Web caching systems at small (100s to 1000s of users) and medium (1000s to 10000s of users) population sizes. As a key

Institute for Human and Machine Cognition Celebrates Its First Decade

By Ken Ford

The Institute for the Interdisciplinary Study of Human & Machine Cognition (IHMC) was established by the Florida Board of Regents in 1990 as a research unit of the University of West Florida. Since its inception, IHMC has succeeded in securing substantial extramural support and has grown into a well-respected research institute. More than 60 researchers investigate a broad range of topics related to understanding cognition in both humans and machines, with a particular emphasis on building computational tools to leverage and amplify human cognitive and perceptual capacities.

In a broader context, much of the research effort at IHMC is focused on what is often called human-centered computing. This emerging concept of human-centered computing represents a significant shift in thinking about intelligent machines, and indeed about information technology in general. It embodies a "systems view" in which human thought and action and technological systems are seen as inextricably linked and equally important aspects of analysis, design, and evaluation. This framework focuses less on stand-alone exemplars of mechanical cognitive talent and is concerned more with computational aids designed to amplify human cognitive and perceptual abilities.

Essentially these are *cognitive prostheses*—computational systems that leverage and extend human intellectual capacities, just as the steam-shovel was a sort of muscular prosthesis. The term 'prosthesis' is sometimes taken to imply some disability, but we do not intend this implication; or, perhaps, we mean a disability that is common to the entire human species. For example, we humans tend to have less-than-perfect memory and generally are not very good at arithmetic. The

Dr. Ken Ford

prosthesis metaphor implies the importance of designing systems that *fit* the human and machine components together in ways that synergistically exploit their respective strengths.

The design and fit of these computational prostheses require a broader interdisciplinary range than has traditionally been associated with AI work, including computer

Expanding the Pipeline
Outstanding Undergraduate Award Winners

The Computing Research Association honors the recipients of the CRA Outstanding Undergraduate Awards competition for 2001, sponsored this year by Microsoft.

Lisa Anthony from Drexel University received the Outstanding Female Undergraduate award. **Kevin Zatloukal**, University of Washington, received the Outstanding Male Undergraduate award. **Litza Stark**, University of Delaware, was the runner-up for the female award. **Russell Cox**, Harvard University, was named runner-up for the male award.

About the Winners

Lisa Anthony is majoring in computer science at Drexel University. She is in the fourth year of a five-year Bachelor of Science/Master of Science program.

Lisa is a research assistant in the Geometric and Intelligent Computing Laboratory at Drexel. She has helped to develop a computer-aided conceptual design environment and is currently working on the use of decision-theoretic and case-based planning techniques for the control of distributed, multi-agent systems. Lisa has co-authored four papers and presented two papers at major conferences. She has also been a summer researcher at the National Institute of Standards and Technology (NIST).

Lisa has received numerous honors at Drexel, including the 1999 Award for Outstanding Industry, Leadership, and Academics in Computer Science; and the AT&T Undergraduate Research Fellowship for 2000. She has also been an assistant Webmaster for her department.

Kevin Zatloukal is a senior majoring in both computer science and mathematics at the University of Washington.

Kevin has developed a new algorithm for nearest-neighbor searches in data compression. He has also worked on several aspects of data caching with colleagues at Microsoft Research, where he has spent three summers. This work includes algorithm design and structure layout for improved cache performance and a cache-conscious Web server. Kevin's work has resulted in three papers and a patent. He is now working on problems in computational molecular biology.

Kevin has been a teaching assistant for four courses, a mentor to disabled high-school students, and a tutor for the Women in Engineering program. He has been named a University of Washington Undergraduate Scholar, a Mary Gates Scholar, and a Robert C. Byrd Honors Scholar.

Litza Stark (Runner-Up) is a senior at the University of Delaware. She is majoring in computer science and Spanish, with minors in cognitive science, linguistics, and psychology.

Litza's research interest is in human-computer interaction, particularly natural language processing. She has done experimental research on language acquisition and is interested in analyzing the mental representation of language with the goal of modeling it. She has co-authored a paper and is currently working on an honor's thesis. Litza has been a research assistant for projects in both computer science and cognitive science, and she has worked two summers at AT&T Research Labs.

Litza has received the Delaware Academy of Science Award, several academic scholarships, and departmental awards as the outstanding junior and outstanding female. She is a member of Phi Kappa Phi and Upsilon Pi Epsilon. Litza is currently a teaching assistant, and she has helped to develop a program to attract high-school girls into computer science.

Russell Cox (Runner-Up) is a fourth-year student majoring in computer science at Harvard University. He expects to receive both Bachelor's and Master's degrees in June 2001.

Russell is interested in the use of file system abstractions to simplify programs and the interfaces between them. He has worked at Bell Labs for four summers. His accomplishments there include creating the first demonstrations of what is now AT&T's "instant answers" service. He has also worked on several aspects of the Plan 9 operating system, including graphics subsystems, terminal emulators, and installation software. His senior thesis is exploring ways to improve the performance of the Plan 9 graphics subsystem. At Harvard he has worked on the implementation of concurrent languages and systems, and he has helped to revise a programming languages textbook.

Russell has been a teaching fellow for introduction to theory of computing (three times) and survey of programming languages (once). For the past two years he has also been a coach for the US Computing Olympiad for high-school students.

This year's selection committee included Gregory Andrews, University of Arizona (Chair); Lori Clarke, University of Massachusetts, Amherst; and Michael Scott, University of Rochester.

Outstanding Undergraduate Award, Honorable Mention

Deborah Abel, Harvard University

Matt Bell, Stanford University

Michael Brown, University of Waterloo

Benjamin Carlson, University of Nevada Reno

Scott Carter, New Mexico University

Billy Chen, UC Berkeley

Tim Danner, Rice University

Gunes Ercal, University of Southern California

Tal Garfinkel, UC Berkeley

David Hauver, University of Virginia

Matt Huenerfauth, University of Delaware

Kimberly Jackson, Xavier University of Louisiana

Frederick Koopmans, U. of Illinois at Urbana-Champaign

David Latham, Dartmouth College

Ondrej Lhotak, University of Waterloo

Dan Maynes-Aminzade, Carnegie Mellon University

Thomas Murphy, Carnegie Mellon University

Meredith Ringel, Brown University

Matthew Rosencrantz, University of Washington

Krishna Roskin, UC Santa Cruz

Andrew Schwerin, Brown University

April Slayden, Millsaps College

Sara Smolensky, Mississippi State

Virginia Volk, University of Virginia

Elizabeth Walter, Dartmouth College

Joseph Wong, University of British Columbia

Steve Zhang, University of Washington ∎

National Research Council's IT Workforce Study

By William Aspray

The National Research Council has recently weighed in on the heated political debate about shortages of information technology workers, temporary visas for foreign workers, and age discrimination in its preliminary report entitled *Building a Workforce for the Information Economy*. The prepublication is available online at: http://books. nap.edu/html/IT_workforce.

Alan Merten, a computer scientist and president of George Mason University—an institution whose mission includes supplying high-tech workers to the growing computing and Internet industries of northern Virginia—chaired the NRC study committee. Burt Barnow, a respected labor economist from Johns Hopkins University who is familiar with issues concerning high-tech labor, served as vice chair. Other members of the committee included IT workers, employers of IT workers, academic computer scientists, labor economists, education and training specialists, an industrial sociologist, and a biotechnologist. The study was commissioned by Congress, funded by the National Science Foundation and NASA, and directed by Herbert Lin of NRC's Computer Science and Telecommunications Board.

The committee's mandate was to: characterize the IT workforce; examine the availability of domestic and non-US workers; understand the range of industrial, governmental, educational, and individual strategies for providing an adequate workforce; and compare information technology with biotechnology with respect to workforce issues. The study reviewed earlier reports, considered both

theoretical perspectives from labor economics and views from the field, and sampled a wide range of data and points of view.

Many *CRN* readers are familiar with the workforce study produced by the Computing Research Association (*The Supply of Information Technology Workers in the United States*, April 1999, by Peter Freeman and William Aspray. Available online at http://www.cra.org/reports/wits/cra. wits.html. Single copies are available free of charge by contacting info@cra.org). It is useful to understand the NRC study by comparing it with the CRA report.

There are strong similarities in the approach taken, topics covered, and conclusions reached in the two reports. Both organizations were less interested in being advocates for a particular position than they were in analyzing the issues and trying to take all sides into consideration. Both reports are stronger in their analysis than in their recommendations. Both reports have received criticism from those who are particularly interested in acting on age discrimination, protection of American workers, and unfettered access to workers from around the world. Both reports find a tight labor market rather than a shortage. Both reports decry the lack of data. Both reports emphasize the important role of the formal educational system, while acknowledging the fact that most IT workers do not have formal IT degrees. Both reports express concern about the seed-corn problem (of too many graduate students and faculty leaving for industry, leaving insufficient numbers in the academy to train future generations of

students), although the CRA report gives this point greater emphasis. Indeed, the two reports have many more points of agreement than disagreement.

Overall, the main differences between the two reports are attributable to four factors:
1. The NRC committee included labor economists and political scientists, while the CRA study group was populated mainly with computer scientists.
2. Congress charged the NRC to cover certain topics, such as foreign workers and age discrimination, that received only passing discussion in the CRA report.
3. Conducted more recently, the NRC study had access to much more data, many more reports (including the CRA report), and a much more advanced level of discussion.
4. The NRC's organizational capabilities to undertake a full-scale study (experience doing such reports, much larger staff with a wide variety of skills, larger budget, etc.) were much better.

In comparison to the CRA study, the NRC study offers:
- Much lengthier and more theoretically informed discussion of the economics and policy of information technology; for example, in describing the role of information technology in the US economy.
- A larger number of data sets analyzed and brought into the discussion.

- More thorough literature review, especially of the economic and political science literature on high technology work, immigration, etc.
- An explicit comparison of IT to biotechnology, as pertains to workforce issues.
- Much more extensive and detailed demographic analysis of IT workers.
- Much more detailed analysis of the critical problems facing the federal government as it seeks an adequate supply of IT workers.
- A detailed analysis of foreign workers and foreign work.
- A detailed analysis of age discrimination and IT workers.
- Greater attention to balance between work and education, and hence to the value of work-study programs.
- More detailed and careful analysis of the size of the IT workforce.
- More emphasis on using structured assessment techniques in evaluating job applications in order to remove biases and increase the number of applications regarded as qualified.
- Greater emphasis on public-private consortia to increase training.
- An analysis of the problems created by a shortage of green cards for temporary workers.
- Greater emphasis on changing production modes to increase productivity and lower demand.
- Belief that progress in software engineering will lead to productivity gains.

Historical Trends from Taulbee Surveys: Faculty Salaries

By Jay Vegso

This is the first in a series of articles reporting trends in data from the Taulbee Survey and its antecedents, which stretch back to 1970. All of these articles will be collected at http://www.cra.org/statistics. This article reports salaries for U.S. CS departments in order to provide some context for this issue's article on the 1999-2000 Taulbee Survey's preliminary results. The data in the accompanying tables date back to 1986, when both the method of reporting the salary results and their publication became standardized.

Salary figures are those effective January 1 of each year. The data have been adjusted for inflation to January 2000 dollars. Up to and including 1993 data, salaries are weighted by the number of faculty at each institution. From 1994 on, the averages are unweighted, calculated by averaging the mean salaries reported by each department.
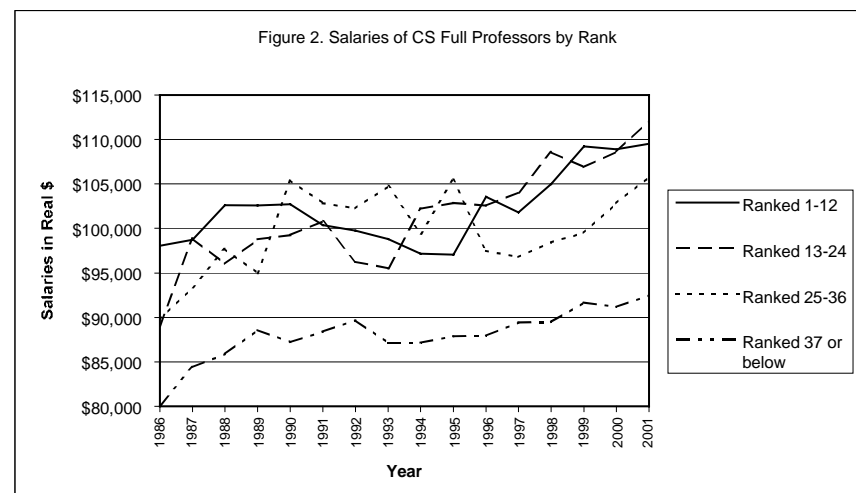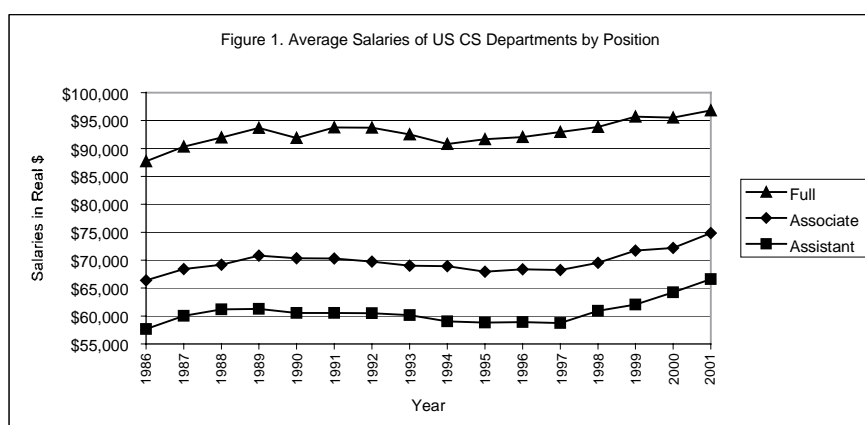
Results from CE departments were included with those from CS until the 1986-87 survey. Because few CE departments were reporting data in these years, it is unlikely that

they had a significant impact on the figures.

Figure 1 traces the average salaries of CSE professors by type of position. The increase in salaries in the past few years has led to a rise in real (inflation-adjusted) terms

salaries enjoyed by assistant professors between 1997 and 2001.

Figure 2 breaks down the salaries for full professors according to the NRC rankings of CS departments released in 1982 and 1995. There were a small number of changes

Figure 2. Salaries of CS Full Professors by Rank

Ranked 1-12
Ranked 13-24
Ranked 25-36
Ranked 37 or below

between 1986 and 2001 of 15 percent for associate professors, 13 percent for assistant professors, and 10 percent for full professors. Particularly noticeable is the 13 percent increase in

among the top 36 departments when the new rankings appeared in 1995.

Figure 1. Average Salaries of US CS Departments by Position

Full
Associate
Assistant

1999-2000 Taulbee Survey
1999-2000 Preliminary Taulbee Data on Faculty Salaries

By Mary Jane Irwin and Randy Bryant

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 30th year that CRA has tracked the production and employment of Ph.Ds in the computer science field. For the past 14 years, computer engineering data have also been incorporated into the survey. The traditionally high response rate to the survey makes the data especially useful; the data are used widely, not only by CRA's members but also by other organizations and institutions.

Each January, as a service to our members, CRA publishes a preliminary report of the survey's faculty 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 results—including updated salary data; enrollment, production, and

employment data; and trend analyses—will appear in the March 2001 issue of *CRN*.

Tables 1 through 8 show the results in a format comparable to that used in previous CRA surveys. Due to a low return rate to date for computer engineering programs (only 5 of 28 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://cra.org/statistics/nrcstudy2/).

Each department was asked to report the minimum, mean, and maximum salary for each rank (full, associate, and assistant professors and non-tenure-track teaching faculty) and the number of persons at each rank. The salaries are those in effect on January 1, 2001. For U.S. departments, nine-month salaries are reported in U.S. dollars. For Canadian departments, twelve-month salaries are reported in Canadian dollars. Respondents were asked to include salary supplements such as salary monies from endowed positions.

The minimum and maximum of the reported salary minima (and maxima) is self-explanatory. The range of

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

For comparison with last year's data, Table 8 shows, separately, the overall average computer science salaries for U.S. departments and for Canadian departments. The preliminary data from 1999 are those published in the January 2000 *CRN*, and the final data from 1999 are those published in the March 2000 *CRN*. When compared with the final 1998-99 data, the U.S. average salaries have increased by:

- 7.6 percent for non-tenure-track teaching faculty;

- 6.9 percent (compared with a 6.5 percent increase last year) for assistant professors;

- 6.9 percent (4.7 last year) for associate professors; and

- 4.5 percent (2.7 last year) for full professors.

In contrast to last year, Canadian average salaries have increased at the lower rates of:

- 5.0 percent for assistant professors (compared with 9.2 percent last year);

- 5.1 percent for associate professors (6.7 last year); and

- 0.8 percent for full professors (5.4 last year).

Since the rate of return for the surveys is somewhat higher than this time last year, other comparisons are more difficult to make. However, Tables 2, 3, and 4 report the data for the same set of schools reporting last year. In the group of U.S. computer science departments ranked 1 through 36, the average salaries for tenure-track faculty increases ranged from a low of 3.6 percent (associates in departments ranked 13-24) to a high of 7.9 percent (assistants in those ranked 13-24). The average increase was 5.9 percent.

Mary Jane Irwin (Pennsylvania State University) and Randy Bryant (Carnegie Mellon University) co-chair CRA's Taulbee Survey Committee. ∎

Table 1. Nine-month Salaries, 136 Responses of 163 US CS Computer Science Departments

Faculty Rank	Number of Faculty	Reported Salary Minimum			Average of all Salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	522.5	$19,692	$45,455	$95,604	$52,034	$31,500	$60,062	$110,000
Assistant	740	$29,997	$64,913	$77,000	$68,671	$48,284	$72,563	$97,000
Associate	897	$42,616	$70,378	$98,000	$77,156	$64,949	$85,701	$150,000
Full	1254	$48,000	$80,864	$108,300	$99,811	$79,100	$129,991	$253,485

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

Faculty Rank	Number of Faculty	Reported Salary Minimum			Average of all Salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	62.5	$35,856	$57,448	$95,604	$66,208	$59,800	$79,326	$99,900
Assistant	104	$46,800	$69,737	$75,006	$75,121	$72,300	$80,268	$90,800
Associate	81	$68,560	$78,077	$98,000	$83,746	$76,400	$89,083	$98,000
Full	216	$48,000	$83,682	$95,000	$112,910	$134,000	$162,626	$203,000

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

Faculty Rank	Number of Faculty	Reported Salary Minimum			Average of all Salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	53	$41,400	$56,797	$68,200	$62,252	$60,000	$69,021	$80,000
Assistant	68	$66,200	$70,693	$77,000	$75,015	$73,332	$80,850	$97,000
Associate	63	$61,520	$77,884	$88,000	$83,599	$75,200	$90,254	$105,300
Full	183	$69,103	$84,306	$108,300	$115,597	$143,000	$166,476	$253,485

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

Faculty Rank	Number of Faculty	Reported Salary Minimum			Average of all Salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	46	$36,000	$51,081	$71,080	$59,308	$46,350	$69,076	$110,000
Assistant	76	$61,000	$67,619	$73,250	$70,929	$61,000	$73,918	$83,243
Associate	83	$61,427	$74,571	$86,803	$82,481	$81,370	$95,194	$135,625
Full	140	$67,574	$85,902	$98,000	$109,100	$105,000	$149,142	$186,150

Table 5. Nine-month Salaries, 101 Responses of 127 US Computer Science Departments Ranked Higher Than 36 or Unranked

Faculty Rank	Number of Faculty	Reported Salary Minimum			Average of all Salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	361	$19,692	$41,950	$85,835	$48,200	$31,500	$55,607	$100,000
Assistant	492	$29,997	$63,299	$76,844	$66,857	$48,284	$70,476	$88,200
Associate	670	$42,616	$68,268	$88,750	$75,159	$64,949	$83,791	$150,000
Full	715	$52,898	$79,537	$102,147	$95,361	$79,100	$119,725	$199,027

Table 6. Twelve-month Salaries, 18 Responses of 23 Canadian Computer Science Departments (Canadian Dollars)

Faculty Rank	Number of Faculty	Reported Salary Minimum			Average of all Salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Maximum
Non-Tenure Teaching Faculty	47	$34,200	$46,904	$71,467	$51,037	$39,008	$57,455	$83,924
Assistant	121	$47,892	$63,093	$88,489	$68,134	$52,980	$73,996	$110,431
Associate	181	$55,000	$67,615	$92,970	$81,021	$74,604	$94,590	$135,000
Full	233	$48,400	$78,002	$99,698	$96,535	$80,964	$120,139	$168,299

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

Faculty Rank	Number of Faculty	Reported Salary Minimum			Average of all Salaries	Reported Salary Maximum		
		Minimum	Mean	Maximum		Minimum	Mean	Max
Tenure-track	95	$45,000	$68,378	$80,000	$68,915	$45,000	$69,439	$80,000
Researcher	3	$69,000	$79,945	$85,835	$79,945	$69,000	$79,945	$85,835
Non-Tenure	9	$42,000	$54,908	$70,000	$54,908	$42,000	$54,908	$70,000
Postdoc	18	$30,000	$45,637	$70,000	$48,001	$30,360	$51,637	$70,000

Table 8. Average Salary Comparison with 1999 Survey

	US CS Departments			Canadian CS Departments		
	Preliminary 1999	Final 1999	Preliminary 2000	Preliminary 1999	Final 1999	Preliminary 2000
No. Reporting/Surveyed	121/155	132/155	136/163	16/23	19/23	18/23
Non-Tenure Teaching	$49,025	$48,609	$52,304	$50,213	$51,267	$51,037
Assistant	$64,279	$64,244	$68,671	$64,686	$64,862	$68,134
Associate	$72,796	$72,177	$77,156	$76,812	$77,109	$81,021
Full	$102,767	$95,526	$99,811	$95,719	$95,766	$96,535

Workforce Study from Page 3

- More detailed economic analysis of economic shortages and strategies.
- Greater emphasis on K-12 education and, in particular, on improving math education.
- Less detailed description of the formal education system.

One difference between the two reports—their definition of IT workers—deserves special mention. The NRC study divides IT work into Category 1 (IT research, development, creation, specification, design, and testing of IT goods and services) and Category 2 (application, adaptation, configuration, support, or implementation of IT products or services designed or developed by others). The NRC study focuses on the Category 1 work, which enables them to make the best use of federal labor data. The CRA study provides a means for differentiating IT workers from IT-enabled workers, focusing principally on the former category. It also provides a further categorization of IT workers, not by occupational title but by functionality of the job: conceptualizer, developer, modifier, supporter.

The NRC study may very well be the last word on the related theoretical issues. Unfortunately, however, it is unlikely to end the rancor and debates any time soon.

See also the article in CRN's November 2000 edition, p. 6, "Recent Reports on the IT Workforce," available on the web at: http://www.cra.org/CRN/issues/0005.pdf ∎

Nominees Sought for CRA Board

The Computing Research Association is seeking nominations for its Board of Directors. The deadline for receipt of nominations is **March 1, 2001**.

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

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

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

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

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

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

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

To receive a nomination form, send an e-mail request to elections@cra.org. Nominations must reach CRA by March 1, 2001. ∎

CRA-W Distributed Mentor Project 2001

Deadline for Applications: February 1, 2001

For Details See:

http://www.cra.org/Activities/craw/dmp/application2001.html

CRA Conference at Snowbird 2002

July 14-16, 2002

Transitions and Announcements

Richard A. DeMillo has been appointed vice president and chief technology officer at Hewlett-Packard. Dr. DeMillo was formerly general manager of Information and Computer Sciences Research at Telcordia.

The first **John D. Gannon** Scholarship was awarded to Carina Hassan for her outstanding work in computer science at the University of Maryland, College Park. The scholarship fund was established in recognition of John Gannon's contributions to the field of computer science and to teaching. Professor Gannon, who died suddenly in June 1999, was the former chair of computer science at the University of Maryland and a member of CRA's board of directors.

Douglas C. Engelbart, Bootstrap Institute, Freemont, Calif., was awarded a 2000 National Medal of Technology by President Clinton in a December 1 ceremony at the White House. He was recognized for "creating the foundations of personal computing, including continuous, real-time interaction based on cathode-ray tube displays and the mouse, hypertext linking, text editing, on-line journals, shared-screen tele-conferencing, and remote collaborative work."

Thomas Manteuffel, professor of applied mathematics at the University of Colorado, Boulder, begins a two-year term as president of SIAM in January 2001. Manteuffel served as vice president at large from 1996 to 1999.

R.S. Nikhil, former acting director of Compaq's Cambridge Research Lab, has joined Sandburst Corp., a startup company in Medford, Mass.

Fernando C.N. Pereira has been named Andrew and Debra Rachleff Professor and Chair of the Department of Computer and Information Science at the University of Pennsylvania, effective July 1, 2001.

Fred Pollack, an Intel Fellow, has been appointed director of Intel Architecture Roadmap Planning. **Justin Rattner** has succeeded Pollack as director of Microprocessor Research Labs at Intel.

Shankar Sastry has been appointed chairman of the department of EECS at UC Berkeley, effective January 1, 2001. For the past year, Dr. Sastry has been serving as director of the Information Technology Office at DARPA. He was on leave from Berkeley where he was professor of electrical engineering and computer sciences and director of the Electronics Research Laboratory.

Ravi Sethi, former senior vice president of Communications Science Research at Bell Labs, has been appointed president of Avaya Labs. Avaya Communication is the former Enterprise Networks Group of Lucent Technologies.

Benjamin W. Wah is the new president of the IEEE-Computer Society for 2001. Wah is a professor of electrical and computer engineering at the University of Illinois, Urbana-Champaign.

Elaine J. Weyuker, Technology Leader, AT&T Labs - Research and a CRA board member, has been named a 2000 AT&T Fellow, AT&T's highest award for members of its technical community. Dr. Weyuker's award was given "for seminal contributions having significant impact on testing software systems." ∎

Congressional Activities

By Lisa Thompson

At the end of November the 106th Congress still had not adjourned. While Senators- and Representatives-elect are put through orientation sessions in advance of the 107th Congress, the existing Congress passed its 15th continuing resolution to keep the government running while FY 2001 appropriations bills remain in limbo.

However, decisions concerning funding levels for computing research have been finalized. As reported in the November issue of *CRN*, the Senate added considerably to funding for the National Science Foundation, and these numbers held in the end. The final VA-HUD appropriations bill provided NSF with a $529 million increase (13.6 percent) to a total of $4.4 billion.

Nearly one-quarter of these new funds, $125 million, will go to the agency's Information Technology Research initiative, bringing the ITR budget to $215 million. The Computer and Information Science and Engineering Directorate will see its budget grow 25 percent in FY 2001. Additionally, $45 million was provided for a new Terascale Computing System.

Elsewhere in NSF, the Biocomplexity initiative will grow by $25 million to a total of $75 million. And the new Nanoscale Science and Engineering initiative was funded at $150 million, an increase of $52.7 million over the FY 2000 estimated budget for nanoscale activities.

The 106th Congress also passed legislation (Public Law 106-313) to expand the H-1B visa program, but failed to pass comprehensive IT research authorization legislation despite the concerted efforts of CRA. (See the November issue of *CRN* for reports on these bills.)
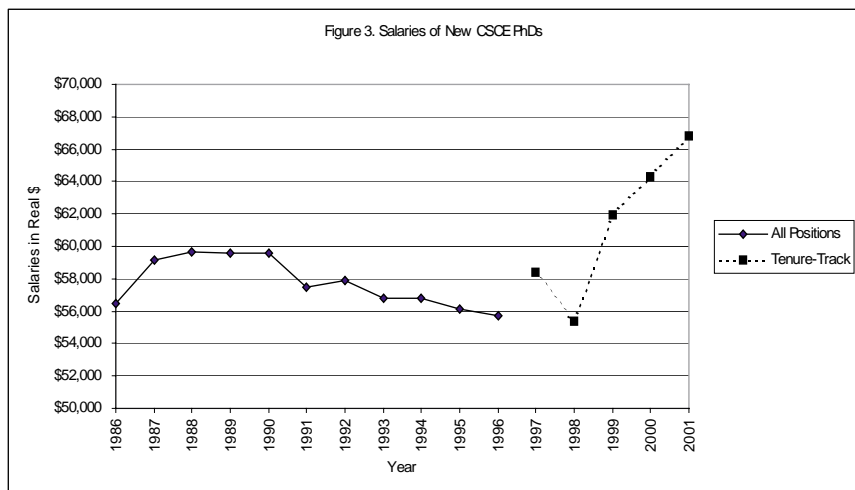
There is every reason to believe that the partisan divisions that marked the 106th Congress will be even sharper in the 107th, with the Republican majority holding an even narrower margin. While progress on major policy bills will be hard to come by, congressional appropriators are far more attuned to getting their work done, however belatedly, in an acrimonious atmosphere. With both parties struggling for the hearts and minds of the citizenry, budgets for programs and agencies supported strongly on both sides, which include research programs, can thrive under such circumstances as long as appropriate pressure is brought to bear.

The Computing Research Association will continue its vigorous activities to promote support for information technology research funding at the NSF and DARPA and other agencies. The efforts of the computing research community will be crucial regardless of the atmosphere in Congress and no matter which party's candidate occupies the White House. Please stay tuned to *CRN* and CRA's Government Affairs website <http://cra.org/govaffairs/> for further information on what you can do to make your voice heard in Washington. ∎

Figure 3 charts the salaries of new Ph.D.s in CS and CE combined. Before 1997, these data were reported only as averages of all positions. The current Taulbee Survey collects data for four categories of positions; however, because the figures for tenure-track positions are the most numerous and most reliable, this category is the only one of the four that is reported here. As can be seen, salaries for new Ph.D.s have undergone significant increases in recent years—14 percent between 1997 and 2001; 21 percent between 1998 and 2001. Between 1997 and 2001, tenure-track faculty received higher salaries than each of the other categories. Assuming that this is true before 1997, the 1986 through 1996 figures may be lower than if tenure-track positions alone were reported. ∎

Figure 3. Salaries of New CSCE PhDs

Professional Opportunities

CRN Advertising Policy

See http://www.cra.org/main/cra.jobshow.html

Argonne National Laboratory

Summer Givens Associates appointments, Mathematics and Computer Science (MCS) Division, Argonne National Laboratory. Focus: for Ph.D. students at U.S. universities beginning careers in numerical analysis or computational mathematics. See: http://www.mcs.anl.gov/division/information/educational_programs/givens00.html Contact:
Jan Griffin
MCS Division
Argonne National Lab.
9700 S. Cass Ave.
Argonne, IL 60439
Email: griffin@mcs.anl.gov;
Phone: 630-252-7271, fax 630-252-5676.
Deadline: February 10, 2001.

Argonne National Laboratory

Undergraduate Program in Computational Science, Mathematics and Computer Science (MCS) Division, Argonne National Laboratory. (May 29-Aug. 3).
Focus: research in numerical and non-numerical methods, parallel tools, scientific visualization, collaboration tools, distributed computing, computational science, and systems administration. See http://www.mcs.anl.gov/division/information/educational_programs/studentopps.html.
Contact:
Jan Griffin
MCS Division
Argonne National Lab.
9700 S. Cass Ave., Argonne, IL 60439
Email:griffin@mcs.anl.gov;
Phone: 630-252-7271; fax 630-252-5676.
Deadline: February 1, 2000.

Auburn University

Department of Computer Science and Software Engineering
Faculty Positions and Director of Institute
The Department of Computer Science and Software Engineering invites applications for multiple tenure-track faculty positions and Director of the Institute for Reconfigurable Smart Components (IRSC). IRSC, which is a joint effort with the Department of Electrical and Computer Engineering, will focus on (1) creation of enabling technology for reconfigurable smart components, and the transfer of the technology, as appropriate, to industry; and (2) enhancement of the graduate research programs in the College of Engineering. The University will invest over $1M (estimated) in five years in new positions with an objective of gaining national prominence in the area over this time period.
Successful applicants may start in January or August 2001. Responsibilities include research, graduate student supervision, and graduate and undergraduate teaching. Applicants must have a Ph.D. in computer science, software engineering, or a closely related field. We are particularly interested in candidates with research interests related to IRSC in the areas of computer and communication networks, security, real-time and embedded systems, wearable computing, operating systems and software engineering; however, all areas of computer science and software engineering will be considered. Appointments will be made at the Assistant, Associate, or full Professor level commensurate with the candidate's qualifications.
Director of IRSC (12 month) - The successful candidate will have demonstrated excellence in leading a research effort in the information technology area and developing partnerships with government and industry. The candidate must qualify for appointment at the rank of Professor with tenure in the CSSE Department. The Director will report to the Dean of Engineering on matters related to the Institute. The Director will coordinate and manage the research effort and will provide much of the vision and direction for the Institute.
The CSSE Department currently has 13 full-time faculty members and supports strong undergraduate (B.S., B.Sw.E.) and graduate programs (M.S., M.Sw.E., Ph.D.). Faculty research areas include software engineering, computer and communication networks, human-computer interaction, wearable computing, artificial intelligence, and database systems. More information about the Department and faculty research interests can be obtained from the Department's home page (http://www.eng.auburn.edu/csse).
Auburn University was chartered in 1856, and is the largest university in the state of Alabama, with a student enrollment of over 22,000 and 1,125 faculty. Auburn is located 100 miles southwest of Atlanta and 50 miles northeast of Montgomery, the State Capitol. Auburn is ranked 38th overall and 34th in Engineering among public universities by U.S. News and World Report. Auburn offers nearly 150 baccalaureate degree programs in 64 academic departments. The graduate school provides master's level programs in 130 areas and doctoral programs in 96 fields. The College of Engineering has an enrollment of 3,100 undergraduates and 500 graduate students in 8 departments. The picturesque main campus covers 1,875 acres, and includes the entire southwest quadrant of the city of Auburn. The Auburn-Opelika community has a population of about 70,000, an excellent public school system, and has been nationally ranked as one of the "best small towns in America".
Applicants should submit a current curriculum vita, research vision, teaching philosophy and 5 references to:
Dr. John M. Owens
Chair, CSSE Search Committee
College of Engineering
108 Ramsay Hall
Auburn University, AL 36849
www.eng.auburn.edu/irsc/
The interview process will begin November 1, 2000 and continue until candidates are selected and recommended for appointment.
AA/EEOE/Women and Minorities are encouraged to apply.

Augsburg College

Department of Computer Science
The Augsburg College Department of Computer Science invites applications for a full-time, tenure track faculty position at the assistant professor rank beginning fall, 2001. This position involves teaching primarily undergraduates in both our day and weekend class schedules. Teaching area preferred in computer/communications and networking. Augsburg program emphasis is on balancing the liberal arts with professional training. Commitment to and excellence in teaching and learning is our priority in the hiring decision. Research is expected to include students both inside and outside the classroom. A willingness to engage in discussions of faith and scholarship is also important. Applicants must have completed their Ph.D. in computer science and provide evidence of outstanding undergraduate teaching.
Augsburg College is a private, four-year coeducational liberal arts college of approximately 3,100 students affiliated with the Evangelical Lutheran Church in America. Our mission is "To nurture future leaders in service to the world by providing high quality educational opportunities, which are based in the liberal arts and shaped by the faith and values of the Christian church, by the context of a vital metropolitan setting, and by an intentionally diverse campus community." For further information about Augsburg visit us at www.augsburg.edu. Please submit a substantive letter of application, curriculum vitae (with list of references ONLY), official graduate transcript and evidence of teaching ability by February 16, 2001 to:
Augsburg College
Human Resources Department
Attn: Larry Ragland, Ph.D.
2211 Riverside Ave, CB #79
Minneapolis, MN 55454
Fax: 612-330-1443
EOE

Boston University

Department of Electrical and Computer Engineering
The Department of Electrical and Computer Engineering (ECE) at Boston University anticipates several openings for faculty positions at all ranks in the following areas: computer engineering, networks, signal and image processing, photonics, solid state devices, and microelectromechanical systems.
Qualified candidates must have an earned Ph.D. degree in a relevant discipline. Faculty are expected to develop a program of funded research in their area of expertise. The Department has 38 faculty members, approximately 170 graduate students and 430 BS majors. Excellent opportunities exist for collaboration with colleagues in outstanding research centers at Boston University, at other universities/colleges, and with industry throughout the Boston area. For additional information on the College of Engineering and ECE Department, visit the College's homepage at http://www.bu.edu/eng/.
Applicants should send their curriculum vita to:
Professor Bahaa E. A. Saleh, Chair
Department of Electrical and Computer Engineering
Boston University
8 Saint Mary's Street
Boston, MA 02215
Boston University is an Equal Opportunity/Affirmative Action Employer.

Brown University

Division of Engineering
The Division of Engineering at Brown University announces the opening of a tenure-track or tenured faculty position in Electrical Sciences and Computer Engineering, beginning September 1, 2001. The appointment may be made at the level of Assistant, Associate or Full Professor depending on the qualifications of the candidate selected.
Qualifications include a Ph.D. or equivalent degree in Electrical Engineering, Computer Engineering or Computer Science with a strong engineering background, and significant research accomplishments in an appropriate area of computer engineering. Areas of special interest include computer systems and architectures, digital VLSI systems and CAD, real-time computing, embedded systems, architectures for signal/image processing or communications/networking, and other related areas. The appointee will be expected to be an important contributor to an active research program in computer engineering at Brown and be able to collaborate with existing faculty. The appointee will be expected to teach undergraduate and graduate courses in the appropriate area of specialty in Computer Engineering as well as in the core curriculum of the Division. The ability to make clear and effective presentations of scientific material is required. Appointment at the level of Associate Professor or Professor would require a record of achievement in research that is commensurate with holding such rank at major research universities. Award of tenure requires demonstration of excellence in teaching as well as research.
Applicants should send a resume in hard copy form and have at least three (five for a senior level appointment) referees send letters of recommendation to:
Professor Harvey F. Silverman
Search Committee Chair
Division of Engineering
Box D
Brown University
Providence, RI 02912
Inquiries may be addressed to: Tina_Trahan@brown.edu. All application materials must be received by January 31, 2001 for full consideration.
Brown University is an equal opportunity/affirmative action employer and strongly encourages applications from women, minorities, and protected persons.

Bryn Mawr College

Computer Science
Applications are invited for a tenure-track position (rank open) in Computer Science. We are seeking individuals willing to participate in the building of a new computer science program at a leading liberal arts college for women and in collaboration with Haverford College. Candidates should include a letter of application, a resume, a statement of teaching philosophy, a description of research, a writing sample or reprints, and at least three current letters of reference concerning the candidate's qualifications for the position. Review of applications and interviews will begin in January 2001 and will continue until the position is filled. All material should be sent to:
Computer Science Search
Department of Mathematics
Bryn Mawr College
101 North Merion Avenue
Bryn Mawr, PA 19010.
Bryn Mawr is an exceptional liberal arts college for women with coeducational graduate programs in sciences, some humanities, and social work. The College supports faculty excellence in both teaching and research, and provides a rigorous education in the context of a diverse and pluralistic scholarly community. Located 11 miles west of Philadelphia, Bryn Mawr participates in consortial programs with the University of Pennsylvania, Haverford and Swarthmore Colleges.
Bryn Mawr College is an equal-opportunity, affirmative action employer.

Bucknell University

Department of Computer Science
Applications are invited for one or more tenure track assistant/associate professor positions (with up to three years credit towards tenure) beginning in mid-August, 2001. A Ph.D. in Computer Science or Computer Engineering and evidence of commitment to excellence in teaching and research are required. Must have interest in participating in teaching and the ongoing development of one or more of the core curriculum areas of computer organization, programming languages, operating systems, and architecture as well as a research interest that builds on areas in the core. Excellent salary and fringe benefits.
Bucknell is a highly selective primarily undergraduate institution. The Department of Computer Science currently has eight full-time faculty. The programs are accredited by both ABET and CSAB. More information about the programs is found at: http://www.eg.bucknell.edu/csci. The computing

Professional Opportunities

environment for instruction and research is based on 70 SUN Ultra 4 workstations.

Applications will be considered as received and recruiting will continue until the positions are filled. Please send a resume, graduate transcript (photocopy acceptable), and names and addresses of three references to:

Gary Haggard, Chair
Department of Computer Science
Bucknell University
Lewisburg, PA 17837
Bucknell encourages applications from women and members of minority groups (EEO/AA).

Butler University
Department of Computer Science and Software Engineering

Outstanding opportunity to participate in the development of a new software engineering initiative. The Department of Computer Science and Software Engineering at Butler University invites applications for an assistant professor from individuals interested in the establishment of an innovative Software Engineering curriculum founded on mathematics, problem solving, and strong ties with industry. Applicants should have a Ph.D. in Computer Science or a related discipline and background in an applied field (i.e. software engineering, operating systems, networks, computer architecture, etc.). A strong commitment to teaching and distinction in scholarship are expected and encouraged.

Applicants should send a detailed resume to:
Professor Peter B. Henderson, Head
Department of Computer Science and Software Engineering
Butler University
4600 Sunset Ave.
Indianapolis, IN 46208-3485
USA
Arrange to have at least three letters of reference sent to the same address.

Screening will begin immediately, and continue until the position is filled. Butler University, with an enrollment of 3400 undergraduate students, is located in a residential area of Indianapolis, Indiana, and offers an array of professional and pre-professional programs within the context of a strong commitment to the traditional arts and sciences and to the values of liberal education. It enjoys a national reputation for excellence and quality, and has been ranked among the top institutions in its Carnegie category.

Letters and requests for information may also be sent to: recruitcs@butler.edu. In addition,

please e-mail to the same address a URL pointing to your online resume and publications.

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

Cal Poly
Computer Science

Assistant/Associate/Full Professor (one or more positions), full-time, tenure track, beginning Fall 2001. Duties include teaching core undergraduate courses, and upper-division and master's level courses in a specialty area; performing research in a mainstream area of electrical engineering, computer engineering, and/or computer science; and service to the home department, university, and community. The candidate's home department will be either Electrical Engineering or Computer Science, by mutual agreement between the department and candidate.

Specific expertise is sought in one or more of the following areas: computer architecture (both at the chip and systems level), communications, embedded systems, microwaves, networking, operating systems, power systems, and software engineering. Applicants in other areas of expertise are also encouraged to apply.

Candidates must have a strong commitment to teaching excellence and laboratory-based instruction, a broad-based knowledge of electrical engineering, computer engineering, and/or computer science, and dedication to continued professional development. A doctorate in one of these three disciplines or in a closely related field is required. Rank and salary is commensurate with qualifications and experience. Demonstrated ability in written and oral use of the English language is required.

Inquiries should be directed to either:
Recruitment Committee
Electrical Engineering Department
(Refer to Recruitment Code 13039)
or
Recruitment Committee
Computer Science Department
(Refer to Recruitment Code 13032)
Cal Poly
San Luis Obispo, CA 93407
Tel. (805) 756-2781 (EE) or
(805) 756-2824 (CSc)
e-mail: recruit@csc.calpoly.edu
A letter of intent to apply and a resume must be received by the closing date of January 16, 2001. For full consideration, candidates will be asked to submit: (1) completed

application form, (2) statement of goals and plans for teaching and research, and (3) three letters of reference.

Cal Poly's Electrical Engineering Department offers B.S. and M.S. degrees in Electrical Engineering. Cal Poly's Computer Science Department offers B.S. and M.S. degrees in Computer Science. A B.S. degree in Computer Engineering is jointly offered by the Computer Science and Electrical Engineering departments. Cal Poly emphasizes "learn by doing", which involves extensive lab work and projects in support of theoretical knowledge. The available computing facilities for instructional and faculty support are modern and extensive. Both departments were ranked among the top three primarily undergraduate programs in the nation by U.S. News & World Report. For further information about the departments, see: www.cpe.calpoly.edu, www.csc.calpoly.edu, or www.ee.calpoly.edu.

San Luis Obispo, a city of 43,000, is located 12 miles from the Pacific Ocean and midway between San Francisco and Los Angeles on California's scenic central coast. University families live in San Luis Obispo and nearby communities both on the coast and inland. Excellent recreational facilities are available and the area has an outstanding climate.

Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of women, persons of color, applicants with disabilities, and members of other underrepresented groups. AA/EEO.

Carnegie Mellon University
Department of Engineering and Public Policy

The Department of Engineering and Public Policy, has faculty openings for candidates with research interests that combine technical issues in CS or ECE with important issues in public policy. Joint appointments possible. Details at www.epp.cmu.edu. Resumes, papers, and references to:
Granger Morgan
EPP
Carnegie Mellon
Pittsburgh, PA 15213.
Carnegie Mellon University is an equal opportunity employer.

Carnegie Mellon University
School of Computer Science

The School of Computer Science at Carnegie Mellon University spans a wide range of topics in computer science and the application of computers to real-world systems. It houses the Center for Automated Learning and Discovery; Computer Science Department; Entertainment Technology Center; Human Computer Interaction Institute; Institute for Software Research, International; Language Technologies Institute; and the Robotics Institute, with research and tenure-track faculty in all of these organizations.

The School of Computer Science seeks applicants for junior level tenure- and research-track faculty positions beginning in fall 2001. We will consider outstanding candidates from all areas, and are especially interested in those whose research activities lie in the areas of Algorithms, Computer Graphics, Computer Systems, Data and Text Mining, Human Computer Interaction and Design, Robotics, and Software Engineering.

All candidates are expected to have a strong interest in research, outstanding academic credentials, and an earned Ph.D. Candidates for tenure-track appointments should also have a strong interest in graduate and undergraduate education. The highly selective undergraduate and graduate programs in the School of Computer Science draw top students from around the world. Further information about the School of Computer Science and its programs may be found at http://www.scs.cmu.edu/.

To apply please send curriculum vitae, statement of research and teaching interests, copies of 1-3 representative papers, and the names of at least three references to:
Faculty Search Committee
Attention: Sharon Burks
School of Computer Science
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213-3891
The applicant should request their references to forward letters of reference directly to the same address to arrive before February 15, 2001. These letters will not be requested directly by the department.

Electronic applications (in postscript or .pdf format) and reference letters may be directed to faculty-search@cs.cmu.edu.

The review of applications will begin on January 1, 2001. To ensure full consideration, applications should be received by February 15. Applications will be accepted until February 15, or until the position is filled.

Carnegie Mellon is an affirmative action/equal opportunity employer and we invite and encourage applications from women and minorities.

Chapman University

Assistant to Full Professor rank, tenure track or tenured positions in computer science at a selective, independent, comprehensive university located in the high technology region of Orange County, California, in a culturally diverse community. Rank and salary commensurate with credentials and experience. Effective date, August, 2001. Appointments will assist in implementation of an innovative program in Integrated Circuit and Embedded Systems Design (ICESD) and have the opportunity to develop linkages and research collaboration with industry; the program is partially funded by a grant from the Samueli Family Foundation. Ph.D. in Computer Science, Computer Engineering or Electrical Engineering; demonstrated excellence in teaching; strong research program in computing or electrical engineering; extensive portfolio of funded research and publications; and commitment to a student-centered environment required. For two of the positions, specializations of architecture, circuit design or embedded systems design preferred, but search is open to all qualified applicants.

Submit cover letter; resume; samples of research (reprints/technical reports); a research plan; and list of 5 references and telephone numbers to:
M. Andrew Moshier
Department of Mathematics
Computer Science and Physics
Chapman University
Orange, CA 92866
Electronic submissions in Postscript, PDF or common word processor formats to: moshier@chapman.edu are encouraged. Application review begins immediately and will continue until positions are filled.

Chapman University values diversity and is committed to providing equal career opportunities to all individuals.

Clemson University
Department of Computer Science

Applications are invited for multiple positions at all ranks. Applicants for lecturer positions should hold the M.S. degree in computer science and provide evidence of a strong commitment to high quality undergraduate instruction. Applicants for the tenure-track positions (Assistant or Associate Professor) should hold the Ph.D. degree in computer science or a related field by the appointment date. Appointment at the Associate Professor level additionally requires evidence of significant accomplishment in teaching, research, and external funding. Areas of research preference include (but are not limited to) database, graphics, networking, operating systems, programming languages, software engineering, and visualization.

The Department has 21 faculty members, approximately 500 undergraduate majors, and 100 graduate students, and offers B.A., B.S., M.S., and Ph.D. degrees. The department also jointly administers a Masters in fine Arts and Computing degree with emphasis in computer animation and special effects. Clemson University is the land-grant university of South Carolina and has an enrollment of approximately 17,000. Clemson, S.C. is a small college town located on beautiful Lake Hartwell at the foothills of the Blue Ridge Mountains.

Applicants should send a curriculum vita and names of three reference to:
Faculty Search Committee
Department of Computer Science
Clemson University
Clemson, S.C., 29634-0974.
Screening will begin August 15, 2000 and continue until the positions are filled.
Clemson University is an Equal Opportunity/Affirmative Action Employer.

Colgate University
Department of Computer Science

Colgate University invites applications for a tenure-stream position at the rank of Assistant Professor starting in the Fall 2001. A Ph.D. or equivalent with strong interest in both teaching and research are expected. Applicants are sought in all areas of computer science, including (but not limited to) Artificial Intelligence, Graphics, Robotics, and Architecture. Successful applicants will help staff other department courses and will also be encouraged to participate in all-university programs.

Colgate University is a highly competitive liberal arts college situated in upstate New York. The university is committed to promoting excellence in both teaching and research.

Review of applications will begin January 15 and will continue until the position is filled. Resumes and three letters of recommendation should be sent to:
Chair
Faculty Search Committee
Department of Computer Science
Colgate University
13 Oak Drive
Hamilton, New York 13346
Colgate University is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply.

Professional Opportunities

College of William & Mary
Department of Computer Science
Faculty Positions

Applications are invited for one, or possibly two, tenure-track faculty positions in Computer Science to begin Fall 2001 at either the junior or the senior level. Applicants must hold a Ph.D. in computer science or in a closely related scientific field. Appointment at the junior level requires that the applicant hold a Ph.D. at the time of appointment and demonstrate strong interests in both research and teaching. Appointment at the senior level requires a documented record of sustained excellence in both research and teaching. We are interested in individuals with research expertise in the following areas: languages and compilers, database systems, graphics and visualization, networks, and other core areas in computer science. Research in these areas which is related to distributed computing/computational science, is particularly interesting to us.

The department currently consists of fifteen faculty members who support B.S., M.S. and Ph.D. programs graduating approximately 40B.S. students annually and enrolling approximately 40 M.S. and 35Ph.D. students. Teaching loads and salary are competitive. For more information about the department and the College see http://www.cs.wm.edu/.

The department maintains a contemporary computing environment for both teaching and research. It was a major participant in obtaining two NSF research infrastructure grants. A large scale cluster of 160processors is now in place in the Computational Science Center, and a major scientific visualization system is planned. These systems will be used for high performance computing research projects. Opportunities exist for joint research within the department, with members of the Computational Science Cluster, and with scientists and engineers at the nearby NASA Langley Research Center, ICASE, and the DOE's Thomas Jefferson National Accelerator Facility.

A resume, research and teaching statements, the names and addresses of three references, and any supporting documents should be sent to:

Faculty Search Committee
Department of Computer Science
College of William & Mary
P.O. Box 8795
Williamsburg, VA 23187—8795
Questions can be e-mailed to:
search@cs.wm.edu. Review of candidates will begin January 15, 2001 and continue until the positions are filled. The College is an EEO/AA employer.

Columbia University
Department of Computer Science

The Department of Computer Science anticipates filling several tenure-track positions, as well as at least one non tenure-track lecturer position with length of service up to seven years. We invite applications from exceptional candidates at all ranks and in all areas, but especially in information systems, networking, software, theory, computer engineering, human-computer interaction, and computer graphics.

Our department of 20 tenure-track faculty and 4 lecturers emphasizes excellence in research and teaching and attracts excellent Ph.D. students, virtually all of whom are fully supported by research grants. Departmental facilities include numerous servers, workstations, and PCs, plus state-of-the-art experimental systems. The department is in the fifth year of its second NSF CISE research infrastructure grant and recently received a major grant from Microsoft Research for a Windows NT teaching lab. We have close ties to the nearby research laboratories of AT&T, IBM, Lucent, Siemens, Verizon, Telcordia Technologies, NEC, and other leading industrial companies, including the start-up companies of Manhattan's Silicon Alley and the financial companies of Wall Street.

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

Candidates for tenure-track assistant professor should exhibit exceptional research promise, while those seeking a more senior position should have an outstanding record of research achievement. Candidates for lecturer should exhibit exceptional teaching skills, as well as strong research promise.

Interest and ability in teaching undergraduates and graduates is necessary. Applicants should submit summaries of research and teaching interests, CV, email address, and the names and email addresses of at least three references by filing an online application at http://www.cs.columbia.edu/recruit. Review of applications will begin January 15, 2001.

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

Cuyahoga Community College
Department of Information Technology

Information Technology - Tenure Track Faculty Position, commencing August 2001 — Teaches a variety of computer courses, which could range from computer literacy to a specialty in areas such as networks, database and/or computer languages, mainframe programming in COBOL for an IBM S/390 Integrated Server. Required Qualifications: Master's degree. Significant Computer Science experience and/or coursework. Vacancy #007-02. For a complete job description and application procedures, visit our web site at www.tri-c.cc.oh.us.
EOE

Cuyahoga Community College
Department of Information Technology

Information Technology - Tenure Track Faculty Position, commencing August 2001 — Teaches a variety of computer courses, which could range from basic computer applications applicants, to specialty in such areas as database, PC programming and/or networks. Required Qualifications: Master's degree. Two years full-time experience in implementing computer technology. Vacancy #018-02. For a complete job description and application procedures, visit our web site at www.tri-c.cc.oh.us.
EOE

Dartmouth College
Department of Computer Science
Faculty Position in Computer Science

The Department of Computer Science anticipates hiring one or more Assistant Professors of Computer Science. We are particularly interested in candidates in the areas of algorithms, graphics, security, and databases.

The Department of Computer Science currently includes 14 tenure-track faculty members. In addition, several faculty members in the Thayer School of Engineering and the Department of Mathematics have research interests related to computer science and hold joint or adjunct appointments in Computer Science.

Dartmouth College is a highly selective Ivy League university with approximately 4000 undergraduates and 1000 graduate students. It combines the advantages of a small liberal arts college (small class size, excellent students, and close student-faculty interaction) with the research activities of a university. As an indication of this dual commitment, research and teaching both count strongly in decisions on hiring, promotion, and tenure.

Persons interested should submit a curriculum vitae and a list of at least four references, at least one of whom can comment on teaching. Review of the applications will begin immediately and will continue until the search is complete. Please send application materials and general inquiries to:

Delia Mauceli
Computer Science Recruiting
Department of Computer Science
Dartmouth College
6211 Sudikoff Laboratory
Hanover, NH 03755-3510
Specific questions can be referred to Scot Drysdale, at the same address or at the following email address (scot@cs.dartmouth.edu).

Information on faculty and their research, facilities, graduate students, etc. is available over the World Wide Web at URL: http://www.cs.dartmouth.edu.

Dartmouth is an equal opportunity/Affirmative Action employer and encourages applications from women and members of minority groups.

Drexel University
Computer Science and Information Systems

Drexel University invites applications for multiple full-time positions at all levels in computer science and information systems. Appointments are available in the College of Information Science and Technology and the Department of Mathematics and Computer Science. Preferred interests include: Software Engineering, Human-Computer interaction, Databases and Information Retrieval, Knowledge management, Programming languages and Compilers. Strong applicants in other areas are encouraged to apply.

Drexel's CS/IS programs are among the fastest growing in the nation. We have rapidly expanding graduate education and research programs emphasizing applied research, with a tradition of both quantitative and qualitative research that encourages interdisciplinary activity. We consider experience in industry a plus. Drexel's combined CS/IS programs have over 50 faculty members and 2000 students in bachelor's, master's and doctoral degree programs.

To apply, send cover letter and CV along with names and contact information for four references to: CS/IS Faculty Search, Rush Building, Drexel University, Philadelphia, PA 19104. Telephone (215)
895-2179. Fax: (215) 895-2494. E-mail: csis-search@drexel.edu WWW: http://www.mcs.drexel.edu/csis-pos/

Applicant review and interviews begin immediately and will continue until the anticipated positions are filled.

Drexel, an affirmative action/equal opportunity employer, is a privately endowed technology university with about 12,000 students.

Florida State University
Department of Computer Science
Chair

The Florida State University invites applications for the position of Chair of the Department of Computer Science. The Florida State University is in a period of significant growth in Computer Science, having hired eight new faculty in the last two years, and is committed to an additional fifty percent growth over the next five years. We are seeking a senior faculty member to lead the Computer Science Department through this growth period to national prominence as a research institution. Already a federally recognized center of academic excellence, the Computer Science Department is well-positioned to reach this distinction, with a core of nationally and internationally distinguished researchers on faculty and an established and growing federal funding record. This year the department added space and equipment for four laboratories of more than forty computer workstations and servers supporting their systems administration, network security, and cryptography research and curricula, further reflecting the commitment of the administration to departmental growth.

The ideal candidate will have demonstrated individual research excellence and success in leading a research effort in computer science or closely related field, resulting in significant federal funding and national visibility and influence. A commitment to high quality undergraduate and graduate education and research partnership must be evident. The chair position in the Computer Science department is a three year appointment, renewable for additional three year terms. Associated with an appointment of an outside chair would be a faculty appointment at the rank of Professor. After serving one or more terms as chair, the appointee would assume a full time professorship as a leading researcher in the department.

Florida State University (FSU) is an accredited Carnegie Research I University situated in Tallahassee, the capital city of Florida. FSU has built a reputation as a strong research institution in both the sciences and the humanities, with significant outside research funding from private foundations, industries, and government agencies. Tallahassee, separated from the high tourist, high traffic areas of the Florida peninsula, enjoys a relaxed lifestyle that is a refreshing counterpoint to the urban bustle of south Florida. The climate is appealingly temperate, cooler in winter than points south, usually with a mild January of half a dozen frost-covered mornings. The populace is professionally oriented with outdoor activities as the family recreation attraction. The university is a significant cultural center, with opportunities ranging from nationally acclaimed theater and music to athletics. Tallahassee is served by a modern airport and four major airlines.

Interested applicants should send a curriculum vitae and three references to:
Chair
Faculty Recruitment Committee
Computer Science Department
Room 203
James Jay Love Building
FSU
Tallahassee, FL, 32306-4530.
For more information about the FSU Computer Science Department see our web page at: http://www.cs.fsu.edu.

Florida State University is an Equal Opportunity/Affirmative Action employer,

committed to diversity in hiring, and a Public Records Agency.

Indiana University
School of Informatics

Indiana University's School of Informatics on the Bloomington and Indianapolis campuses invites applications for tenure-track positions, primarily at the assistant professor rank. Senior rank will be considered for applicants with recognized national and international stature. Rank will be determined on the basis of qualifications and experience. This is the first new school at Indiana University in 28 years, and one of the very first new schools in the country dedicated exclusively to informatics, understood as the application of information technology to problems in various disciplines. At both Indiana University Bloomington (IUB) and Indiana University Purdue University Indianapolis (IUPUI), the school offers a B.S. in Informatics and M.S. degrees in bio- and chemical informatics. On the Bloomington campus the school also offers an M.S. degree in Human-Computer Interaction. On the IUPUI campus, the school offers both a B.S. and an M.S. in New Media and an M.S. in Health informatics. More information about the new school may be found at http://www.informatics.indiana.edu.

This is an excellent opportunity for faculty interested in building new academic programs in a dynamic environment. Applicants should be able to teach a range of undergraduate and graduate courses in informatics, which could include mathematical foundations of information, organizational informatics, social informatics, distributed information and knowledge systems, human-computer interaction, and new media. Applicants with a background in computer and/or information science are encouraged to apply as well as those who have knowledge of best practices in the application of information technology to a particular discipline such as biology, chemistry, health sciences, journalism, telecommunications or fine arts. (This list is not exclusive.) Joint appointments with campus units in the applicants' specialties are possible.

Applicants at the assistant professor level should have a promising agenda of scholarly research or creative activity and demonstrated commitment to teaching. Senior applicants should have evidence of outstanding research and excellent teaching. Preference will be given to those with a completed Ph.D. or the equivalent or appropriate terminal degree.

Applicants should send a letter of application outlining their qualifications, a curriculum vitae, and a list of three references (for senior applicants, a list of six references). A sample of written work and evidence of quality teaching are welcome additions.

IU-Bloomington Positions
Send all materials for Bloomington positions to:
Associate Dean Christine Ogan
School of Informatics
339 Sycamore Hall
1023 E. Third St.
Indiana University
Bloomington, IN 47405
Indiana University-Purdue University at Indianapolis (IUPUI) Positions
Send all IUPUI materials to:
Associate Dean Douglas Perry
School of Informatics
117 Mary Cable Building
525 N. Blackford St.
IUPUI
Indianapolis, IN 76202
The search committee will start reviewing applications for all positions on Feb. 15, 2001, and will continue until the positions are filled. The School of Informatics is eager to consider applications from women and people of color. Indiana University is an Affirmative Action/Equal Opportunity Employer.

Tenure-Track Faculty Positions

The Computer Science Department of SUNY Stony Brook has several tenure-track faculty positions for Fall 2001. We are particularly but not exclusively interested in applications from junior faculty in the experimental computer systems area, such as networking, Internet-related systems, graphics, computer-human interaction, computer architecture, and information systems.

The Department currently has 36 faculty members and is expected to recruit additional members in the next few years. There are five main active research areas in the department: graphics/visualization, logic programming/database, concurrency/verification, computer systems, and algorithms. Detailed information on the research activities of these groups can be found in the department home page at www.cs.sunysb.edu.

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

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

Applicants should have a Ph.D. in Computer Science or a related discipline. Apply by sending a detailed résumé, the names of at least three references, and three publications to: Professor Tzi-cker Chiueh, Faculty Recruiting Committee Chair, Computer Science Dept., SUNY/Stony Brook, Stony Brook, NY 11794-4400. (631) 632-8470. Please also have at least three reference letters sent to the same address or to rccruit@cs.sunysb.edu. In addition, please e-mail to the same address a URL pointing to your online resume and publications.

Applications from women and minorities are particularly sought. Action/equal opportunity educator and employer. AA/EOE

STONY BROOK
STATE UNIVERSITY OF NEW YORK

Professional Opportunities

College of Arts and Sciences
Department of Computer Science
Faculty Recruiting

The Florida State University Department of Computer Science invites applications for several tenure-track and non-tenure-track positions at all ranks. The department is in a period of significant growth in Computer Science and allied areas. In the last two years it has hired eight new faculty and the growth is continuing. New faculty will have the opportunity to help shape the department's future.

Applicants for tenure-track faculty positions are required to have completed a PhD in computer science, computer engineering, or a closely related field by the date of the appointment. Well qualified individuals in any area of computer science are encouraged to apply. Areas of priority include the following: trustworthy systems (including such topics as safety, reliability, system security, and information assurance); operating systems and networking; databases and massive data storage, processing, and archiving; visualization; software engineering. We are also interested in individuals who could contribute to our undergraduate distance-learning degree program and our professional master's degree tracks in software engineering and computer and network system administration. Selection will be based on evidence of outstanding research accomplishments and teaching ability.

FSU's primary mission is graduate teaching and research. It is classified as a Carnegie Research I university. FSU is an Internet 2 university. It is 14th among public universities in NSF support, and awards over 300 PhD's per year. The university has about 30,000 students, representing every state and 136 foreign countries. FSU is located in the Florida capital — a city of approximately 250,000, surrounded by forests, lakes and farms, and about an hour's drive from the Gulf Coast. It has excellent public schools and affordable housing. The department offers degrees at the BS, MS, and PhD levels.

Further information about the university and the department can be found via links from http://www.cs.fsu.edu/reference/tlhinfo.html, and questions may be e-mailed to recruitment@cs.fsu.edu.

Candidates are encouraged to apply immediately. Applications will be considered as they arrive, until the available positions are filled. Please use the on-line application form at http://www.cs.fsu/positions/apply.html. In addition, please arrange for at least three letters of reference to be sent to the following address:

Faculty Search Committee
Computer Science Department
PO Box 4530
Florida State University
Tallahassee, FL 32306-4530

The Florida State University is an Equal Opportunity/Affirmative Action employer, committed to diversity in hiring, and a Public Records Agency.

Indiana University
Computer Science Department
Faculty Positions

The Indiana University Computer Science Department anticipates filling several tenure-track faculty positions beginning 2001-2002. Areas of interest are operating systems, distributed systems, networking, graphics and databases. In addition our new, privately endowed, IPCRES research center will be hiring several senior positions in the areas of distributed systems, networking, pervasive computing, security and graphics.

The CS department, which is part of the College of Arts and Sciences, is working cooperatively with our new School of Informatics, which offers a B.S. degree focusing on the application of information technology to various disciplines and has M.S. programs in Human Computer Interaction, and Bio and Chemical Informatics. Cross-appointments with Informatics are possible in computer science related areas such as data mining and search technologies.

A Ph.D. in Computer Science is required for all CS faculty positions. Applicants must have demonstrated potential for excellence and productivity in research. In addition, a strong contribution to the educational mission of the department is expected.

The department occupies a spacious limestone building with extensive state-of-the-art computing facilities. The attractive wooded campus of Indiana University is located in Bloomington, chosen as one of the most cultural and livable small cities in the US, and only one hour from the Indianapolis airport. To learn more about the department please visit our web site at www.cs.indiana.edu.

Please send a detailed CV and a list of references to:
Faculty Search
Computer Science Department
Indiana University
Lindley Hall 215
Bloomington, IN 47405-7104
email: search@cs.indiana.edu
Indiana University is an Equal Opportunity/Affirmative Action Employer. The Computer Science Department strongly encourages applications from women and minorities.

Iowa State University
Department of Computer Science
http://www.cs.iastate.edu
We seek applications for several faculty positions. We are primarily looking for assistant professors in the areas of computational complexity, distributed computing systems and networking, machine learning, data mining and multiagent systems. However, outstanding applicants in all areas and at all ranks will be considered. Candidates for the senior positions should have a strong record of research, teaching, and external funding. The positions require a Ph.D. in Computer Science or a related field, and strong evidence of research and teaching abilities.

The department currently consists of 21 full-time faculty and offers BS, MS, and Ph.D. degrees in Computer Science. It also participates in interdepartmental Ph.D. programs in Bioinformatics, Computational Biology and Neuroscience. The department has approximately 750 undergraduate and 110 graduate majors. Established research and education areas in the department include algorithms, artificial intelligence, bioinformatics, computational biology, computation complexity, databases, data mining, distributed computing systems, machine learning, parallel computing, programming languages, multimedia systems, operating systems, networks, robotics, software engineering, and theory of computation. A strong graduate program, a well-funded research program, opportunities provided by the Baker Center for Bioinformatics and Biological Statistics, DOE Ames Laboratory, Virtual Reality Applications Center, and moderate teaching load (three courses per year) provide an excellent work environment that nurtures leading edge research and innovative education.

Iowa State University is a major land-grant university located in Ames, Iowa. Ames is a pleasant small, yet cosmopolitan city with a population of 50,000 (26,000 students), a vibrant cultural scene, and a secondary school system that ranks among the best in the United States. Ames is ranked as the 2nd most livable small city in the U.S.

Applicants should send a curriculum vita, including names of three references, to:
Chair of Search Committee
Department of Computer Science
Iowa State University
Ames, IA 50011
Fax: (515)294-0258
Tel: (515)294-4377
Email: faculty-search@cs.iastate.edu.
Review of applications will begin on November 1, 2000 and continue until the positions are filled.
ISU is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

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

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

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

Applicants should have (ASCII or PostScript copies of) a comprehensive curriculum vitae, a statement of future plans for research and teaching, and at least three letters of reference sent via e-mail to: search@cs.jhu.edu. To ensure full consideration, complete electronic applications should be received by February 1, 2001. Applications may also be sent to:
Faculty Search Committee
Department of Computer Science
Room 224
New Engineering Building
Johns Hopkins University
Baltimore, MD 21218-2694
Fax: 410-516-6134
The Johns Hopkins University is an EEO\AA employer. Women and minorities are strongly encouraged to apply.

Kent State University
Department of Computer Science
Multiple tenure-track positions
Multiple tenure-track positions in Computer Science at the Assistant and Associate Professor are available in the Department of Mathematics and Computer Science at Kent State University. The principal areas of interest for these positions are: Graphics and Scientific Visualization, Database Systems, Networking and Computational Science. The exact number of open positions has not been determined and will depend on the availability of funding.

In addition, subject to funding approval, two tenure-track positions at the Associate and Full Professor levels, with responsibilities for industrial outreach and with responsibility for interdisciplinary outreach respectively, are available. The principal areas of interest for these positions are: Graphics and Scientific Visualization; Database Systems; Computational Science; Massively Parallel and Distributed Computation; Networking; Operating Systems; Artificial Intelligence; and Image processing. Individuals with experience in cooperative, computer science-industrial programs or with experience in interdisciplinary computer science programs are encouraged to apply.

The department offers B.S., M.A., M.S. and Ph.D. degrees in computer science. The computer science program has 15 faculty, over 150 graduate students and over 350 undergraduate students, and is experiencing growth in student numbers. In addition, the computer science program has been targeted for significant enhancement by both the State of Ohio and Kent State University.

Application letters together with a resume and the names of three references should be sent to:
Computer Science Search Committee
Department of Mathematics and Computer Science
Kent State University
Kent, Ohio 44242, USA
FAX (330)-672-7824
Nominations and applications may also be submitted via email to cs-pos@mcs.kent.edu (in ASCII or PostScript format.)
The search committee will begin to consider applications on January 2, 2001 and will continue until the position is filled. Visit the Kent State Computer Science website at http://www.cs.kent.edu for additional information about the program.
Kent State University is an Affirmative Action/Equal Opportunity Employer.

Kent State University
Department of Computer Science
Distinguished Professor of Computer Science
Applications and nominations are invited for the position of Distinguished Professor of Computer Science. Outstanding candidates in all areas will be considered, but our principal areas of interest are parallel and distributed computation and networking. This position, which resulted from an initiative by the Ohio Board of Regents to strengthen Ph.D. computer science programs in Ohio, is intended to enhance the quality and visibility of research activities in the department as well as to promote collaboration between the computer science doctoral programs in Ohio and with industry. In addition to startup funds, the position includes ongoing research funding. A successful candidate will be expected to interact effectively with existing faculty and to help in shaping the future research directions of the department and the state.

The department offers B.S., M.A., M.S. and Ph.D. degrees in computer science. The computer science program has 15 faculty, over 150 graduate students and over 350 undergraduate students, and is experiencing strong growth in student numbers. In broad terms, the faculty areas of research lie in massively parallel and distributed computation; numerical and scientific computation, modeling, and visualization; symbolic computation; networking and distributed operating systems; artificial intelligence; and image processing. The department has been targeted for significant enhancement by the State of Ohio and Kent State University, and will be increasing its equipment holdings and staff considerably in the near future.

Letters of nomination or application letters together with a resume and the names of five references should be sent to:
Distinguished Chair in Computer Science
Search Committee
Department of Mathematics and
Computer Science
Kent State University
Kent, Ohio 44242, USA
FAX (330)-672-7824
Nominations and applications may also be submitted via email to distinguished@mcs.kent.edu (in ASCII or PostScript format.)
The search committee will begin to consider applications immediately and will continue until the position is filled. Visit the KSU Computer Science website at http://www.cs.kent.edu for additional information about the program.
Kent State University is an Affirmative Action/Equal Opportunity Employer.

Kent State University
Department of Math and Computer Science
Post Doctoral Position in Networking and Multimedia
A Post Doctoral position is immediately available at Kent State University under PER-CEPTMEDIA project sponsored by DARPA. The project involves research in perceptual engineering in the area of high definition video transcoding and networking. We are looking for an energetic young researcher interested in leading this cross cutting initiative with innovative ideas and the ability to validate concepts by planning and executing experiments. While a creative mind will help in the former, involved network and systems programming will be needed to succeed in the later. The optional ingredients that would help are familiarity in visual perception, MPEG, and eye-gaze tracking research. Nonetheless, this position will be an excellent opportunity to master the above. The position is initially available for a period of one year and may be renewable subject to availability of funds.

If you are interested please send a CV to postdoc@mcs.kent.edu or mail it to:
Dr. Javed I. Khan
C/O Shirley Sommers
Media Communication and Networking
Research Lab
233 MSB
Department of Math & Computer Science
Kent State University
Kent, OH-44242.
For query: 330:672-9045
Kent State University is an equal opportunity/affirmative action employer.

Lehigh University
Tenure-Track positions in Computer Science and Computer Engineering
Lehigh University is seeking applicants at all levels for tenure track positions in Computer Science and Computer Engineering. Exceptional applicants with a doctorate (by September of 2001) in any area of Computer Science or Computer Engineering are sought with preferences in distributed systems,

Professional Opportunities

networking, theory, compilers, digital or embedded systems, and computer architecture. Applicants must have a proven record of innovative research and be committed to teaching.

Lehigh University has announced a $75 million program to strengthen its academic core, and computer and information sciences are key among intended areas for investments. While detailed plans are being developed this year, this is expected to translate into very significant growth in the next 3-5 years, with new initiatives to commence in Spring 2001. Lehigh is a top 40 ranked national university with quality graduate and undergraduate programs in Computer Science and Computer Engineering. A new department, tentatively named Computer Science and Engineering, is currently being formed starting with faculty from the EECS department. We seek exceptional faculty, at all ranks and in all areas, to help build this new department. The new department is expected to expand existing programs, and to significantly increase research production in computer science and engineering related areas. More details, as they emerge, can be found at: www.cse.lehigh.edu.

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

Applications should include a vita, names of at least three references (with both postal and email addresses) and teaching and research statements. Send applications to:
Professor Glenn Blank
Faculty Search Committee
Lehigh University
EECS Department
19 Memorial Drive
West Bethlehem, PA 18015
Or: compsearch@eecs.lehigh.edu
Lehigh University is committed to recruiting and retaining women and minorities.

Lehman College (CUNY)
Department of Mathematics and Computer Science

Two tenure track positions in Computer Science are available starting on September 1, 2001 at the rank of Assistant/Associate/Full Professor. One position calls for an individual who will do research, teach and create courses in any of the areas of Software Development, New Media, Internet Applications, Computer Security, Visualization, Networking. Ph.D. preferred, Masters required. The selected individual is expected to: develop grant proposals, develop relations with industry and establish and supervise a student intern program and participate in departmental and college-wide committee work. The other position requires a Ph.D. The selected individual is expected to teach undergraduate and graduate courses in Computer Science, publish research articles in refereed professional journals, participate in departmental and college-wide committee work and develop grant proposals.

For both positions, the appointment rank and salary will be commensurate with qualifications and experience.

Application procedure: Send curriculum vitae along with a cover letter and arrange for at least three letters of recommendation to be sent to:
Prof. Robert Feinerman, Chair
Department of Mathematics and
Computer Science
Lehman College
Bronx, NY 10468
Review of applications will begin on January 15, 2001 and will continue until positions are filled. Additional information at: http://www.lehman.cuny.edu.
AA/EEO/ADA Employer

Louisiana State University and Southern University
Anticipated Two Tenure-Track Positions - Assistant/Associate Professor

Louisiana State University (LSU) and Southern University (SU) in partnership with the National Science Foundation and the Louisiana Board of Regents have established a Joint Faculty appointment Program (JFAP) in the area of high performance networking. LSU is the only Research I university in Louisiana, while SU is a major Historically Black College and University (HBCU). These universities are only eight miles apart in Baton Rouge, the capital city of Louisiana, with many ongoing joint curricula and collaborative research projects. The partnership wishes to increase the diversity of engineering education in Louisiana. Through this JFAP, two tenure-track faculty positions are available at the rank of Assistant or Associate Professor, designated as a LaSER assistant/associate professor. The appointment will begin at the Fall Semester of

2001. The successful candidates will have a 50% faculty appointment in each university, and fringe benefits will be appropriately arranged. Special provisions for these positions include: (I) A $120,000 start-up fund for two years; (a) establishing a research lab; (b) up to two summer months salary per year for two years; (c) graduate and undergraduate student support; (d) travel, and (e) materials and supplies. Full usage of teaching and research resources at both universities as well as full privileges of a regular member at both universities.

Required Qualifications: An earned Ph.D. degree in Computer Science, Computer Engineering or a closely related field.

Additional Qualifications Desired: Expertise in Telecommunications and Networking, Distributed Computing and related areas. Candidates possessing experience in High Performance Computing and Communication, teaching and/or industrial experience, and strong demonstrated research funding and publications record are especially encouraged to apply. The successful candidates are expected to teach at both undergraduate and graduate levels, and develop externally funded research programs. Salary and rank will be commensurate with qualifications and experience.

The Department of Computer Science at LSU offers the B.S. (Computer Science) M.S. (Systems Science), and Ph.D. degrees with approximately 250, 60, and 45 students, respectively. They receive federal grants of about $1 million/year from A.F.O.S.R., A.R.O., D.O.E., N.A.S.A., D.A.R.P.A., N.S.F., and other agencies. The Southern University position offers a B.S. degree in Electrical Engineering and is expected to initiate a Master's Program in Engineering during the beginning Fall 2000 and Ph.D. in Material Science Engineering in Fall 2001.

Applications received by March 15, 2001 will be fully considered, and screening will continue until the positions are filled. Please submit: (a) a cover letter including vision statement addressing research and teaching goals, how to achieve these goals while being affiliated with the two institutions, and a statement of career objectives, (b) curriculum vitae, (c) a statement of work authorization status, and (d) names, addresses, and phone numbers of five references. Please provide these materials to:
Dr. S. Iyengar
Chair of the Joint Faculty Appointment
Program
Department of Computer Science
Louisiana State University
Ref: Log #0652
Baton Rouge, LA 70803
LSU/SU is an Equal Opportunity/Equal Access Employer.

Loyola University Chicago
Chair, Department of Computer Science

The College of Arts and Sciences is in the process of a major expansion of its Computer Science activity, and invites applications for Chair of a newly formed Computer Science Department.

The CS program, currently a part of a department of Mathematical Sciences, has 200+ undergraduate and 200 graduate students, offers BS and MS degrees in CS, and certificate and online programs. The CS group consists of about 10 tenure-track faculty performing successful, funded research programs in several areas of computer science. Continued growth of the Computer Science Department is a high priority of the College and University, and the successful candidate will have the opportunity to lead a dynamic and growing department effective July 1, 2001.

The Chair of the Department of Computer Science will have a balanced perspective on research and teaching, and work with faculty across the Department and University to identify and pursue innovations in teaching, research, and outreach and will lead the Department in the strategic planning for the future that is currently in progress.

Candidates must be qualified to receive an appointment at the rank of tenured Full Professor. This is an annual (12 month) appointment. Candidates must have a strong record of outstanding research, educational innovation, and administrative effectiveness. Salary will be competitive and commensurate with qualifications.

Review of applications will begin on January 15 and continue until the position is filled. Please submit a curriculum vita, and the names and contact information (including address, email, and phone numbers) of at least four references to: chairsearch@cs.luc.edu, in HTML, ASCII, PDF, or PostScript format. Additional information about this position may be obtained by sending email to: chairsearch@cs.luc.edu, and by visiting: http://www.cs.luc.edu/chairsearch/.

Loyola University Chicago is an Equal Opportunity/Affirmative Action Institution and encourages applications from women and members of ethnic minority groups. Loyola University Chicago is sensitive to "two-body problems" and will actively assist with opportunities at Loyola and elsewhere in the Chicago area.

Malardalen University
Real-Time Research Centre
Research fellow in Real-Time System

Malardalen Real-Time Research Centre (MRTC) is hiring 1-2 research fellows for a period of 1-2 years. Further information at: www.mrtc.mdh.se or contact Professor Hans Hansson (han@idt.mdh.se) Closing date: December 1st, 2000, or until the position is filled.

Michigan Technological University
Department of Computer Science
Tenure-Track Faculty Position(s)

Applications are invited for one or more tenure-track faculty positions beginning August 2001. Candidates are expected to have a Ph.D. in computer science or computational science and engineering and are expected to demonstrate potential for excellence in teaching and research. Applications from exceptional candidates for more senior positions will be considered. Of particular interest are candidates with research in areas of software engineering, architecture, networks, operating systems, databases, bioinformatics or cheminformatics. Individuals with on-going research support may be considered for research faculty positions.

Michigan Technological University, designated as one of four Michigan research universities, has over 6,200 students and 400 faculty. The Department has 14 full-time faculty members and well-established undergraduate and M.S. programs with excellent students. The Department has a central role in the interdisciplinary Computational Science and Engineering Ph.D. Program. This program fosters research and teaching in the application of computer science to problems in engineering and the sciences. A proposed Ph.D. Program in Computer Science is under review with an anticipated start date of Fall 2001. Enrollments in the undergraduate program exceeds 400 students and approximately 150 students are enrolled in the graduate program.

Computing facilities in the Department include a heterogeneous Unix network of over 100 work-stations and servers. The main platforms are Sun Solaris and Linux. Research equipment includes Compaq Alpha and SGI workstations, a 128-processor Beowulf cluster, a 12-node Sun E4500, and Internet 2 access.

Michigan Technological University is located in Houghton in Michigan's scenic Upper Peninsula.Surrounded by Lake Superior

and nearby forests, the community offers year-round recreational opportunities. This environment combined with a competitive compensation package and a low cost of living results in an excellent quality of life.

Review of applications will continue until the position is filled. Women and minorities are particularly encouraged to apply. Applicants should send a resume, email address, and a list of at least three references to:
Linda Ott, Chair
Department of Computer Science
Michigan Technological University
Houghton, Michigan 49931
linda@mtu.edu
(906) 487-2209
For more information see our web page http://cs.mtu.edu/.
Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

Middle Tennessee State University
Computer Science Department
Tenure-track position

Ph.D. required, computer science preferred, rank open. Evidence of excellence in teaching ability and demonstrable potential for research in computer science required. Department currently offers a MS and a CSAB/CSAC accredited BS in computer science. Full position announcement available at: www.mtsu.edu/~csdept. Review of applications begins January 22, 2001.
Send application materials to:
Richard C. Detmer, Chairperson
Computer Science
Box 48
Middle Tennessee State University
Murfreesboro, TN 37132.
Middle Tennessee State University is an Equal Opportunity Employer.

Minnesota State University, Mankato
Computer and Information Systems Department

CS/CIS, multiple tenure-track positions.

The Computer and Information Systems Department invites applications for multiple tenure-track positions. Complete descriptions of the positions available at:
http://www.mankato.msus.edu/dept/AffAct
/MSU-VAC_NOT/VacHP.html
AA/EOE

Professional Opportunities

Montclair State University
Department of Computer Science
Two Tenure-Track Assistant Professors

The Department of Computer Science invites applications for two tenure track assistant professors starting September 1, 2001. The Department's twelve faculty support the BS with a CSAC accredited track and the MS in Computer Science. Qualifications include experience with Object Oriented technology including C++ or Java and modern architecture (RISC), interest in teaching a rich variety of computer science courses to ethnically diverse students, and a Ph.D. in Computer Science or a closely related area. Candidates with specializations in Informatics or Human Computer Interaction are preferred. Faculty are expected to have an ongoing research plan, to commit to quality teaching, and to be involved in professional activities and the pursuit of grants. Screening begins immediately and continues until the positions are filled. The positions are subject to available funding. Candidates should send a resume, statement of research interests, teaching philosophy, and professional goals to:
> Dr. Dorothy Deremer, Chairperson
> Department of Computer Science
> Montclair State University
> RI301, Box V-29
> Upper Montclair, NJ 07043
> Montclair State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

New Jersey Institute of Technology
Department of Computer and Information Science

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

NJIT is a public, technological research university serving more than 8,800 students. The school has a rapidly growing research culture and funding record. The university is located in northeastern New Jersey, just a short distance from New York City.

With a total enrollment of over 2,300 (including 80 PhD students), the department offers BS, MS, and PhD degrees in both computer and information science.

Interested candidates should send their CV, and also request 3 letters of reference be sent to:
> Chair
> Computer and Information Science Search Committee
> New Jersey Institute of Technology
> Personnel Box F-CIS
> University Heights
> Newark, New Jersey 07102-1982

Additionally, please send an email copy to "recruit@cis.njit.edu". See http://www.cis.njit.edu, for more information on the department. Applications will be considered continuously from November 1 through the end of April.

New Jersey Institute of Technology is an Equal Opportunity Employer.

New Mexico Institute of Mining and Technology
Computer Science and Information Technology
Faculty Positions

New Mexico Institute of Mining and Technology, seeks applicants for multiple tenure-track positions in its Computer Science (CS) department and a newly-established Information Technology (IT) program. Appointments will generally be made at the Assistant Professor level; higher-rank appointments are possible for highly qualified applicants.

Candidates for the positions must have an earned Ph.D. in CS, IT, Management, Computer Engineering, or a closely related field at the time of appointment and have demonstrated potential for excellence. The ability to teach graduate and undergraduate courses, conduct research in major areas of CS and IT, and attract research funding is essential. We are particularly interested in applicants with experience in interdisciplinary work involving the areas of software engineering, architecture and OS, Internet technology, multimedia, e-commerce, complex systems, and/or security. New Mexico Tech is a scientific and technical institute with 1700 students.

The CS Department (offering B.S., M.S., and Ph.D. degrees) currently has more than 250 students. There are excellent facilities for research and teaching, and opportunities to interact with nearby institutions, including the National Radio Astronomy Observatory and Los Alamos and Sandia National Laboratories. (Commensurate with applicant's qualification, joint appointment with New Mexico Tech's Institute for Complex Additive Systems Analysis will be considered.) New Mexico Tech is located in the Rio Grande Valley with fabulous weather and endless outdoor recreational opportunities.

Send application material, including the names and addresses of at least three references, a brief description of research interests and accomplishments, a statement of teaching philosophy, and transcripts of graduate work, to:
> New Mexico Institute of Mining and Technology
> Human Resources 801 Leroy Pl.
> Box 133C
> Socorro, NM 87801
> Screening will begin immediately and continue until positions are filled. Visit our web

page at: http://www.nmt.edu/. E-mail applications not accepted.
> AAEOE

New Mexico State University
Computer Science Department

Applications are invited for two tenure-track positions at the assistant professor level in any area of specialty. Strong commitment to both research and teaching is required. Applications from women and members of minority groups are encouraged. A Ph.D. in Computer Science or a closely-related discipline and evidence of strength in teaching and research are required.

The Department has eleven tenure-track and two college professors and offers B.S., M.S. and Ph.D. degrees. Facilities in the department include a network of about 100 workstations, a 14 processor Sun Enterprise, a 32 node Beowulf machine, and several other multi-processor machines, as well as VBNS/Internet-2. The Department recently received a $1.5M grant from the National Science Foundation to augment its infrastructure.

Computer Science has growing enrollment, with over 300 undergraduates and 70 graduate students. Salaries are competitive. NMSU is unique in having both Carnegie 1 Research, and Minority Institution status. The Department collaborates closely with the Computing Research Laboratory, an independent center at NMSU that works in Natural Language Processing, the Physical Science Laboratory that houses the National Biotechnology Information Facility, and many other departments, including Electrical and Computer Engineering, and Business Computer Systems. There are close ties to both Sandia and Los Alamos National Laboratories, and the White Sands Missile Range, which are all within the state. Las Cruces is in the south of New Mexico, the "Land of Enchantment", just 50 minutes from El Paso airport.

Applicants should arrange for a vita, a short research description and at least three reference letters to be sent by postal mail directly to:
> Faculty Recruiting Committee
> Department Of Computer Science
> BOX 30001 MSC CS
> New Mexico State University
> Las Cruces, NM 88003-8001.
> Screening will begin November 16th.

2000. Enquiries by eMail to Roger Hartley, Department Head, (rth@cs.nmsu.edu) are welcomed. Applications will be accepted until all positions are filled.

NMSU is an EEO/AA employer.

North Carolina State University
Department of Computer Science
SAS Institute Endowed Chair and Professor of Computer Science

The Department of Computer Science at North Carolina State University seeks a distinguished scholar for the newly created SAS Institute Endowed Chair. This Chair has been created to promote excellence in all aspects of computer science that support e-commerce systems and applications.

SAS Institute, based in Cary, is about 10 miles from NCSU and employs 6,200 people worldwide. SAS is the world's largest privately held independent software company with annual revenues exceeding $1 billion. With a focus on the needs of the decision-support community, SAS derives more than half its revenue from data warehousing and data mining-related solutions. In addition to the endowment, the chair comes with several hundred thousand dollars worth of equipment, software, and support for a new laboratory. This new position has been created to further strengthen our activities in software systems, which currently include research in areas such as electronic commerce, virtual enterprises, heterogeneous and object-oriented databases, machine learning, multiagent systems, multimedia, distributed computing, networking, and human interfaces. The new faculty member will find a lively and collegial work environment with many opportunities for collaboration on campus and with local industry.

The department is in a period of rapid growth and advancement, and is aggressively positioning itself to be at the forefront of selected areas in computer science. We attract research sponsorship from a variety of sources, including ARPA, AFOSR, EPA, NASA, NIH, NSF, and ONR. Industrial sources include IBM, Fujitsu, Glaxo-Wellcome, Proctor & Gamble, and others. The new faculty member will have access to our state-of-the-art networking, computational, and multimedia facilities. The department receives excellent support from the college of engineering and the university. We recently obtained space in the new $41 million Engineering Graduate Research Center on NCSU's industry-oriented Centennial Campus. Also, the State of North Carolina recently passed a bond issue providing $93 million to move the College of Engineering to the new Centennial Campus.

NCSU, a Research I Land-grant University, is located in Raleigh, a vertex of the world-renowned Research Triangle, which

boasts a large concentration of high-tech companies and research institutions. The state of North Carolina is a world center of banking and finance. The Research Triangle area is recognized as one of the best places to live in the U.S.

Interested candidates should send their resume, two or more sample papers, and the names of four references to:
> Chair
> SAS Institute Endowed Chair Recruitment Committee
> Department of Computer Science
> North Carolina State University
> Raleigh, NC 27695-8206, USA
> For primary consideration, applications must be submitted by January 31, 2001. Prospective candidates may access the department's homepage (http//www.csc.ncsu.edu), and may send inquiries to:
> saschair@csc.ncsu.edu.
> NC State is an Equal Opportunity, Affirmative Action employer. Individuals with disabilities desiring accommodations in the application process should contact the Computer Science Department at NCSU at (919) 515-2858.

Northwestern University
Department of Computer Science

The department seeks outstanding candidates for junior faculty positions at the Assistant Professor level in all areas of systems, broadly construed, including operating systems, databases, programming languages and environments, multimedia systems, graphics and animation, distributed computing, networking, and e-commerce infrastructure and applications.

Send applications, including 3 references, by January 31, to:
> Faculty Search Committee
> Northwestern University
> Dept. of Computer Science
> 1890 Maple Ave.
> Evanston, IL 60201
> or by email to: facultysearch@cs.nwu.edu
> Northwestern University is an affirmative action/equal opportunity employer. Hiring is contingent upon eligibility to work in the United States. Applications by minorities and women are particularly encouraged.

Northwestern University
Department of Computer Science

The department seeks outstanding candidates for either a junior or senior position in theoretical computer science at the level of Assistant, Associate or Full Professor. Senior candidates should have a proven record of research leadership.

Send applications, including 3 references (5 for the senior position) by January 31 to:
> Faculty Search Committee
> Northwestern University
> Dept. of Computer Science
> 1890 Maple Ave.
> Evanston, IL 60201
> or by email to: facultysearch@cs.nwu.edu
> Northwestern University is an affirmative action/equal opportunity employer. Hiring is contingent upon eligibility to work in the United States. Applications by minorities and women are particularly encouraged.

Northwestern University
Department of Computer Science
Board of Trustees Professorship

We seek distinguished candidates for a senior faculty position in all areas of systems, broadly construed, including operating systems, databases, programming languages and environments, multimedia systems, graphics and animation, distributed computing, networking, and e-commerce infrastructure and applications. Applicants should have a proven record of research leadership.

Send applications, including at least 5 references, by January 31, to:
> Faculty Search Committee
> Northwestern University
> Dept. of Computer Science
> 1890 Maple Ave.
> Evanston, IL 60201
> or by email to: facultysearch@cs.nwu.edu
> Northwestern University is an affirmative action/equal opportunity employer. Hiring is contingent upon eligibility to work in the United States. Applications by minorities and women are particularly encouraged.

Oakland University
Department of Computer Science and Engineering

The Department of Computer Science and Engineering invites applications for a tenure-track position at the assistant/associate professor level. Applicants must have completed a Ph.D. in Computer Science, Computer Engineering, or a closely related field by the appointment date. Candidates must show exceptional promise in both research and teaching. Desired areas of interest include, but are not limited to, embedded systems, networking and mobile computing, real time systems, software engineering, multimedia information retrieval and visualization, and web-based systems.

Professional Opportunities

Applications should be submitted by January 15, 2001 but will be accepted until the positions are filled. Applicants should send a letter of intent, resume and the names of three references to:

Professor Ishwar K. Sethi
Chair, Department of Computer Science and Engineering
Oakland University
Rochester, MI 48309-4401
Email: isethi@oakland.edu.
URL: www.cse.secs.oakland.edu

Oakland University is an affirmative action/equal opportunity employer and encourages applications from women and minorities.

Ohio State University
Department of Computer and Information Science

The Department of Computer and Information Science invites applications for at least eight tenured or tenure-track positions. Areas of primary interest include, but are not limited to, networking, database systems, human-computer interaction, artificial intelligence (including speech, vision, and language processing),graphics (including scientific visualization and computer animation), parallel and distributed computing (including operating systems and file systems, network-based computing, metacomputing, mobile computing, and scientific computing), and software engineering (including programming languages, component-based software, and formal methods).

Appointments at all ranks will be considered. Applicants for an assistant professor position should hold or be completing a Ph.D. in computer science or a closely related field, and have a commitment to excellent research and quality teaching. Applicants for a senior position should also demonstrate a strong record of external funding and impact on their field.

The department maintains active collaborative relationships with the Ohio Supercomputer Center, Advanced Computing Center for the Arts and Design, Cognitive Science Center, and many other centers and departments in the university.

To apply, please send a curriculum vita, along with a cover letter, by e-mail to: fsearch@cis.ohio-state.edu
or by hardcopy to:

Chair, Faculty Search Committee
Department of Computer and Information Science
The Ohio State University
2015 Neil Avenue, DL395
Columbus, OH 43210-1277

Review of applications will begin immediately and will continue until the positions are filled. For additional information please see http://www.cis.ohio-state.edu.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, and individuals with disabilities are encouraged to apply.

Oklahoma State University (OSU)
Computer Science Department
Faculty Search

Applications are invited for anticipated full-time, tenure-track positions at the Assistant Professor level. The term of initial appointment will begin in Fall, 2001.

The Oklahoma State University (OSU) Computer Science Department is seeking applications from qualified candidates with teaching and research experience in any areas of Computer Science. A Ph.D. or D.Sc. in Computer Science or a closely related area is required.

The OSU Computer Science Department is a growing department that is committed strongly to the goal of excellence in research, teaching, and extension. It offers a full range of undergraduate and graduate courses leading to B.S., M.S., and Ph.D. degrees in Computer Science. The department has B.S. and M.S. programs at the OSU campus in Tulsa, OK, and also offers courses to students at remote sites using interactive video and the World-Wide Web. There are currently more than 200 undergraduate students and more than 150 graduate students enrolled in the department. The department has a goal of accreditation of its B.S. program within the next few years. Positions are available on both the Stillwater and Tulsa campuses.

Stillwater is a small, attractive university city of about 38,000, located on the prairie in north-central Oklahoma. Stillwater is 65 miles north of Oklahoma City. There are numerous cultural activities within a two-hour drive of Stillwater. The Oklahoma State University campus is one of considerable beauty with modified Georgian architecture.

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

Oklahoma State University encourages applications from qualified women, minorities, and persons with disabilities. Please send curriculum vita and names of three references to:

Chair, Faculty Search Committee
Computer Science Department
Oklahoma State University
Stillwater, OK 74078-1053
Telephone: (405) 744-5668
FAX: (405) 744-9097
E-mail: faculty-search@cs.okstate.edu;
WWW: http://www.cs.okstate.edu/search.

For full consideration applications should be received by January 15, 2001, but applications will be accepted until the position has been filled. Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.

Oklahoma State University
Computer Science Department
Department Head Search

The Oklahoma State University (OSU) Computer Science Department is seeking applications from qualified candidates for the position of Professor and Department Head. The term of initial appointment will begin July 1, 2001.

The OSU Computer Science Department is a growing department that is committed strongly to the goal of excellence in research, teaching, and extension. It offers a full range of undergraduate and graduate courses leading to B.S., M.S., and Ph.D. degrees in Computer Science. The department recently expanded its B.S. and M.S. programs to the new OSU campus in Tulsa, OK and also offers courses to students at remote sites using interactive video and World-Wide Web. There are currently more than 250 undergraduate students and more than 150 graduate students enrolled in the department. The department has a goal of CAC Accreditation (formerly CSAB/ CSAC) within the next few years.

Applicants must qualify for the rank of Professor in the Computer Science Department and have a commitment to research, teaching and extension excellence. A record that clearly demonstrates strong leadership, innovation, and consistent success in securing external research funding is requisite for this tenured position.

Stillwater is a small, attractive, university city of about 38,000 located on the prairie in north-central Oklahoma. Stillwater is 65 miles west of Tulsa and 65 miles north of Oklahoma City. There are numerous cultural activities within a two-hour drive of Stillwater. The Oklahoma State University campus is one of considerable beauty with modified Georgian architecture.

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

E-mail: head-search@cs.okstate.edu
WWW:http://www.cs.okstate.edu/search

For full consideration all applications plus supporting material must be received by December 15, 2000, but applications will be accepted until the position has been filled. Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.

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

The Department of Computer Science and Engineering invites applications for faculty positions at all levels. Our target areas include networking, distributed systems, mobile and embedded systems, real-time and reactive systems, security, computational science, bioinformatics, environmental informatics, medical informatics, databases and data mining, computer architecture, vision, robotics, and sensor fusion. In addition, we are interested in excellent candidates at all levels that complement and enhance our existing research in neural networks, human computer interfaces, spoken language systems, software engineering, applied formal methods, and verification of both hardware and software.

OGI is a private graduate school that conducts internationally acclaimed research and provides outstanding graduate and professional education in science and technology. OGI is located near Portland, Oregon, in the beautiful Pacific Northwest. Portland's thriving hi-tech community, extensive cultural amenities and spectacular natural wilderness combine to make the quality of life here extraordinary.

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

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

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

OGI is an Equal Opportunity/Affirmative Action employer. We particularly welcome applications from women, minorities, and individuals with disabilities. Appointment is subject to the availability of funding.

Oregon State University
Department of Computer Science

Are you interested in joining a group of highly productive faculty who work well together? We are in a period of significant growth, and we invite applicants for one or more tenure-track faculty positions at any professorial rank. Appointments will begin September 2001.

Candidates must hold or be completing a Ph.D. in computer science or a closely related field. Applicants for an assistant professor position should have records that demonstrate clear promise for innovative research and quality teaching. Applicants for associate and full professor positions must have sufficient experience to qualify for promotion at the indicated level according to university guidelines. Qualifications for associate professor or professor include a demonstrated record of accomplishment in teaching and research, significant refereed publications, and potential for contributions at the appointed level.

We desire candidates whose research complements our existing research strengths and are excited by a collaborative work environment. We particularly seek candidates in the areas of bio-informatics, geographical information systems, networking, and software engineering.

Oregon's reputation for livability is well deserved. Corvallis residents can enjoy all the benefits of small town life and still have easy access to everything from big-city culture to wilderness recreation.

To apply, send a complete resume, a statement of research interests, and at least three sealed letters of recommendation (email is acceptable) to
Faculty Search Committee
Dept. of Computer Science
Oregon State U.
102 Dearborn Hall

Corvallis, OR 97331-3202
Phone: 541-737-3273
Email: jobs@cs.orst.edu
Web: WWW.cs.orst.edu.

The application deadline is January 10, 2001. OSU has an institution-wide commitment to diversity and multiculturalism; it provides a welcoming atmosphere with unique professional opportunities for leaders who are women and/or people of color.

Oregon State University is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.

Pennsylvania State University
Department of Computer Science and Engineering
Tenure-track faculty positions

Applications are invited for several tenure-track faculty positions at all ranks. Outstanding candidates in all areas of computer science and engineering will be considered. Areas of particular focus are operating systems, databases, security, networks, computer graphics and vision, multimedia, compilers, architecture, and algorithms. We can consider multiple and coordinated hires in these targeted areas. In addition, we are also looking for candidates to fill a position in computational molecular biology.

Applicants should hold a Ph.D. in computer science, computer engineering, or a closely related field and should be committed to excellence in research and teaching. Excellent support will be provided to the successful applicants for establishing their research programs.

The Department of Computer Science and Engineering has 24 close-knit, tenure-track faculty and is committed to growing with several open tenure-track positions in the next several years. The Department offers a graduate program with about 100 Master students and about 60 PhD students. The department has state-of-the-art computer equipment with excellent system and network support, and has close ties with other university departments and their computing and networking facilities. In particular, there are well-equipped research labs in areas including microsystems design and VLSI, programming languages and compilers, computer vision and robotics, virtual environments, high performance computing and bio-informations. By Fall 2003, the

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Professional Opportunities

SIMON FRASER UNIVERSITY

Applications are invited for several tenure-track positions at the Assistant Professor level. A Ph.D. in Computing Science or equivalent is required, with a strong commitment to excellence in research and teaching. Outstanding candidates in all areas and at all levels will be considered, subject to funding.

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, the downtown New Media Centre, and local industry.

Simon Fraser University serves about 18,000 students. The university is situated on top of Burnaby Mountain just east of Vancouver and commands magnificent views of Burrard Inlet, the North Shore Mountains, the Fraser River, and Vancouver harbour. The Lower Mainland area of British Columbia is unique in Canada for its mild climate and varied recreational opportunities.

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

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

Dr. Binay Bhattacharya, Director
School of Computing Science
Simon Fraser University
Burnaby, British Columbia, Canada, V5A 1S6
email: cs-chair@cs.sfu.ca
or dir-sec@cs.sfu.ca

Department should be moved into a new building that is currently being designed.

Penn State is a major research university and in recent years has ranked first in the nation among public universities in industry-sponsored research. US News and World Report consistently ranks PSU's College of Engineering undergraduate and graduate programs in the top 15 of the nation. The university is located in State College, a town of about 40,000 inhabitants in the center of Pennsylvania. While situated in a beautiful college town with a variety of outdoor recreational activities, many major population centers on the east coast (New York, Philadelphia, Pittsburgh, Washington DC, Baltimore) are only a few hours drive away.

Applications should be received by January 31, 2001 to receive full consideration. To apply by electronic mail, send your resume (including curriculum vitae and the names and addresses of at least three people willing to write a letter of recommendation) as a postscript or pdf file to recruiting@cse.psu.edu or by post to:

Chair, Faculty Search Committee
The Pennsylvania State University
Department of Computer Science and Engineering
220 Pond Laboratory, Box CRN
University Park, PA 16802-6106 USA
For more information about the Department of CSE at PSU, see http://www.cse.psu.edu.

PSU is an Equal Opportunity / Affirmative Action Employer. Women and minorities are encouraged to apply.

Polytechnic University
Department of Computer and Information Science

Polytechnic University's Department of Computer and Information Science is continuing a major expansion and has several open positions at all levels for tenured or tenure-track faculty at our main campus in Brooklyn, NY. We are particularly interested in candidates in computer systems, networking, database systems, architecture, computer security, software engineering, mobile computing, and multi-media, but will consider strong candidates in other areas. Candidates must be outstanding researchers and teachers, and must have a PhD by the appointment date.

Current active areas of research in the department include algorithms, graphics and visualization, image processing, database systems, combinatorial optimization, distributed systems, computational geometry, machine learning, software engineering, and web information retrieval. Faculty research is supported by numerous NSF grants and by funding from industry and other government agencies. The department offers BS, MS, and PhD degrees.

Polytechnic University (formerly known as Brooklyn Poly) is located on three campuses in the New York City metropolitan area, close to cultural attractions and to major companies in the financial, telecommunications, and computer industries. The Brooklyn campus is a five-minute subway ride from lower Manhattan.

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

Qualified applicants should send their curriculum vitae to:
Prof. Lisa Hellerstein
Head of CIS Search Committee
c/o Human Resources
Polytechnic University
Six MetroTech Center
Brooklyn, NY 11201
or by e-mail to: facsrch@morph.poly.edu.
Candidates are strongly encouraged to apply by January 31, 2001 but applications will be considered while positions are still open.

Polytechnic University is an Equal Opportunity Employer.

Portland State University
Positions in Computer Science

Portland State University anticipates one or more tenure-track, nine-month faculty positions at all levels to begin Fall 2001. Applicants for senior positions are expected to have demonstrated the ability to generate external funding; applicants for junior positions must show potential for future external support. The department's strengths are in databases, software engineering, systems/networking, programming languages and theory. Our intention is to build on these strengths, but excellent applicants in all areas will be considered.

All Ph.D. applicants beginning or continuing their professional careers will be considered. The minimum qualifications for the position include a Ph.D. The faculty member will teach undergraduate and graduate classes; develop program, course and laboratory resources in Computer Science; maintain scholarly activity in funded research and publications; provide professionally related public service; advise students, and support University activities through committee service

The department currently has nineteen faculty and offers a CSAB accredited B.S., an M.S., and a Ph.D. in Computer Science. Collaboration with industry colleagues and with faculty at nearby institutions such as the Oregon Graduate Institute and Oregon Health Sciences University is encouraged. Our low teaching loads give faculty time to maintain funded research programs and to collaborate with local industry. The department currently serves approximately 500 undergraduates and 100 graduate students. Further information about the department is available at http://www.cs.pdx.edu.

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

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

Princeton University
Department of Computer Science
Lecturer Position

The Department of Computer Science at Princeton seeks applications from outstanding teachers to assist the faculty in teaching our introductory course sequence. There is no deadline for applications, but candidates are encouraged to apply early. Candidates should have an exceptional record of classroom instruction and curricular innovation.

Princeton University prides itself on the quality of its undergraduate teaching and the Computer Science Department is committed to being a leader in developing new courses and teaching methods. The job involves recitation sections (two per semester) in the first and second year as well as certain responsibilities for overall management of the introductory sequence. There is also work supervising assistants in introduction (i.e TA's) and developing curricular material, classroom demonstrations and laboratory exercises. Lecturers are appointed to one-year terms, renewable for up to six years. Promotion to the rank of senior lecturer, with unlimited renewable terms, is a possibility. We are seeking candidates who are interested in establishing a long-term professional relationship at Princeton.

Qualified applicants should send a letter of application, a resume, and the names of four references to:
Lecturer Recruiting Committee
Department of Computer Science
Princeton University
Princeton, NJ 08544
Princeton University is an Equal Opportunity/Affirmative Action Employer.

Princeton University
Computer Science Department
Tenure-Track Positions

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

Applicants should include a resume and the names of at least three people who can comment on the applicant's professional qualifications. Applications should be sent to:
Chair
Search Committee
Department of Computer Science
Princeton University
35 Olden Street
Princeton, NJ 08544-2087
E-mail: search@cs.princeton.edu
The Committee will begin to consider applications in January 2001.
Princeton University is an Equal Opportunity/Affirmative Action Employer.

Princeton University
Department of Electrical Engineering

The Department of Electrical Engineering invites applications for tenure-track faculty appointments in the general area of computer systems/engineering. Research areas in custom circuit design, computer systems and architectures, wireless devices and networking have been identified as key areas for our department to grow in, but all strong candidates are encouraged to apply.

Applicants must have outstanding academic credentials and an ability to develop an excellent independent research program, as well as to teach effectively at the undergraduate and graduate levels. Please send resumes and a list of three to five references to:
Professor Stephen Forrest, Chair
Department of Electrical Engineering
Princeton University
Princeton, NJ 08544.
Princeton University is an Equal Opportunity/Affirmative Action employer.

Purdue University
Department of Computer Sciences

The Department of Computer Sciences at Purdue University invites applications for tenure-track positions beginning August 2001. Positions are available at the assistant professor level; senior positions will be considered for highly qualified applicants. Applications from outstanding candidates in all areas of computer science will be considered. Areas of particular interest include networking and distributed systems, security, graphics, and emerging areas of computing.

The Department of Computer Sciences offers a stimulating and nurturing academic environment. Thirty-three full-time faculty have research programs in analysis of algorithms, databases, distributed and parallel computing, geometric modeling and scientific visualization, information security, networking and operating systems, parallelizing compilers, programming languages, scientific computing, and software engineering. The department implements a strategic plan for future growth which is strongly supported by the higher administration. This plan includes a new building expected to be operational in 2004 to accommodate the significant growth in faculty size. Further information about the department is available at: http://www.cs.purdue.edu.

Applicants should hold a Ph.D. in Computer Science, or a closely related discipline, and should be committed to excellence in teaching and have demonstrated strong potential for excellence in research. Salary and benefits are highly competitive. Special departmental and university initiatives are available for junior faculty. Candidates should send a curriculum vitae, a statement of career objectives, and names and contact information of at least three references to:
Chair, Faculty Search Committee
Department of Computer Sciences
Purdue University
West Lafayette, IN 47907-1398
Applications are being accepted now and will be considered until the positions are filled. Inquiries may be sent to personnel@cs.purdue.edu.
Purdue University is an Equal Opportunity/Affirmative Action employer. Woman and minorities are especially encouraged to apply.

Queens University
Department of Computing and Information Science

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

The Department of Computing and Information Science, which has 23 faculty, 12 staff and approximately 80 graduate students, is committed to excellence in both research and teaching. The faculty are doing research in a number of areas of computer science including software engineering and design, theoretical computer science, biomedical computing, intelligent systems, human-computer interaction and computer systems. The department offers undergraduate programs in computer science, cognitive science, and software design. It hopes to soon begin a new undergraduate program in biomedical computing. The department also offers graduate programs at the masters and doctoral levels. Further information can be found at the department's website: http://www.cs.queensu.ca/

Applicants should have a Ph.D. degree in computer science or a related field. The Department will consider applicants in software engineering, intelligent systems, parallel and distributed systems and database systems. Applicants in the area of software engineering, including those with a specialization in human-computer interaction, and applicants in the four general areas whose research has applications to biomedical computing are particularly encouraged to apply. The successful candidate will be expected to develop an active research program and to teach effectively at the undergraduate and graduate levels. Salary is commensurate with qualifications and experience.

Professional Opportunities

Applicants are requested to send a hard copy of a curriculum vitae, including a list of publications and the names of three references, and copies of up to three recent papers to

Dr. Janice Glasgow
Chair, Department of Computing and
Information Science
Queen's University, Kingston
Ontario, Canada K7L 3N6

Openings are for July 2001 and beyond. Screening of applicants will begin immediately and continue until all positions are filled.

Queen's University is committed to employment equity and welcomes applications from all qualified men and women, including visible minorities, aboriginal people, persons with disabilities, gay men and lesbians.

Rensselaer Polytechnic Institute
Department of Computer Science

The Department of Computer Science at Rensselaer Polytechnic Institute invites candidates for tenured and tenure-track positions at all levels in Networking, Data Engineering, Data Mining, Security Parallel and Distributed Computing, Computational Biology, and Biomedical Imaging, starting Fall 2001. We also welcome applications for clinical (teaching), visiting and postdoctoral positions.

Applicants should submit a vita with a list of publications, a statement describing current and planned research, and a statement describing teaching philosophy to

New Staff Committee
Department of Computer Science
Rensselaer Polytechnic Institute
Troy, NY 12180-3590

Candidates should also arrange to have at least three letters of recommendation sent to the same address.

The Department offers B.S., M.S., and Ph.D. degrees in computer science, has multi-million dollar research programs and excellent computing facilities. Rensselaer, under the leadership of its new president, plans to double its research program in the next five years. Major research initiatives in information technology and biotechnology are integral components of this plan, and the Department of Computer Science will play a leading role. Currently, there are 21 full-time faculty members in the department, and this number is expected to grow substantially.

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

Rensselaer Polytechnic Institute
Department of Mathematical Sciences
Tenured and Tenure-Track Positions

Applications are invited for one or more tenured and tenure-track positions in applied mathematics, to begin in August 2001. Applicants are expected to possess an outstanding record in research and a strong interest and ability in teaching. Of particular interest are candidates with a commitment to interdisciplinary research and whose work involves mathematically based ideas for extracting information from data (data-mining, imaging, optimization, bioinformatics, geoinformatics, etc.). Other areas of interest are integrative systems biology and scientific computation. When applying an applicant should indicate whether they are applying for an assistant, associate professor or full professor position.

Applicants should submit a letter of application, a curriculum vita, a description of research interests, and arrange to have three letters of recommendation sent directly to

Search Committee Chair
Department of Mathematical Sciences
Rensselaer Polytechnic Institute
Troy, NY 12180

Evaluation of applications will begin January 15, 2000, and will continue until a candidate is selected.

Rensselaer is an equal opportunity/affirmative action employer and strongly encourages applications from women and underrepresented minorities.

Rensselaer Polytechnic Institute
Electrical
Computer and Systems Engineering
Department
Tenure-track positions in Computer Engineering

Electrical, Computer, and Systems Engineering Department invites applications for several tenure-track positions in Computer Engineering starting in Fall 2001. All areas of computer engineering are of interest. In particular, the department has special needs in computer networking, computer architecture, VLSI design, multimedia, and mobile computing. The candidates must have a PhD in Computer Engineering or equivalent. While we are looking for primarily Assistant Professors, appointments of candidates with outstanding academic or industrial research experience and leadership at the Associate and Full Professor levels will also be considered.

The ECSE Department has major research programs in microelectronics technology and design, digital signal and image processing and

communications, computer networks, control and robotics, and electromagnetics. The department participates in two NSF Engineering Research Centers, one of which is the recently announced Center of Subsurface Sensing and Imaging Systems. New faculty will receive attractive start-up packages. Letters of application and resumes (including a list of references) should be sent to:

Faculty Search Committee
Electrical, Computer, and Systems
Engineering
Rensselaer Polytechnic Institute
Troy, New York 12180-3590
email: facultysearch@ecse.rpi.edu

For more information, see ECSE's homepage (www.ecse.rpi.edu).

Rensselaer is an affirmative action/equal opportunity employer and specifically encourages applications from women and underrepresented minority groups.

Ricoh Silicon Valley, Inc.
California Research Center

The California Research Center of Ricoh Silicon Valley seeks creative individuals to invent solutions for the problems facing knowledge workers. Working with a small team you will have the freedom to experiment with new means of communication, collaboration, and information management. Past projects include an "infinite memory copier" that spawned the novel eCabinet product, Bayesian belief networks for query free information retrieval, the world's fastest JPEG compressor and creation of the next generation JPEG 2000 image compression standard, a digital photo album for sharing stories about pictures, and open source software to build Web applications that can be customized without programming.!User Interaction Can you see problems through the eyes of a customer? Can you articulate solutions and rapidly test them? Can you turn feedback into better prototypes? Join us in giving people the power to collaborate and communicate simply using images, documents, and digital media.!A demonstrated ability to creatively apply information processing techniques to human computer interaction is required.

Qualifications: Ph.D. in Computer/Information Science or equivalent experience. Background in participatory design. Strong prototyping/implementation skills.

Job Location: Ricoh Silicon Valley, Inc. 2882 Sand Hill Road, Suite 115 Menlo Park, CA 94025.If you have the key skills outlined above, please forward your resume to: cfitzsimmons@rsv.ricoh.com

Ricoh Silicon Valley is an Equal Opportunity Employer

Ricoh Silicon Valley, Inc.
California Research Center
Multimedia analysis and visualization

The California Research Center of Ricoh Silicon Valley seeks creative individuals to invent solutions for the problems facing knowledge workers. Working with a small team you will have the freedom to experiment with new means of communication, collaboration, and information management. Past projects include an "infinite memory copier" that spawned the novel eCabinet product, Bayesian belief networks for query free information retrieval, the world's fastest JPEG compressor and creation of the next generation JPEG 2000 image compression standard, a digital photo album for sharing stories about pictures, and open source software to build Web applications that can be customized without programming.

Do you know how to extract useful features from images, audio, or video? Can you implement and extend existing analysis techniques? Help us combat information overload by better utilizing a person's natural capabilities to visualize and recall multimedia information.

A strong background in developing software to process audio and/or images is required.

Qualifications: M.S. in Computer/Information Science or equivalent experience 2-4 yrs developing audio/video tools Familiarity with various audio/video compression and file formats such as MPEG, AVI, WAV. Experience with a commercial SDK is a plus. Skilled in C/C++ in a Microsoft or Unix environment

Job Location : Ricoh Silicon Valley, Inc. 2882 Sand Hill Road, Suite 115 Menlo Park, CA 94025

If you have the key skills outlined above, please forward your resume to: cfitzsimmons@rsv.ricoh.com

Ricoh Silicon Valley is an Equal Opportunity Employer

Ricoh Silicon Valley, Inc.
California Research Center
Networked services design

The California Research Center of Ricoh Silicon Valley seeks creative individuals to invent solutions for the problems facing knowledge workers. Working with a small team you will have the freedom to experiment with new means of communication,

collaboration, and information management. Past projects include an "infinite memory copier" that spawned the novel eCabinet product, Bayesian belief networks for query free information retrieval, the world's fastest JPEG compressor and creation of the next generation JPEG 2000 image compression standard, a digital photo album for sharing stories about pictures, and open source software to build Web applications that can be customized without programming.

Can you analyze the communication needs of a workgroup? Can you balance requirements for secure access with the need to easily share information? Is it possible to design a useful system that delivers security, privacy, reliability and continual improvement? Help develop the science of workplace interaction and create better work environments in which the technology supports people.

The ideal candidate will have a strong background in formal systems with the demonstrated ability to apply those methods in the analysis and design of communication and authorization technologies.

Qualifications: Ph.D. in CS/Information Science, discrete mathematics or equivalent 3-5 yrs systems design in one or more of the following areas: workflow systems; distributed file systems; public key infrastructures; or online services

Job Location : Ricoh Silicon Valley, Inc. 2882 Sand Hill Road, Suite 115 Menlo Park, CA 94025

If you have the key skills outlined above, please forward your resume to: cfitzsimmons@rsv.ricoh.com

Ricoh Silicon Valley is an Equal Opportunity Employer

Rochester Institute of Technology
Computer Science

Applications are invited for full-time tenure track positions. The department offers an MS and a CSAB-accredited BS degree in Computer Science. Applicants should be prepared to participate in a department that emphasizes a strong commitment to teaching as well as to consistent professional development. While a Ph.D. in Computer Science or a related field is preferred, applicants having a Masters degree and relevant industrial experience will be considered. Teaching experience is highly desirable. Please submit a letter of interest, a statement of teaching philosophy, a

current resume and the names of three references to:

Search Committee
c/o Sandy Ferrara
Dept. of Computer Science
RIT
102 Lomb Memorial Drive
Rochester, NY 14623-5608
E-mail: csdept@cs.rit.edu

See a more complete description at: http://www.cs.rit.edu/~csdept/search

Rochester Institute of Technology is an Equal Opportunity Employer.

Rutgers University
Department of Computer Science
Faculty Positions

Rutgers University's strategic plan calls for significant increases in Computer and Information Sciences. Consequently we are seeking candidates for junior and senior positions in all active areas of Computer Science and in Bioinformatics.

We are partners in major centers in theoretical computer science (DIMACS), cognitive science (RUCCS), wireless and mobile computing (WINLAB), the Center for Advanced Biotechnology and Medicine (CABM), and the Waksman Institute among others. For more details, see http://www.cs.rutgers.edu.

Our department also has close ties to industry including AT&T, Cisco, Hewlett-Packard, Lucent, Microsoft, NEC, Siemens, and Sun, as well as several emerging companies in the New York area.

We offer very competitive salaries and startup packages and in recent years have successfully recruited new faculty from such top schools as Berkeley, Princeton, and the University of Washington, Seattle.

To apply please submit a curriculum vita including names of at least four professional references to:

Hiring Chair
Department of Computer Science
Rutgers, The State University
110 Frelinghuysen Road
Piscataway, NJ 08854-8019

by February 1, 2001 or send email to: hiring@cs.rutgers.edu for further information. We especially encourage applications from women and other under-represented groups.

Professional Opportunities

Saginaw Valley State University
Department of Computer Science
Assistant/Associate/ Professor of Computer Science

The Department of Computer Science at Saginaw Valley State University invites applications for a full-time, tenure-track position at the rank of Assistant Professor or higher. Minimum qualifications include progress toward an appropriate earned doctorate by the time of appointment. While SVSU values high quality teaching, the expectations of the position include scholarship and service. Candidates with teaching and/or industry experience are encouraged to apply.

Saginaw Valley State University is a baccalaureate and master's level university offering more than 70 undergraduate programs of study and five master's degree programs. Situated on a spacious 782-acre campus, SVSU is conveniently located in mid-Michigan, 90 miles north of Detroit. One of the fastest growing universities in the state, SVSU currently has an enrollment of over 8,300 students. The unique and attractive campus includes several newly constructed classroom and office buildings and a new performing arts center. For more information about SVSU visit our website at www.svsu.edu.

SVSU offers a competitive salary and excellent benefits. For full consideration, please send letter of application, describing teaching/research philosophy and goals, curriculum vitae, and names, addresses, and phone numbers of three references to:
Mr. James Wood
Director of Human Resources
Saginaw Valley State University
7400 Bay Road
University Center, MI 48710
Screening of applicants will begin immediately and continue until the position is filled.
SVSU is an equal opportunity/affirmative action employer.

Southern Methodist University
Computer Science and Engineering

The Computer Science and Engineering Department at Southern Methodist University invites applications for one tenure-track faculty position beginning Fall 2001. Priority will be given to individuals with expertise in software engineering or computer engineering. Candidates at all ranks will be considered. The successful candidate must hold a Ph.D. in Computer Science, Computer Engineering, or a closely related area and must demonstrate a strong commitment to excellence in teaching and research.

The Dallas/Fort Worth area, one of the top three high-tech industrial centers in the country, has the largest concentration of telecommunications corporations in the US, providing abundant opportunities for industrial research cooperation and consulting. Dallas/Fort Worth

is a multifaceted business and engineering community, offering exceptional museums, diverse cultural attractions, and a vibrant economy.

The CSE Department resides within the School of Engineering and offers BS, MS, and Ph.D. degrees in Computer Science and in Computer Engineering. The department currently has 15 faculty members with research concentrations in computer arithmetic, computer networks, database systems, software engineering, natural language processing, operations research, and related areas. Additional information may be found at: www.seas. smu.edu/cse.

Interested individuals should send a complete resume and names of three references, including a one-page statement of research interests and accomplishments to:
Beth Minton
Administrative Assistant
Department of Computer Science and Engineering
SMU
Dallas, TX 75275-0122
The committee will begin its review of the applications on or about February 15, 2001. To ensure full consideration, applications must be postmarked before February 15, 2001; however, the committee will continue to accept applications until the positions are filled.

SMU will not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status. SMU is committed to nondiscrimination on the basis of sexual orientation.

Stanford University
Department of Computer Science
Faculty Opening- Associate Chair for Education

The Department of Computer Science at Stanford University invites applications for the position of Associate Chair for Education and Director of Undergraduate Studies. The Associate Chair directs the evolution and development of the computer science curriculum and is expected to provide the vision and leadership necessary to maintain a top-quality academic program. The teaching load is determined by a departmental formula that takes into account a variety of activities; the typical teaching load is one course per quarter. The appointment will be made at the level of Associate Professor (Teaching) or Professor (Teaching) in the non-tenure line, depending upon the candidate's experience.

The ideal applicant for this position will have an established reputation within the computer science education community along with a strong commitment to and demonstrated aptitude for teaching. Experience in the development and use of technology in education will also be considered an asset. All candidates must hold a Ph.D. in computer science or a closely related discipline.

Applicants should submit a cover letter, curriculum vitae, teaching statement, material relevant to evaluating the applicant's teaching abilities, and at least three letters of reference to:
Search Committee Chair
c/o Laura Kenny-Carlson
Department of Computer Science
Gates Hall 278
Stanford, CA 94305-9025
Applications will be accepted until March 15, 2001 or until the position is filled.
Stanford University is an equal opportunity employer and welcomes applications from women and minority group members.

SUNY Institute of Technology
Computer Science/Computer Information Systems
Assistant Professor

The Computer Science Department at SUNY Institute of Technology invites applications for one or more tenure-track teaching positions at the Assistant Professor Level. Duties required for all positions include teaching, research, leadership in course/program development and interacting with community business and industry. A Ph.D. in computer science or closely related discipline required. Salary and benefits are very competitive. Review of applications will begin January 2, 2001, and continue until the position is filled. Please send letter of application, curriculum vitae, and three letters of reference to:
Dr. Orlando Baiocchi, Dean
Information Systems and Engineering Technology
SUNY Utica/Rome
Drawer 135 P.O. Box 3050
Utica, NY 13504-3050
www.sunyit.edu
An Equal Opportunity/Affirmative Action Employer.

Texas A&M University
Department of Computer Science

Applications are invited for several anticipated tenure-track and visiting faculty positions. Outstanding candidates at all levels and from all areas of specialization will be considered. Candidates should include in their letter of application the type of position for which they are applying.

Texas A&M University has long enjoyed national leadership status in engineering education. Today, the Dwight Look College of Engineering is one of the largest and best endowed in the nation, and it ranks among the top institutions in every significant national poll.

The Department of Computer Science is one of the fastest-developing departments in the College. In recent years, it has built a strong national reputation based on the quality of its faculty and programs. The Department offers B.S., Master's and Ph. D. degrees in computer science and computer engineering. Full-time faculty currently number 35, including seven NSF PYI/NYI/ CAREER award recipients, and the annual research budget is more than $4 million and growing. In recent competitions for DoD MURI and NSF ITR, the department came out very well, the best in the state. More information is available on the Web at http://www.cs.tamu.edu.

Candidates should have a Ph. D. in computer science or a closely related field, a strong commitment to both research and teaching, and demonstrated ability to perform research and acquire external funding appropriate to the rank being sought. Applications from minority and women candidates are especially encouraged. Texas A&M University is an affirmative action/equal opportunity employer committed to diversity.

Applicants should send a statement of research and teaching interest, a complete resume, and the names of at least three references, their addresses (including email) and telephone/fax numbers to:
Faculty Search Committee
Department of Computer Science
Texas A&M University
College Station, Texas 77843-3112
Inquiries or email applications may be sent to faculty_search@cs.tamu.edu. Applications will be accepted until the positions are filled.
Texas A&M University is an Equal Opportunity Employer.

Texas Tech University
Computer Science Department

The Department of Computer Science at Texas Tech University is committed to being a nationally recognized program in the computing field. We invite applications for several positions at all levels to begin employment in the fall of 2001. We will begin reviewing applications on January 15, 2000. Priority will be given to applicants whose areas of interest include distributed and high performance computing and complexity. Applicants at the assistant professor level must have the requirements for the Ph.D. in computer science or related field completed before employment, and should demonstrate clear potential for effective teaching and research. In addition to holding a Ph.D. in computer science or a

related field, applicants at other ranks should have a proven record of scholarly accomplishments, including a strong record of publications and funded research commensurate with rank.

The Department of Computer Science is within the College of Engineering, and offers B.S., M.S., and Ph.D. degrees in Computer Science and a new M.S. degree in Software Engineering. The department participates in both an EE/CS dual degree program and a Computer Engineering program in conjunction with the Department of Electrical and Computer Engineering, as well as dual degrees with both Chemical Engineering and Mathematics. At present, there are over 600 undergraduate and 60 graduate students in computer science degree programs. The graduate program offers specialties in computer engineering, software engineering, and intelligent systems.

The primary research mission of the department is to advance the state-of-the-art in computer science through the achievement of fundamental advances required to support hard applications. Faculty perform scholarly and funded research in many areas, including: distributed computing and modeling; graphics and haptics; high performance computing; multimedia systems; neural networks; knowledge representation; real-time systems; software process improvement; computer languages; logic programming; robotics; image processing; databases; requirements engineering and software metrics. Applicants should send a letter expressing interest in the position, a detailed resume, and the names and addresses of three professional references to
Daniel E. Cooke
Chairperson,
Department of Computer Science,
PO Box 43104,
Texas Tech University,
Lubbock TX 79409-3104
For additional information, see our website: http://www.cs.ttu.edu/FacSearch/.
All questions should be directed to: dcooke@coe.ttu.edu. Applications will be reviewed as they are received, until the positions are filled. Applicants must be able to lawfully accept employment in the United States.
Texas Tech University is an Equal Opportunity, Affirmative Action Employer.

Tulane University
Department of Electrical Engineering and Computer Science
Faculty Positions in Electrical Engineering and Computer Science

The Department of Electrical Engineering and Computer Science invites applications for several tenure-track faculty positions in Computer Science, Computer Engineering, or Electrical Engineering starting in Fall 2001. Candidates should have a Ph.D. in Computer Science, Computer Engineering, or Electrical Engineering, a strong commitment to both research and teaching, a publication record in their area, and demonstrate potential for obtaining external research funding. Outstanding candidates at all levels and from all areas of specialization will be considered.

Applicants should send a letter of intent, a statement of research and teaching interests, a resume, and the names of at least three references including the reference's address, e-mail, telephone, and fax number to:
Dr. Boumediene Belkhouche
Search Committee Chair
Department of Electrical Engineering and Computer Science
Tulane University
New Orleans, LA 70118
Applications will be accepted until the positions are filled.
Tulane University is an equal opportunity/affirmative action employer.

Union College
Computer Science Department

Tenure-track and one-year visiting assistant-professor positions starting September, 2001. The department has four full-time faculty and offers a small master's program as well as a computer science major. It shares additional faculty with the Electrical Engineering Department, with which it offers a major in computer engineering. Candidates should hold a Ph.D. in computer science or a closely related discipline, and be committed to excellent teaching and research. All specializations are welcome.

Union is a highly selective coeducational college with programs in the liberal arts and engineering, and with a tradition of undergraduate research. The department offers a congenial working environment, excellent students, and labs with up-to-date Unix workstations and PCs. Rensselaer Polytechnic Institute, the University at Albany, and the GE Research and Development Laboratory are nearby. We are three hours from New York and Boston, and near the Adirondack Mountains.

Applications should include names, postal and email addresses of three references, and a statement of teaching and research goals. Address applications to:

University of Massachusetts Lowell

Faculty Positions

Department of Computer Science

The Department of Computer Science at the University of Massachusetts Lowell seeks scholars with exceptional records or, for junior appointments, with exceptional potential to expand our suite of research groups. We invite applications for several tenure-track faculty positions, to start in January or September 2001, from applicants with specialties in traditional or innovative areas of computer science. We anticipate hiring at the assistant professor level, but will consider candidates at all levels.

Our campus is located 35 miles northwest of Boston in the state's high-tech corridor and is considered the most technology-oriented of the five UMass campuses. The CS department has 16 full-time faculty, as well as over 350 undergraduates in the bachelor's program and over 300 graduate students in the master's and doctoral programs. Our research specialties include human-computer interaction, visualization and perception, database systems, networking and telecommunications, languages and compilers, object-oriented software engineering, internet and web systems and a newly formed groups in bioinformatics and computational geometry. For more information about us, please visit http://www.cs.uml.edu.

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

Applicants must have a doctorate in Computer Science or a closely related discipline at the time of appointment. Please send a statement of research interests; curriculum vitae; selected relevant papers; the names, addresses, email addresses, and telephone numbers of at least three references and, if appropriate, your residency status to:

Dr. Thomas M. Costello, Head
Department of Computer Science
University of Massachusetts Lowell
One University Avenue
Lowell, Massachusetts 01854
tom@cs.uml.edu

Review of applications will begin immediately, and will continue until the positions are filled. US citizenship or permanent residency is required. The University of Massachusetts is an equal opportunity, affirmative action employer, and encourages applications from women and minorities.

Professional Opportunities

Prof. David Hemmendinger
Chair, CS Department
Union College
Schenectady, NY 12308
E-mail: hemmendd@union.edu
For more information, write to: hemmendd@union.edu or see http://www.cs.union.edu. Review of applications will start 15 December for the tenure-track position and 15 January for the visiting position and continue until the position is filled.

Union College is committed to a program of affirmative action and equal employment opportunity. Women and minorities are strongly encouraged to apply.

United Technologies Research Center
Embedded Information Devices Group

The Embedded Information Devices at UTRC is seeking a creative, highly motivated, hands-on electronics design engineer to develop RF and microwave systems for use in wireless control and data acquisition systems for industrial and aerospace applications. Responsibilities include the design and testing of prototype systems and the evaluation of commercially available hardware. This engineer will work as part of a technical project team that interacts with UTC commercial Divisions and customers.

Multiple full-time and sabbatical positions are available. We offer comprehensive benefits package and competitive salaries commensurate with qualifications and experience. United Technologies Research Center (www.utrc.utc.com) in East Hartford CT, USA is the central R&D organization for United Technologies Corporation (www.utc.com). UTC consists of Pratt & Whitney (jet engines), Carrier (heating, ventilation, air conditioning), Otis (elevators, escalators), Hamilton Sundstrand (aerospace components), Sikorsky (helicopters), and International Fuel Cells.

Interested parties should send a resume and three references to:
Employment@utrc.utc.com
Or mail to:
UTRC 411 Silver Lane MS 129-35 East Hartford, CT 06108
Reference Job: NET2625-0110
UTRC is an equal opportunity employer.

United Technologies Research Center
Embedded Information Devices Group

The Embedded Information Devices at UTRC is seeking multiple professionals in the area of software and computer engineering and invites application for several tracks. Areas of interest include (but are not limited to) real-time embedded operating systems and architectures, remote monitoring and diagnosis, JAVA-based development of embedded computer-based systems, etc. Applications range from real-time to embedded systems for appliances such as elevators, fuel cells, and air conditioners, to aircraft computer networks and to e-Business. In this position, you will develop and evaluate computer-based architectures (hardware, software, and communication) to improve UTC's service, manufacturing, and supply chain metrics. You will apply your knowledge in hardware and software development of embedded systems, communication protocols (TCP/IP, wireless, field-buses), and Internet and application software design.

Multiple full-time and sabbatical positions are available. We offer comprehensive benefits package and competitive salaries commensurate with qualifications and experience. United Technologies Research Center (www.utrc.utc.com) in East Hartford CT, USA is the central R&D organization for United Technologies Corporation (www.utc.com). UTC consists of Pratt & Whitney (jet engines), Carrier (heating, ventilation, air conditioning), Otis (elevators, escalators), Hamilton Sundstrand (aerospace components), Sikorsky (helicopters), and International Fuel Cells.

Interested parties should send a resume and three references to:
Employment@utrc.utc.com
Or mail to:
UTRC 411 Silver Lane MS 129-35 East Hartford, CT 06108
Reference Job: NET2625-0111
UTRC is an equal opportunity employer.

University of Albany
State University of New York

The University at Albany Computer Science Department is seeking applicants working in the broad areas of experimental computer science for a tenure-track assistant professor position, beginning September 2001. We are particularly interested in candidates in bioinformatics, genomics, and related fields. In these areas, the position is offered in cooperation with the Department of Biological Sciences and the Center for Comparative Functional Genomics. We also actively seek candidates with backgrounds in computing applications and systems, especially the following: computational science, databases,

distributed and mobile computing, knowledge and data discovery, natural language information processing, networks and parallel computing. Applicants must have a Ph.D. in computer science, computational biology or a related discipline.

The department offers B.S., M.S., and Ph.D. degrees. It has well-established research strengths in theory and formal methods, including algorithms, data structures, automated reasoning, software design, and computational complexity. It has expanded into experimental computer science and computational science, with five hires in these areas since 1994. A majority of the faculty is engaged in interdisciplinary research. Several members are associated with the Department of Biological Sciences and/or the Center for Comparative Functional Genomics. Additional information may be found on our web page: http://www.cs.albany.edu/search.

Applicants should submit curriculum vitae, copies of up to three publications, the names and contact information for three references, statements of research and teaching philosophies to
Chair
Faculty Search Committee
Computer Science Department LI-67A
University at Albany
1400 Washington Avenue
Albany, NY 12222
(search@cs.albany.edu)
Position pending final budget approval.
The University at Albany is an equal opportunity, affirmative action, Immigration Reform and Control Act, and Americans with Disabilities Act employer.

University of Alabama at Huntsville
The Department of Electrical and Computer Engineering

The Department of Electrical and Computer Engineering of the University of Alabama in Huntsville invites applications for three tenure-track positions at all levels. The starting date can be as early as the Spring of 2001. Specific areas of interests are computer engineering, photonics/optics, and wireless communications/signal processing. Applicants should have a Ph.D. in electrical, computer, or optical engineering and have demonstrated potential for excellence in both instruction and research. The Department offers programs leading to bachelors, masters and doctoral degrees. For a more detailed description of the University of Alabama in Huntsville and the Electrical and Computer Engineering Department, please visit us at http://www.ece.uah.edu. For information about Huntsville, visit http://www.ci.huntsville.al.us.

Resumes with the names, addresses, and telephone numbers of three references should be mailed to
Reza Adhami
Professor and Chair
Electrical and Computer Engineering Department
The University of Alabama in Huntsville
Huntsville, Alabama 35899
Review of applications will begin by September 2000 and will continue until all positions are filled.
UAH is an Equal Opportunity/Affirmative Action Employer

University of Alberta
Department of Computing Science

Do you have a commitment to the science of computing? Are you looking for an academic environment that focuses on the science of your discipline? Join us in a dynamic Computing Science department, known for its collegial atmosphere and collaborative research environment. Our department is in the Faculty of Science at the University of Alberta, in Edmonton, the capital of Alberta. We have eight established research laboratories, including Algorithmics, Artificial Intelligence and Cognitive Science, Database Management, Graphics, Networks and Communications, Distributed Systems, Software Engineering, and Vision and Robotics. We have abundant computing facilities, and our department leads broadly-based multidisciplinary research within the Multimedia and Advanced Computational Infrastructure (MACI) project, and the Research Institute for Multimedia Systems (RIMS).

In addition to the standard computational research facilities, we also have a large SGI Origin 2000, and a 3D immersive display powered by an SGI Onyx2. We are currently constructing a new research laboratory building adjacent to a renovated historical building, to provide us with office and research space consolidated in the middle of our campus of about 30,000 students (see the WebCam at www.cs.ualberta.ca). Our current complement of 35 regular faculty work within a department of 28 support staff, 140 graduate students (50/50 MSc/PhD) and 400 undergraduate students. Our consistent performance in ACM World Programming Contests is evidence of our claim to be one of the best undergraduate programs in the country, and our graduate

students are successful in industrial and academic research labs around the world.

We are looking for 15 highly productive eager computing scientists to complement our strengths in all areas. We are especially keen on those who can demonstrate that they are driven by curiosity and interested in collaborative research with existing faculty across sub-disciplines. Candidates should have, or be at the completion stage of degree, a PhD in Computing Science, a proven research record, and a strong commitment to excellence in teaching. Responsibilities include research as well as teaching at the graduate and undergraduate levels. Most positions will be at the assistant professor level, however, we will consider associate and full professor appointments for outstanding candidates.

We offer an environment that is congenial and supportive of new PhDs, with the challenge to help you be your best, and the support to help you succeed within an academic environment. Our department is part of a full-service university, in a province that has the fastest economic growth in the country, and we enjoy strong collaborative ties with local industry. Competition will remain open until suitable candidates are chosen.

Find further details about us at www.cs.ualberta.ca and send your curriculum vita and the names and addresses of three referees to:
Iris Everitt
Administrative Assistant
Department of Computing Science
University of Alberta
Edmonton, Alberta, Canada T6G 2E8
or: everitt@cs.ualberta.ca
The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPP). The University of Alberta hires on the basis of merit. We are committed to the principle of equity of employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.

The University of Arizona
Department of Computer Science
http://www.cs.arizona.edu

Applications are invited for tenure-track faculty positions at all ranks, beginning employment August, 2001. Candidates must hold a doctorate in computer science or related field, have a commitment to excellence in teaching, and a demonstrated strong potential for excellence in research. Primary consideration will be given to computer scientists who work in systems software, networks, computational biology and graphics.

The Department of Computer Science at The University of Arizona has a long history of research accomplishment, influential software distribution and substantial external funding to individual faculty, exceeding 2.5 million dollars last year. Major funding has included three NSF infrastructure grants, providing a broad array of equipment for computing research. Research areas include programming languages, compilers, operating systems, networks, algorithm design, database systems, and computational biology.

Applicants must send a curriculum vitae and the names of at least three references to:
Faculty Recruiting Committee
Department of Computer Science
The University of Arizona
PO BOX 210077
Tucson, AZ 85721-0077.
We will start the review of applications on October 15, 2000, and will continue to consider applicants until the positions are filled, subject to availability of funds.
The University of Arizona is an EEO/AA employer - M/W/D/V.

University of Arizona
Department of Computer Science
http://www.cs.arizona.edu

Applications are invited for the position of Lecturer or Senior Lecturer beginning August 2001. Lecturer candidates must hold a graduate degree in computer science or closely related field, have a strong commitment to excellence in teaching, and must have substantial experience teaching computer science at the university level. Compensation is competitive, with rank and salary dependent on experience and qualifications. This is a non-tenured position, with appointments for fixed terms of three years; reappointment is possible subject to review.

Duties of this position include teaching undergraduate computer science courses in systems software areas, machine organization and architecture, operating systems, and data structures. Duties also include academic advising of students, service on department committees involved in undergraduate life, and development of new curriculum and new instructional laboratories.

The Department of Computer Science at The University of Arizona has a long history of research accomplishment, influential software distribution and substantial external funding to individual faculty, exceeding 2.5 million dollars last year. Major funding has included three NSF infrastructure grants, with a fourth such infrastructure grant beginning this year, providing a broad array of equipment for computing research. Major research and instructional areas include programming languages, compilers, operating systems, networks, algorithm design, database

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UNIVERSITY OF UTAH
School of Computing
Tenure Track Faculty Positions

The University of Utah's School of Computing seeks applicants for tenure-track faculty positions at all levels. From its original concentration on computer graphics, Utah's School of Computing has expanded its focus to include large, multi-investigator efforts addressing large-scale problems of significant impact in the areas of CAD/CAM, virtual environments, architecture and systems, VLSI, scientific computation and visualization, robotics, natural language processing, and computer vision, as well as a number of individual investigator research activities. Research areas and course offerings benefit from the quality and breadth of our faculty and emphasize a balance of theoretical foundations and practical engineering. As the School of Computing, we have been funded to expand from 22 to 30 regular faculty members, and we have several open positions. We will consider strong candidates in all areas of computer science, but we especially seek candidates in scientific computing & visualization, and networking.

Applicants should have earned a Ph.D. in Computer Science or a closely related field. The University of Utah is located in Salt Lake City, the hub of a large metropolitan area with excellent cultural facilities and unsurpassed opportunities for outdoor recreation only a few minutes drive away. Additional information about the school can be found at http://www.cs.utah.edu. Please send Curriculum Vitae, a research goals statement, a teaching goals statement, and names and addresses of at least four references to: Faculty Recruiting Committee, c/o Shawn Darby, School of Computing, 50 So. Central Campus Drive, Rm 3190 MEB, University of Utah, Salt Lake City, UT 84112-9205. The University of Utah is an Equal Opportunity, Affirmative Action Employer and encourages nominations and applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

John E. and Marva M. Warnock Presidential Endowed Chair
for Faculty Innovation in Computer Science

The School of Computing at the University of Utah is pleased to announce the establishment of the John E. and Marva M. Warnock Presidential Endowed Chair for Faculty Innovation in Computer Science. Support for the Chair derives from a substantial gift provided by the Warnocks for this purpose.

The School also announces its search to hire an outstanding junior faculty candidate to become the first recipient of this newly established chair. At the donors' request the recipient of the endowed chair shall be a junior, untenured faculty member in the School of Computing. The recipient shall be appointed to the chair for up to six years, after which time he/she will be expected to have established a record of excellence in teaching and research that will be sufficient to advance independently of the chair.

Candidates for the John E. and Marva M. Warnock Presidential Endowed Chair will be considered from the pool of qualified candidates applying for the tenure-track positions announced in the companion advertisement. Strong candidates in all areas of computer science are encouraged to apply.

Professional Opportunities

systems, and computational biology.

Applicants must send a curriculum vita and the names of at least three references to:
Faculty Recruiting Committee
Department of Computer Science
The University of Arizona
PO BOX 210077
Tucson, AZ 85721-0077

A majority of the references should be able to comment directly upon the candidate's teaching experience and abilities. We will start the review of applications on January 5, 2001, and will continue to consider applicants until the position is filled, subject to availability of funds.

The University of Arizona is an EEO/AA employer - M/W/D/V.

University of California, Davis
Department of Computer Science
Faculty Positions

The Department of Computer Science, at the University of California, Davis, invites applications for several tenure-track faculty positions. The department is seeking candidates at all levels. At the senior level, we invite applications from candidates with truly distinguished records in research, teaching, and leadership; at the junior level, we invite applications from candidates with a commitment to excellence in teaching and demonstrated research excellence. The department welcomes applications from strong candidates in areas that emphasize innovative applications in computer science. It has a particular interest in the areas of Information Systems, Computational Biology, Virtual Reality, Networks, and Computer Systems.

The Computer Science Department currently has 22 faculty members, covering all major areas of computer science. It is experiencing a period of strong growth in the size of its faculty and expects to continue this trend. The Davis campus is the third largest in the University of California system. UC Davis ranks among the nation's top 20 universities in research funding, and has been rated as one of the top five "up and coming" universities in the country.

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

These positions require a Ph.D. or equivalent. The positions are open until filled, but for full consideration, applicants should apply by January 15, 2001.

UC Davis is responsive to the concerns of dual career couples and offers a Partner Opportunity Program.

Please consult our web page (http://www.cs.ucdavis.edu/employ) for additional information on the particular areas of interest and application instructions.

UC Davis is an affirmative action/equal opportunity employer.

University of California, Davis
Department of Computer Science
Announces Lecturer Positions for the 2001-2002 Academic Year

Several full and part-time Lecturer positions are available for the 2001-2002 academic year.

Additional information regarding these positions can be found at: http://www.cs.ucdavis.edu/employ/lectpositions/

Qualifications: Candidates should have a Ph.D. in Computer Science (or equivalent background) or an M.S. in Computer Science preferably with at least two years teaching or work experience.

Salary range: Depending on level of education and experience, salary ranges from a full-time 9-month rate of approximately $48,384-$60,936.

To apply: These positions are open until filled, however, for full consideration, candidates should apply by March 1, 2001. Please consult our web page for application instructions.

These positions are covered by a collective bargaining agreement. The University of California is an affirmative action/equal opportunity employer.

University of California, Irvine
Computer Simulation Modeler
Specialist/Professional Researcher

Join a team of enthusiastic researchers building a Tobacco Policy Model. Develop and refine model structure using standard system dynamics software; identify data sources and develop mathematical and statistical functions for inclusion in the model; perform Monte Carlo sensitivity analyses; import/export data; debug and validate model.

Doctorate or master's in quantitative field and experience with computer simulation modeling required. Salary is competitive and commensurate with experience. Rank is flexible. A senior or junior research faculty position (non-tenure track) is possible along with the opportunity to write new grant proposals and forge new research directions.

Send cover letter, curriculum vitae, and names/addresses of 3-5 references to:
Tammy Tengs, Sc.D.
Director, Health Priorities Research Group
300 University Tower
University of California
Irvine, CA 92697-7076

Review of applications will begin 1/5/01 and continue until the position is filled. Visit our web site:
http://www.healthpriorities.uci.edu
The University of California is an equal opportunity educator and employer.

University of California, Riverside
Department of Computer Science and Engineering
Faculty Positions in Computer Science & Engineering

The University of California, Riverside invites applications for tenure-track or tenured faculty positions in the Department of Computer Science and Engineering for the 2001-2002 academic year. Applicants must have a Ph.D. in Computer Science or in a closely related field. Systems specialties such as architecture, networking, security, databases, operating systems, computer graphics, and software engineering, as well as the area of computational biology are of particular interest, but applications are welcome in all areas of Computer Science. Senior candidates must have an exceptional research and teaching record. Junior candidates must show outstanding research and teaching potential. Salary will be competitive, and commensurate with appointment rank and qualifications. UC Riverside is the fastest-growing member of the

nine-campus University of California System, widely regarded as the most distinguished system of public higher education in the United States. The CSE department has now grown rapidly to 18 full-time faculty, and expects to grow to about 40 over the next six years. The Campus- and College-wide expansion programs include a new state-of-the-art building soon to house the CSE and EE departments. Annual research expenditures in the College are close to $300K/year per faculty. The CSE department offers the B.S., M.S., and Ph.D. degrees. More information is available at: http://www.cs.ucr.edu.

The city of Riverside, located about 60 miles away from Los Angeles, offers easy access to mountains, Pacific Ocean beaches, cultural activities, shopping, and other attractions. Applications and inquiries should be sent to:
Chair
Faculty Search Committee
Department of Computer Science and Engineering
University of California, Riverside
CA 92521-0304
(909)-787-5639
or by e-mail to: hire@cs.ucr.edu

Applications must include curriculum vitae, list of publications, a statement of research and teaching objectives, and names and addresses of four references (junior candidates may have reference letters mailed directly to the department). Formal review of applications begins January 15, 2001, but positions will remain open until filled. Early applications are encouraged. The University of California, Riverside is an Equal-Opportunity, Affirmative-Action Employer.

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

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

The Department of Computer Science currently has 23 full-time faculty and approximately 140 graduate students (including approximately 75 Ph.D. students) involved in various research areas including digital libraries and databases, parallel and distributed systems, programming languages, networking, bioinformatics, security, theory of computation, algorithms, computer vision and interaction, and computational sciences.

The Department of Computer Science is part of an expanding College of Engineering which encompasses over 100 faculty in various engineering disciplines. UCSB is a major research institution, elected member of the Association of American Universities, as well as an integral part of the nine-campus University of California system. Graduate degrees in Computer Science are offered at the M.S. and Ph.D. levels. The department recently received a NSF CISE award to experiment with campus-wide wireless network and multimedia services, and is engaged in a number of collaborative projects (e.g., Alexandria Digital Library) both at the College and the campus level.

Applicants should hold a doctoral degree in Computer Science or a related field; appointments are scheduled to begin in 2001-2002. Primary consideration will be given to candidates who apply by January 15, 2001, however positions will remain open until filled. Send resume and names of at least four referees to
Recruitment Committee
Department of Computer Science
University of California
Santa Barbara, CA 93106-5110

To apply by electronic mail, send the application to: recruitment@cs.ucsb.edu. Additional information about the Computer Science Department may be found at http://www.cs.ucsb.edu. An EO/AA employer.

University of Chicago
Department of Computer Science

The Department of Computer Science at the University of Chicago is recruiting at all levels in a wide range of topic areas, including but not limited to AI, bioinformatics, computational linguistics, security, systems, and theory.

The University of Chicago has the highest standards for scholarship and faculty quality - and the Computer Science Department's charge and goal is substantial growth through appointments that will enhance the quality and prestige of our University. We especially value faculty whose research has impact and visibility beyond Computer Science. The University and Argonne National Laboratory established the Computation Institute to facilitate such interdisciplinary research. The Chicago Metropolitan area is diverse and exciting. The local economy is vigorous, with international stature in banking, trade, commerce, manufacturing, and transportation, while the cultural scene can boast diverse cultures, vibrant theater, world renowned symphony, opera, jazz, and blues, not to mention the best pizza in the world.

Please send nominations or applications to Professor Stuart A. Kurtz, Chairman
Department of Computer Science
The University of Chicago
1100 E. 58th Street, Ryerson Hall
Chicago, IL 60637
The University of Chicago is an Equal Opportunity Employer.

University of Colorado at Boulder
Department of Computer Science
Tenure Track Positions

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

The Department has 39 faculty (including five new members who have joined this year), 191 graduate students, and 565 undergraduates. It has strong research programs in human computer interaction, machine learning, numerical and parallel computation, software and systems, speech and language processing, and theoretical computer science.

The Department has four received successive five-year NSF CER and RI awards to support its computing infrastructure and collaborative research among its faculty, most recently for the period 2000-2005. In the recent NSF ITR competition our faculty participated in proposals funded for more than $13.5M. The faculty is also proud of its record in offering an outstanding educational experience to our students.

We are seeking new colleagues who share our commitment to the ideals of the research university as a uniquely valuable institution in our society, combining the creation of new knowledge with the shaping of future leaders.

Our location in Boulder offers a pleasant college town ambience, easy access to the great outdoors, and

participation in a vibrant, rapidly-growing high tech industry community. A recent study by a major telecommunications startup identified Boulder County as the most attractive setting nationally to which to recruit staff. Our alumni are playing important roles in creating the next generation of technology and technology companies here and elsewhere.

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

Review of applications will begin immediately, and continue as long as positions are open. We expect to have positions in future years as well as for appointments beginning in academic year 2001-2002, and we welcome inquiries about these future opportunities.

Because we have a number of positions available, we would be glad to receive inquiries from research collaborators interested in joining our faculty together. We also welcome applications from academic couples wishing to co-locate.

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

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

University of Connecticut
Computer Science & Engineering Department
Senior Faculty Position in Computer Science & Engineering

The Computer Science & Engineering Department at the University of Connecticut invites nominations and applications to fill a senior tenure-track faculty position in computer science and engineering. Qualified candidates will have a strong record of proven accomplishments in research and education, and demonstrated leadership qualities.

The successful candidate will oversee and lead establishment of the GE Fund Information Technology Clinic. This program is made possible by a generous donation from the GE Fund, with an initial funding of $750,000 to explore information technologies for engineering research and education. This position offers an excellent opportunity to interact with broad industrial and research communities for the creation of a nationally recognized, cutting-edge program emphasizing engineering applications of information technology. The focus and direction of the program will clearly be influenced by the research strength, preference and leadership of the applicant.

The University of Connecticut, a land grant university and the State's flagship public university, is one of only two public universities in New England designated a Carnegie Foundation Research I institution. The

Professional Opportunities

University is also rated the number one public university in New England by U.S. News & World Report. The University was founded in 1881 and is undergoing a remarkable physical transformation thanks to a $1 billion, 10-year capital initiative aimed at rebuilding the campus to meet the demands and opportunities of the 21st century. The CSE Department has strong research and education programs in areas including distributed computing, networks, intelligent systems, agent-based computing, parallel algorithms, complexity theory, data security, cryptography, geometric modeling, databases, computational biology, performance modeling and human-centered computing. The CSE faculty currently are funded by NSF, AFOSR, NIH, DARPA, MITRE and other industrial and government sources. The selected candidate will provide leadership in his/her area of research and enjoy collaboration with highly qualified and motivated faculty members in the department and in the School of Engineering for the development of nationally and international visibility research and education programs. (Search #01A241)

Please send applications and nominations to

Professor T.C. Ting
Department of Computer Science & Engineering
Unit 3155, University of Connecticut
191 Auditorium Road
Storrs, CT 06269-3155
e-mail: ting@engr.uconn.edu
phone: (860) 486-3784.

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

University of Delaware
Department of Computer Science

Applications are invited for a tenure track Assistant Professor to begin fall 2001. Outstanding senior level candidates will also be considered. Of primary interest are candidates whose research is in an area of experimental computer science such as systems, software engineering, security, data mining, graphics, speech, or web-based technologies. Candidates in related areas will be considered. Applicants should hold a Ph.D or its equivalent and should be committed to excellence in research and teaching. The normal teaching load is 3 courses per year.

The department has 17 tenure-track and 3 research faculty members, with a substantial portion of our 90 graduate students pursuing the Ph.D. We have significant external funding, including a large Army grant for networking research, an NSF CISE Research Infrastructure Grant for parallel and distributed computing, and NSF CAREER awards. A major UDel biotechnology initiative offers opportunities for

collaborative research in bioinformatics. The University of Delaware is centrally located between Philadelphia and Baltimore, with major government and industrial labs nearby. More information is available at: http://www.cis.udel.edu/~saunders/crn.

Candidates should send a letter of application and curriculum vitae. Also have three confidential letters of reference sent directly. Mail to: Dr. B. David Saunder, Dept. of Computer Science, University of Delaware, Newark, DE 19716, or email to: csfacsch@cis.udel.edu (pdf please). Applications will be accepted until the positions are filled; those received by Feb 1, 2001 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 Georgia
Department of Computer Science

The Department of Computer Science of The University of Georgia invites applications for multiple tenure-track positions in Computer Science to begin Spring or Fall of 2001. Two areas of special interest this year are Algorithms and Bioinformatics. The latter 0 will be made at the senior level for a candidate with the necessary skills to participate significantly in a campus-wide program in Bioinformatics. Also of interest are positions that are part of a Georgia strategic initiative, Yamacraw, to achieve pre-eminence in the design of broadband infrastructure systems, devices, and chips. Applicants for these positions should have demonstrated expertise in high performance networking, software engineering, optical networks, high speed access devices, wireless computing, or embedded systems. The department intends to hire persons whose research complements existing departmental strengths. We are especially interested in algorithms, networking, graphics, operating systems, software engineering, compilers and programming languages, and theory. However, outstanding applicants in all areas are encouraged to apply. Successful applicants must be committed to excellence in both research and teaching.

The Department of Computer Science is a growing and congenial department of 20 faculty with wide areas of research interests. The

department has 500 undergraduate and 80 graduate students, and offers the B.S., M.S., and Ph.D. degrees in computer science. The teaching load allows for substantial concentration on research. Faculty interact with several centers for computational science, including centers for Genomics and Computational Biology, Molecular Structure and Design, Computational Quantum Chemistry, and Simulational Physics.

The University of Georgia, founded in 1785, is the oldest land-grant university in the nation and the largest university in the state of Georgia, with a student body of 31,000. Located in Athens, a charming and historic university town of 100,000, approximately 65 miles from metropolitan Atlanta, with mild winters and warm summers, the University boasts a Performing Arts Center and is a major cultural center for music and the arts. Applicants should submit a vita and a statement of research interests and arrange to have four reference letters sent to:
Faculty Search Committee
Department of Computer Science
The University of Georgia
Athens, GA 30602-7404
To be assured full consideration, applications should be received by January 15, 2001.

The University of Georgia is an equal opportunity / affirmative action employer, and especially encourages applications from women and minorities.

University of Houston
Department of Computer Science

The Department of Computer Science at the University of Houston (UH) seeks applicants for at least three tenure-track faculty at any rank. Successful candidates are expected to participate in teaching at all levels, carry out independent research, and strengthen graduate programs in communications/networks, computational science, computer graphics/vision,

databases, and scientific/engineering data visualization. Other areas may be considered as well. The Department is experiencing a period of strong growth and expects this trend to continue. Faculty are 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 Sciences (TCCIS), the Texas Learning and Computation Center (TLC2), and/or the Virtual Environments Research Institute (VERI). TCCIS, TLC2, VERI, and the department have a substantial infrastructure to support both teaching and research activities (see www.cs.uh.edu, www.tccis.uh.edu, and www.vetl.uh.edu). UH, together with Rice University, Baylor College of Medicine, and Texas A&M University, operates a regional OC-12 network connected to the vBNS. UH is also a charter Internet2 member. The department is affiliated with the Center for Research in Parallel Computation (Rice) and both NSF Partnerships for Advanced Computing Infrastructure. Significant opportunities for

collaborative research exist within the university and with the Texas Medical Center, the NASA/Johnson Space Center, and the region's oil/gas industry.

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

Applications, including a resume, a list of publications and funding, and the names of at least three references (five for senior positions) should be sent to:
Faculty Search Committee
Department of Computer Science
Mail Stop CSC-3475
Houston, TX 77204-3475 USA
713-743-3343 (voice)
713-743-3335 (fax)
johnson@cs.uh.edu (email)
Review of applications will begin immediately and will continue until
The positions are filled.

University of Louisiana at Lafayette
Computer Science Department
http://www.louisiana.cmps.edu

Applications and nominations are invited for a tenure track position at the assistant professor level starting Fall 2001. Applicants must have a doctorate in Computer Science or a closely related discipline and demonstrate a commitment to excellence in undergraduate education. The successful candidate is expected primarily to teach undergraduate courses in Computer Science and contribute to the discipline through active research and/or other scholarly activities. He/She can also teach at the graduate level and supervise M.S. and Ph.D. students

The Computer Science department at UL Lafayette is one of the oldest in the nation. The department consists of 7 faculty members, and several part-time adjunct instructors. It

Faculty Position

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

Marist College
www.marist.edu

Marist College seeks to hire a faculty member to fill a tenure-track position in its Computer Science and Information Technology programs for the Fall, 2001 semester. The Department has 14 full-time faculty and offers bachelor's degrees in Computer Science, Information Systems and Information Technology, and Master's Degrees in Software Development and Information Systems. Additionally two five-year BS/MS programs are also offered. The successful candidate will have expertise in areas such as: network computing, database systems, multimedia, and application development. An earned doctorate is required for this tenure-track appointment. Research pursuits, professional activities, and classroom teaching are expected.

Teaching excellence is one of the distinguishing characteristics of Marist College. Marist is a leader among small liberal arts colleges in integrating technology into teaching and learning. It has multimedia development labs for faculty and students. A state-of-the-art digital library facility was recently completed.

The Marist College technology infrastructure was developed through a joint study with the IBM Corporation. Currently the College is in the second phase of the joint study. Research is being conducted in the areas of streaming media, digital library, and e-commerce applications. Marist has also established a major Linux Research and Development Center and is in the process of establishing a special training program in an S390 environment. Marist is also leading major efforts to train professionals in e-commerce with on-line courses in Linux, Java, XML, C++ and others.

Marist College is located on the scenic Hudson River and only 90 minutes away from New York City. It enrolls approximately 3,800 full-time and 600 part-time undergraduates and 800 graduate students. Candidates are encouraged to visit our home page at http://www.marist.edu.

Review of applications will begin immediately. A letter of application along with a curriculum vita and the names of three professional references should be addressed to:

MARIST COLLEGE

Onkar P. Sharma, Dean
School of Computer Science and Mathematics
MPO-905/CRA, Marist College
Poughkeepsie, NY 12601-1387

An Equal Opportunity/Affirmative Action Employer

has 430 majors, and offers a curriculum that has been accredited by CSAB since 1987. Computing equipment specifically allocated to undergraduates includes a Unix lab of over 170 SUN workstations and a Windows NT lab of over 35 PCs. UL Lafayette, (http://www.louisiana.edu,) has the distinction of having the first ACM student chapter in the country, as well as the first Louisiana chapter of the UPE honor society.

All Ph.D. faculty members in the department maintain an active research program. Areas of research include cognitive science, computer science education, human computer interaction, multimedia, parallel processing, scientific visualization, software engineering, artificial intelligence, and machine learning. The department has a very close relationship with the Center for Advanced Computer Studies, (http://www.louisiana.cacs.edu) which contributes to a stimulating research environment that is exceptional among undergraduate departments.

The University of Louisiana is located in Lafayette, a city with a population of about 120,000. It is the cultural and commercial center of Acadiana, which is the region settled by the French-speaking population of Acadians that was exiled from Nova Scotia in the eighteenth century.

Culturally, the region is characterized by a joie de vivre, or joy of life. Acadiana residents are hard-working and fun-loving. Fairs and festivals throughout the year celebrate everything from A to Z – alligators to zydeco music. For more than a decade, the annual Festival International de Louisiane has showcased musicians from French-speaking countries from around the world. For more information, see: http://www.lafayette.org.

Applicants should send a letter of application, resume, three letters of recommendation (at least one of which should address teaching) and any other supporting material to:
Magdy A. Bayoumi, Department Head
Computer Science Department
University of Louisiana
P. O. Box 41771
Lafayette, LA 70504-1771
(337) 482-6768
(337) 482-5791 FAX
The search committee will start reviewing applications and will continue until the position is filled.

The University is in compliance with Title IX of the Civil Rights Act, Section 504 of the Rehabilitation Act of 1973, and is an Equal

Employment Opportunity Affirmative Action Employer.

University of Maryland, College Park
Department of Computer Science

The University of Maryland, College Park, Department of Computer Science is seeking faculty members at all ranks. Truly outstanding candidates in all areas will be considered, but we are especially seeking candidates in the areas of networks, mobile computing, multimedia systems, graphics, Human Computer Interaction, databases, information security, programming languages and software engineering.

Under the University of Maryland Flagship Initiative, candidates with established research programs will be considered for joint appointments between the Department and the Institute for Advanced Computer Studies, The Department of Electrical Engineering, and the Institute for Systems Research.

Candidates who are interested should send curriculum vitae, research summary, and at least four names of references with (3) emphasizing research and (1) emphasizing teaching to:
University of Maryland at College Park
Department of Computer Science
Attention: Recruiting Committee
College Park, Maryland　20742-3255
At the time they apply, candidates must request their references to send
written recommendations. Failure to do so will delay the application process. Beginning January 15, 2001 we will begin the review of candidates to interviewed and therefore encourage your early application.

Additional information about academic and research units at Maryland is available on the World Wide Web. Department of Computer Science, http://www.cs.umd.edu/
The University of Maryland is an Equal Opportunity, Affirmative Action Employer.

University of Massachusetts, Amherst
Department of Computer Science
Faculty and Research Scientist Positions
The University of Massachusetts, Amherst invites applications for tenure-track faculty positions at the assistant professor level. Applicants must have a Ph.D. in Computer Science or related area and should show

(continued)

Professional Opportunities

evidence of exceptional research promise. Candidates in all areas of Computer Science are encouraged to apply. We particularly welcome candidates who would thrive in a highly collaborative environment in which projects often span several research groups. Candidates with an established record of strong research may also apply for positions other than at the assistant professor level.

The Department of Computer Science has 39 tenure and research track faculty and 160 Ph.D. students with broad interdisciplinary research interests. The department offers first-class research facilities and has just moved into a new state-of-the-art building. Please see http://www.cs.umass.edu for more information. Applications should reference search R10951.

We also invite applications for Research Faculty (R10950), Research Scientist (R10949), Postdoctoral Research Associate (R10949), and Research Fellow (R10949) positions in all areas of Computer Science. Applicants should have a Ph.D. in Computer Science or related area (or an M.S. plus equivalent experience), and should show evidence of exceptional research promise. These positions are grant-funded; appointments will be contingent upon continued funding.

To apply, send a letter with your vitae and at least three reference letters to:
Search [fill in number from above]
c/o Chair of Faculty Recruiting
Department of Computer Science
University of Massachusetts
Amherst, MA 01003-4610

We will begin to review applications on December 15, 2000, and will continue until available positions are filled. Salary commensurate with education and experience; comprehensive benefits package.

The University of Massachusetts is an Affirmative Action/Equal Opportunity employer. Women and members of minority groups are especially encouraged to apply.

University of Memphis
Department of Mathematical Sciences
Tenure-track Assistant Professor Position in Computer Science

The Division of Computer Science anticipates filling a tenure-track position at the assistant professor level in the fall of 2001. In addition to a Ph.D. in Computer Science or a related field, the successful candidate will have an active research program and will strengthen The Division's research, teaching and outreach programs.

We offer B.S., M.S., and Ph.D. degrees, as well as a concentration in Bioinformatics and an interdisciplinary M.S. degree in Electronic Commerce. We have recognized and well-funded interdisciplinary research groups in artificial intelligence (agents and cognitive science), biologically inspired computation (neural networks, evolutionary computation, molecular computing and bioinformatics), network security, database and data mining, algorithms, and software development. Review of applications will begin on January 15, 2001 and may continue until the position is filled, subject to budgetary approvals. More information about the position can be found at: http://www.cs.memphis.edu/

To apply, send vitae, a statement of research interests, and direct four letters of recommendation to:
Division of Computer Science
Attn: Recruiting Committee
The University of Memphis
373 Dunn Hall
Memphis, TN 38152-3240
The University of Memphis is an AA/EOE employer.

University of Miami
Department of Computer Science
Three new tenure-track faculty positions
The Department of Computer Science for the University of Miami seeks to hire three new tenure-track faculty at all ranks. Highly qualified researchers in all areas of Computer Science are invited to apply. Candidates must hold a doctorate in computer science or a related field and demonstrate strong potential for excellence in research and teaching. Rank and salary are commensurate with qualifications.

The Department of Computer Science is a newly established department recently separated from the combined Department of Math and Computer Science. The successful candidate will show the desire to shape the future of this budding department. The University of Miami is a Group I research university as well as a member of the next-generation Internet (Internet2) project. For more information on the department and the university, please visit our web site at www.cs.miami.edu.

Applicants should send a letter of application, curriculum vitae, research statement, teaching statement, and the names of three references to:
Victor Milenkovic
Department Chair
Faculty Search Committee
Department of Computer Science
University of Miami
P.O. Box 248154
Coral Gables, FL 33124-4245

or via email to: cssearch@cs.miami.edu.

In addition, please include in your letter of application a URL containing supporting material such as online publications. Electronic submissions are strongly encouraged.

Review of applications will begin immediately and continue until positions are filled.

The University of Miami is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

The University of Michigan, Ann Arbor
Computer Science and Engineering
Faculty positions

Applications and nominations are solicited for several junior and senior faculty positions in the Computer Science and Engineering (CSE) Division. Qualifications include an outstanding academic record, a doctorate or equivalent in computer engineering or computer science, and a strong commitment to teaching and research. Candidates from all areas of computer science and engineering will be considered.

Please send resume and names of three or more references to:
Professor John E. Laird
Associate Chair for Computer Science and Engineering Division and
Chair of the CSE Faculty Search Committee
Department of Electrical Engineering and Computer Science
University of Michigan
1301 Beal Avenue, Room 3402
Ann Arbor, MI 48109-2122
URL: http://www.eecs.umich.edu/cse
You may submit applications and inquiries via email to: csesearch@eecs.umich.edu
The University of Michigan is a Non-Discriminatory/Affirmative Action Employer.

The University of Michigan, Ann Arbor
Computer Science and Engineering
Lecturer Positions

Applications for lecturer positions in Computer Science and Engineering are being accepted immediately for the January 2001 teaching term. Qualifications include an outstanding academic record, a doctorate or equivalent in computer engineering or computer science, and an excellent teaching record. Candidates from all areas of computer science and engineering will be considered.

Please send resume and names of three or more references to:
Professor John E. Laird
Associate Chair for Computer Science and Engineering Division and
Chair of the CSE Faculty Search Committee
Department of Electrical Engineering and Computer Science
University of Michigan
1301 Beal Avenue, Room 3402
Ann Arbor, MI 48109-2122
URL: http://www.eecs.umich.edu/cse
You may submit applications and inquiries via email to: csesearch@eecs.umich.edu
The University of Michigan is a Non-Discriminatory/Affirmative Action Employer.

The University of Michigan – Dearborn
Department of Computer and Information Science
Chair

Applications are invited for the position of Chair of the Computer and Information Science (CIS) Department, College of Engineering and Computer Science, at the University of Michigan-Dearborn. Qualifications must include a Ph. D. in Computer Science, Information Systems, or a closely related area and excellent sponsored research record. The successful candidate must have the demonstrated ability for academic and administrative leadership and be eligible for a tenured Full Professor position. The CIS Department offers a BS degree in Computer and Information Science, a BS degree in Software Engineering, an MS degree in Computer and Information Science, an MS in Software Engineering jointly with the Department of Electrical and Computer Engineering, and an MS in Information System and Technology jointly with the Department of Industrial and Manufacturing Engineering. The CIS Department is rapidly growing and serves over 500 students. The research areas in the department include Database Systems, CAD/CAM, Computer and Network Security, Distributed Systems, Information Systems, and Software Engineering. The current research projects are funded by highly competitive sources including NSF, Ford, IBM, Motorola, etc. The Chair is expected to provide leadership in increasing funded research activities.

Being in an industrial heartland, the University of Michigan - Dearborn provides significant opportunities for faculty interactions with many of the local industries. The Chair of CIS is expected to be able to promote collaborations with local industries and provide leadership in this unique environment.

For further information on the department, please visit our Web site at http://www.engin.umd.umich.edu/CIS.

Curriculum vitae and the names of three references should be sent to
Dr. David Yoon, Chair
CIS Chair Search Committee
Department of Computer and Information Science
University of Michigan – Dearborn
4901 Evergreen Rd
Dearborn, MI 48128

The evaluation of applications will start on Feb. 15, 2001. However, the process will continue until the position is filled.

The University of Michigan – Dearborn is an Equal Opportunity/Affirmative Action Employer and encourages woman and minorities to apply.

The University of Missouri – Rolla
Department of Electrical & Computer Engineering

Nominations and applications for tenure-track faculty positions in Computer Engineering are invited. The department has successful interdisciplinary research and instructional programs in systems intelligence and software engineering, embedded computer systems, digital systems design, and electrical engineering. A Ph.D. in Computer Engineering, or equivalent, is required, as well as a demonstrated potential for scholarly research and professional development. The applicant must have the ability to initiate research programs and a dedication to high-quality teaching. The appointment is anticipated to be at the assistant professor level, however, qualified candidates at all levels will be considered. More information about the campus and department can be found at <http://www.umr.edu>. Screening will begin February 1, 2001, and continue until positions are filled.

Please submit application and vitaes to
Human Resource Services
Reference Number R53192
University of Missouri – Rolla
1202 North Bishop, 1870 Miner Circle
Rolla, MO 65400-1050.
UMR is an AA/EEO employer. Females, minorities and persons with disabilities are encouraged to apply.

University of Nebraska — Lincoln
Computer Science and Engineering Department
Olson/Othmer Endowed Chair in Software Engineering or Computer Network Security

The UNL CSE Department invites applications for an Olson/Othmer Endowed Chair position in Software Engineering or Computer Network Security. The mandate of the Chair is to provide leadership in building an internationally recognized research and teaching program and to instill a spirit of entrepreneurship among students.

The Olson/Othmer Chair position is a result of UNL receiving two large gifts that have allowed the establishment of several Othmer Endowed Chairs and the J.D. Edwards Honors Program in Computer Science and Management (http://www.unl.edu/jdedward/).

Candidates must have a proven record of excellence in research and building an academic program. A resume, statement of research and teaching interests, and a list of at least three references who will not be contacted prior to applicant consent should be sent to:
Rich Sincovec, CSE Chair
Computer Science and Engineering Department
University of Nebraska — Lincoln
Lincoln, Nebraska 68588-0115
The CSE Department (http://cse.unl.edu/) offers both computer science and computer engineering programs leading to BS, MS, and PhD degrees and has 20 tenured or tenure-track faculty, about 650 undergraduates and 100 graduate students. UNL is Nebraska's comprehensive research university with Carnegie I standing and membership in the American Association of Universities.

See www.cse.unl.edu; email search@cse.unl.edu; phone 402.472.2401; fax 402.472.7767. The University of Nebraska is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact Rich Sincovec at (402)472-2401 for assistance.

University of Nevada, Reno
Department of Computer Science

Applications are invited for a tenure track Assistant Professor position beginning in August 2001. A Ph.D. in Computer Science or Computer Engineering is required by the date of appointment. Candidates should possess a demonstrated potential and strong commitment to quality research and teaching at the undergraduate and graduate levels. Candidates with expertise in one or more of the following areas may be given preference:

software engineering, database systems, computer networking and data communication. The department is dynamic, growing and offers BS, MS, and Ph.D. degrees. Visit: www.cs.unr.edu or email: varol@cs.unr.edu for further information.

The Reno area has four mild seasons and is a scenic half-hour drive to Lake Tahoe, one of the largest and most beautiful alpine lakes on the planet. The Pacific Crest Trail is nearby for hiking and fantastic ski areas abound. San Francisco and the Silicon Valley are within a short half-day's drive. To apply, send a letter, vita and information on 3 references to
Search Committee Chair
Computer Science Department/171
University of Nevada
Reno, NV 89557
Review of applications will begin February 15, 2001.
EEO/AA.

University of North Carolina at Chapel Hill
Department of Computer Science

Applications are invited for up to four faculty positions at open ranks to begin in Fall 2001 or Spring 2002.

We particularly invite applications from candidates with expertise in hardware systems, operating systems and networking, embedded systems, and ubiquitous computing. Outstanding candidates who would strengthen other existing research groups in the department will be welcomed.

Candidates must hold or expect to hold a Ph.D. before starting employment, or must present an equivalent level of professional accomplishment.

Further information about the department and this search may be obtained by e-mail to jeffay@cs.unc.edu, or via our Web site http://www.cs.unc.edu/ under "Joining Our Department"/ "Faculty Recruiting", or by post to:
Professor Kevin Jeffay
Chair, Faculty Search Committee
Department of Computer Science
Campus Box 3175, Sitterson Hall
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-3175.
Minorities and women are encouraged to apply. The University of North Carolina is an equal opportunity, affirmative action employer.

University of Oregon
Department of Computer and Information Science
Faculty Positions

The Department of Computer and Information Science has multiple tenure-track faculty positions open for Fall 2001. Applicants must have a Ph.D. in computer science and be committed to excellence in both teaching and research. Primary consideration will be given to applicants in the areas of programming languages, networking, parallel and distributed systems. However, outstanding candidates in other areas will be seriously considered.

Applicants should send their curriculum vitae, the names of at least four references, a statement of research and teaching interests, and selected publications to
Faculty Search Committee
Dept. of Computer and Information Science
University of Oregon
Eugene, OR 97403-1202
email: faculty.search@cs.uoregon.edu
Review of applications will begin on January 15, 2001 and continue until the positions are filled.

The Department has eighteen research faculty and two instructors and offers B.S., M.S., and Ph.D. degrees. The Department is associated with the Cognitive and Decision Sciences Institute, the Computational Science Institute, the Computational Intelligence Research Laboratory, and the Software Engineering Research Center. More information about the department, its programs and faculty can be found at:
http://www.cs.uoregon.edu. The University of Oregon is an AAU research university located in Eugene, a community rated among the most livable in the nation.

The University of Oregon is an Equal Opportunity/Affirmative Action institution committed to cultural diversity and compliance with the Americans with Disabilities Act.

University of Pennsylvania
Department of Computer and Information Science
Faculty Positions

The University of Pennsylvania invites applicants for tenure-track appointments in both experimental and theoretical computer science to start July 1, 2001. Faculty duties include undergraduate and graduate teaching, as well as research.

Successful applicants will find Penn to be a stimulating environment conducive to professional growth. Ground breaking recently took place on a new $15 Million Computer Science Building. The Department of Computer and Information Science has embarked on a strategic plan to add a significant number of

Professional Opportunities

tenure-track faculty over the next five years. We seek to expand and broaden both the applied and theoretical sides of our research and teaching program, building on existing strengths in algorithms and computational biology, computer graphics and animation, computer vision and robotics, databases, logic and computation, natural language processing, networks and distributed systems, programming languages, and real time systems.

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

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

Electronic applications are strongly preferred, but hard-copy applications (including the names of at least four references) may alternatively be sent to:

Chair, Faculty Search Committee
Department of Computer and Information Science
School of Engineering and Applied Science
University of Pennsylvania
Philadelphia, PA 19104-6389
Applications should be received by January 1, 2001 to be assured full consideration. Applications will be accepted until positions are filled. Questions can be addressed to: faculty-search@central.cis.upenn.edu.

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

University of Pennsylvania
Department of Computer and Information Science
Lecturer (Lab Instructor) Position

The University of Pennsylvania invites applicants for the position of Lecturer (Lab Instructor) in Computer Science, to start July 1, 2001. The position is for one year and is renewable annually up to three years.

Position Description: Support programming projects for CSE330 (Database Management Systems), CSE350 (Software Design/Engineering), CSE380 (Introduction to Operating Systems), and CSE480 (Distributed Systems). This includes acting as a resource in design of programming projects, acting as liaison with the Technical Staff, assisting Teaching Assistants in the grading of programming assignments, and assisting students in using the software through how-to lectures and office hours.

Position Requirements: Masters Degree in Computer Science or related field is preferred for this position, in addition to the following skills: (a) SysAdmin experience managing any version of Unix (e.g. Solaris, BSD, Linux, etc.), experience with NT is a plus; (b) experienced C programmer (socket, thread and signal programming, and kernel hacking are pluses); (c) database management (Oracle is preferred; knowing MySQL is a plus); (d) experience with PHP, ASP, ColdFusion or CGI scripting; and (e) knowledge of, or willingness to learn, at least one language such as Java or ML. Applicants must have good people skills in addition to software management skills.

Successful applicants will find Penn to be a stimulating environment conducive to professional growth. Ground breaking recently took place on a new $15 Million Computer Science Building. The Department of Computer and Information Science has embarked on a strategic plan to add a significant number of tenure-track faculty over the next five years. We seek to expand and broaden both the applied and theoretical sides of our research and teaching program, building on existing strengths in algorithms and computational biology, computer graphics and animation, computer vision and robotics, databases, logic and computation, natural language processing, networks and distributed systems, programming languages, and real time systems.

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

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

Electronic applications are strongly preferred, but hard-copy applications (including

the names of at least four references) may alternatively be sent to:

Chair, Lecturer (Lab) Search Committee
Department of Computer and Information Science
School of Engineering and Applied Science
University of Pennsylvania
Philadelphia, PA 19104-6389
Applications should be received by April 1, 2001 to be assured full consideration. Applications will be accepted until positions are filled. Questions can be addressed to: faculty-search@central.cis.upenn.edu.

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

University of Pennsylvania
Department of Computer and Information Science
Lecturer Positions

The University of Pennsylvania invites applicants for the position of Lecturer in Computer Science, to start July 1, 2001. Lecturer duties include undergraduate and masters level teaching. The position is for one year and is renewable annually up to three years.

Successful applicants will find Penn to be a stimulating environment conducive to professional growth. Ground breaking recently took place on a new $15 Million Computer Science Building. The Department of Computer and Information Science has embarked on a strategic plan to add a significant number of tenure-track faculty over the next five years. We seek to expand and broaden both the applied and theoretical sides of our research and teaching program, building on existing strengths in algorithms and computational biology, computer graphics and animation, computer vision and robotics, databases, logic and computation, natural language processing, networks and distributed systems, programming languages, and real time systems.

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

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

Electronic applications are strongly preferred, but hard-copy applications (including the names of at least four references) may alternatively be sent to:

Chair, Lecturer Search Committee
Department of Computer and Information Science
School of Engineering and Applied Science
University of Pennsylvania
Philadelphia, PA 19104-6389
Applications should be received by March 1, 2001 to be assured full consideration. Applications will be accepted until positions are filled. Questions can be addressed to: faculty-search@central.cis.upenn.edu.

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

University of Pittsburgh
Telecommunications Program

The University of Pittsburgh's Telecommunications Program seeks a 1.5-year Visiting Professor and, pending budgetary approval, a tenure-stream Assistant- or Associate Professor, both beginning AY 2001-2. Candidates for both positions must have an earned PhD, with research and teaching expertise in the protocols and practical issues of computer networks. Candidates, who are not familiar with the technical quality of Pitt's Telecom Program, should see: http://www.tele.pitt.edu for information about the program, the faculty, these openings, and the procedure for applying. Review of applications will begin on January 15, 2001. Please send questions and curriculum vitae by e-mail to: rat@tele.pitt.edu.

The University of Pittsburgh is an Equal Opportunity / Affirmative Action employer and strongly encourages women and minority candidates to apply.

The University of San Francisco
Department of Computer Science

The Department of Computer Science at The University of San Francisco (USF) invites applications for a tenure-track position at the Assistant Professor level, to begin Fall 2001. Further details on the position are available online at: http://www.cs.usfca.edu/job.html.

USF is an AA/EOE.

University of Southern California
Department of Electrical Engineering-Systems

The Division of Computer Engineering invites outstanding candidates at all levels to apply for a tenure-track position in computer architecture. Specific areas of interest include processor architecture and embedded system architecture.

Applications must include a detailed curriculum vitae, a description of research and teaching interests, and the names of at least four professional references. The applicant is responsible for soliciting the reference letters to be sent directly to the faculty search coordinator:

Search Committee Coordinator
Attention: Dr. Timothy Pinkston
University of Southern California
3740 McClintock Avenue EEB 100
Los Angeles, CA 90089-2560
USC is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are encouraged.

University of Southern California
Computer Science

University of Southern California Computer Science (http://www.cs.usc.edu/) invites applications for tenure-track positions from outstanding candidates. Areas include Networking; Scalable Distributed and Scientific Computing; Software Engineering; Computation Theory with Applications; Agents and machine Learning; and Computer Graphics and integrated Media. Exceptional candidates in other areas may also be considered.

Please send a comprehensive resume, a list of references and a statement of goals to

Paulina Tagle
Computer Science
USCSAL 300
Los Angeles, CA 90089-0781
or Email to: paulina@pollux.usc.edu
USC is an Equal Opportunity/ Affirmative Action Employer and encourages applications from women and minorities.

University of Texas at Arlington
Computer Science and Engineering Department
Multiple tenure-track faculty positions

The University of Texas at Arlington (UTA), Computer Science and Engineering (CSE) Department - CSE@UTA invites

applications for multiple tenure-track faculty positions at assistant or associate professor levels. Applicants with expertise in the following areas are preferred: software engineering; systems including architecture, distributed and high-performance computing; networks and telecommunications; database and data mining; and applied theory. UTA, part of The University of Texas System, is located in the heart of the rapidly growing Dallas/Fort Worth area, one of the nation's largest high-technology regions, with a flourishing industrial base and excellent opportunities for industry/university collaboration.

We at CSE@UTA are committed to excellence in research, teaching, and community service. We recently kicked off a "Top 25 Initiative" with the goal of reaching a national top 25 ranking. The initiative is strongly supported by all CSE@UTA stakeholders including the UTA administration, our students and alumni, and our industry partners. The highlights of the Top 25 Initiative include significant increase in tenure track faculty positions and PhD students; significant increase in research funds; and establishment of endowed student fellowships, endowed faculty chairs, and industry-sponsored laboratories.

Applicants for an assistant professor position must have an earned doctorate in computer science, computer engineering, or closely related fields and a commitment to teaching and scholarly research. Applicants for an associate professor position must have demonstrated an excellent record of professional accomplishments in their field of expertise. The faculty openings are anticipated for September 2001. Screening of applications will begin immediately and will continue until all positions are filled. Interested persons should send a resume and reference letters to:

Chair of Search Committee, Department of Computer Science and Engineering, P.O. Box 19015, Arlington, TX 76019-0015. Phone: 817-272-3605. FAX: 817-272-3070. Email: search@cse.uta.edu. http://www-cse.uta.edu.

The University of Texas at Arlington is an Equal Opportunity/Affirmative Action Employer.

University of Toronto
Department of Computer Science

The Department of Computer Science invites applications for several tenure-track and tenured positions at all levels, and in all

Professional Opportunities

three campuses of the University of Toronto: St. George (downtown), Scarborough (east) and Erindale (west). The department is an international leader in Computer Science research and education, and is currently undergoing a significant expansion in faculty and research resources.

We consider excellence in research and teaching to be of prime importance and we will seek applicants in all areas of computer science. We are, however, especially interested in the following areas: computer graphics, human computer interaction and software and hardware systems, (including networks, software engineering, operating systems, computer architecture, distributed and real time systems, and programming languages).

Salaries are competitive with our North American peers and will be determined according to the successful applicants' experience and qualifications.

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

Applications should include a curriculum vitae, a list of publications, and the names and addresses of at least three references, and may additionally include a research and teaching statement and other supporting documentation. Please send by email (text, postscript or PDF only, please) to: faculty-search@cs.utoronto.ca or, if that is not possible, by post to:

Faculty Recruiting Committee Chair
Department of Computer Science
University of Toronto
Toronto, Ontario M5S 3G4
Canada

The deadline for applications is January 31, 2001. We will consider applications as they arrive and we encourage early applications.

Canadians and non-Canadians are urged to apply.

The University of Toronto is strongly committed to diversity within its community. The University especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, and others who may contribute to further diversification of ideas.

University of Toronto
Department of Computer Science

The Department of Computer Science at the University of Toronto seeks enthusiastic and innovative teachers for teaching stream positions at the rank of Lecturer. The department is an international leader in Computer Science research and education, and is currently undergoing a significant expansion in faculty and research resources. Candidates should have an advanced degree in Computer Science or related field and an exceptional record of classroom instruction and curricular innovation.

Responsibilities include undergraduate teaching, managing teaching assistants, developing course materials, and curriculum development. In addition, all faculty have some responsibility for student recruitment and departmental administration.

Initial appointments are for terms of one to three years. In the fifth year of service, Lecturers are reviewed for promotion to the rank of Senior Lecturer, which is a continuing appointment.

The successful applicant will join a group of talented Lecturers and Senior Lecturers, who enjoy a collegial and stimulating work environment. We seek candidates who are interested in establishing a long-term teaching career in the Department.

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

Interested candidates are invited to submit a curriculum vitae, statement of career goals and teaching philosophy, evidence of teaching excellence, and the names and email addresses of at least three references. Applications should be sent by email (text, postscript or PDF only, please) to: lecturer-search@cs.toronto.edu or, if that is not possible, by post to

Lecturer Recruiting Committee Chair
Department of Computer Science
University of Toronto
Toronto, Ontario M5S 3G4
Canada

The deadline for applications is January 31, 2001 or until the position is filled. We will consider applications as they arrive and we encourage early applications.

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

University of Vermont
Department of Computer Science

After a successful search for two faculty members in 2000, the Department of Computer Science at the University of Vermont invites applications for two additional tenure-track Assistant Professors, commencing with the 2001-02 academic year. The University of Vermont is the premier research university in the state of Vermont. It is situated in Burlington, a city of 125,000 people on the shores of Lake Champlain between the Green Mountains of Vermont and the Adirondack Mountains of New York. Burlington and the surrounding area provide an environment rich in cultural, family, and sporting activities. The Department of Computer Science offers programs in the Colleges of Arts and Sciences, Engineering and Mathematics, and Graduate Studies, as well as a joint program with the School of Business Administration.

Position 1: Candidates in networking, database systems, programming environments, and/or artificial intelligence are most sought. Exceptional candidates in any area of computer science will be seriously considered.

Position 2: A new concentration in computational biology has been established in the Colleges of Medicine, Agricultural and Life Sciences, Engineering and Mathematics, and Arts and Sciences. Candidates with demonstrated research interests in computational biology or bioinformatics are invited to apply. The startup package includes summer support, seed research grant, graduate student support, and additional teaching relief through a major Department of Energy grant which commenced in July, 2000.

Candidates for either position should have a strong research record, hold a doctorate in Computer Science or a closely related field, and have broad teaching abilities and interests. Current teaching responsibilities typically consist of three computer science courses per year with average enrollments of 25 students. Please have a letter of interest indicating the position sought, a curriculum vitae, a short statement of teaching interests, a short statement of research interests, and arrange for at least three letters of reference to be sent to:

Chair, Faculty Search
Position (1 or 2)
Department of Computer Science
University of Vermont
Burlington, VT 05405

Complete applications received by January 22, 2001 will be fully considered. For more information about the Department and the University please see: http://www.cs.uvm.edu or email to: cssearch@cs.uvm.edu.

The University of Vermont is an Affirmative Action/Equal Opportunity employer and encourages applications from women and members of minority groups.

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

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

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

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

Information about the department can be found on the web at www.cs.washington.edu. Applications received before February 1, 2001 will be given priority consideration. Please send a letter of application, a resume, statement of research and teaching interests, and the names of four references to:

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

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

The University of Waterloo
Departments of Computer Science and Electrical & Computer Engineering

The Departments of Computer Science and Electrical & Computer Engineering seek applications for a senior and a junior Scotiabank Research Chair in Software Engineering. Applicants must have an outstanding research record and a commitment to teaching, and should hold a doctoral degree in Software Engineering, Computer Engineering or Computer Science. A demonstrated record of industrial collaboration would be an asset. Candidates for the senior Chair should be qualified for an academic position at the level of full professor. Candidates for the junior Chair should be qualified for an academic position at the level of either a mature assistant professor or an associate professor. The chairholders will hold joint-appointments in the Departments of Computer Science and Electrical & Computer Engineering, as tenured or tenure-track faculty members.

The Chairs are funded by Scotiabank, and the associated research funds can be matched by provincial and federal funding programs, up to $2,000,000 over five years. It is expected that the chairholders' research programs will focus on problems in developing and maintaining large software systems: software architecture, feature interactions, testing and verification, program understanding, visualization, reverse engineering, software evolution.

The University of Waterloo has one of the largest Software Engineering research groups in the country, involving 11 full-time faculty members from the Departments of Computer Science and Electrical & Computer Engineering. These two departments together have over 100 faculty members, and have a long history of collaborating with each other on undergraduate programs and research projects. In September 2001, the two departments will initiate a jointly sponsored undergraduate degree in Software Engineering. More information can be found at http://www.math.uwaterloo.ca/Faculty/SoftwareEng/.

Applications should include a curriculum vitae and the names and e-mail addresses of three references. The application should be directed to Director

Dr. Joanne Atlee
Software Engineering
University of Waterloo
Waterloo, Ontario, Canada N2L 3G1
se-director@cs.uwaterloo.ca.

To expedite handling of applications, candidates should ask those named as references to direct supporting letters to the same address. The positions are expected to commence during the 2001 calendar year. Applications will be considered as soon as they are complete and as long as positions remain available.

The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities.

These appointments are subject to the availability of funds.

University of Wisconsin-Madison
Computer Sciences Department
Faculty Positions

The Computer Sciences Department at the University of Wisconsin-Madison, consistently ranked among the top ten departments in the nation, has embarked on a multi-year effort to significantly enhance the strengths of the department. As a part of this endeavor, we hired 4 new faculty in 1999-2000, 3 new faculty in 2000-2001, and have multiple faculty positions available beginning August 2001.

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

Further information about the department may be found at: http://www.cs.wisc.edu/.

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

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

Applicants are encouraged to submit their applications as soon as possible, but no later than February 15, 2001. Unless confidentiality is requested in writing, information regarding the applicants must be released on request. Finalists cannot be guaranteed confidentiality.

The University is an Equal Opportunity/Affirmative Action employer and encourages women and minorities to apply.

University of Wisconsin-Milwaukee
Computer Science

The Computer Science Program at the University of Wisconsin-Milwaukee is seeking qualified candidates to fill several tenure track faculty positions. We invite applications from strong candidates at all levels and in all areas of Computer Science, subject to the needs of the Department. All candidates for faculty positions should have a demonstrated promise in research and teaching in Computer Science. Senior candidates should have excellent research records.

The Computer Science Program at UWM is poised for continued development. Our Program has an excellent record in hiring outstanding junior faculty and in helping them develop their careers. As of this Fall, all eligible faculty in the Program have received the NSF Early CAREER Awards. The Program faculty are engaged in research projects that span many areas including Artificial Intelligence, Computational Geometry, Computer Graphics, Cryptography and Data Security, Distributed Systems, and Programming Languages and Software Systems. Many of the projects include collaborative work with researchers from other academic units, institutions and industrial organizations.

Our University, the home of about 24,000 students, is located in a very pleasant residential neighborhood near the shores of Lake Michigan. Our location in a major metropolitan area helps facilitate easy interactions with industry and affords many cultural and recreational activities.

Screening of all candidates will begin November 15, 2000 and continue until the positions are filled. Female and minority candidates are strongly encouraged to apply. Faculty applications must be accompanied by a statement of plans for research and teaching. Please visit our website at http://www.cs.uwm.edu for periodic updates on the status of our recruitment.

Applicants should send a vita along with the names of at least three references to:

Dr. Hossein Hosseini
Faculty Recruitment Coordinator for Computer Science
Department of Electrical Engineering and Computer Science
University of Wisconsin-Milwaukee
PO Box 784
Milwaukee WI 53201
E-mail: hosseini@uwm.edu, Phone: 414/229-5184.

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

Vanderbilt University
Department of Electrical Engineering and Computer Science

We invite applications for a tenure-track faculty position in the area of Computer Science and Engineering in the EECS Department. We are interested in both entry level and senior candidates. Our primary target areas are in computer systems, particularly embedded systems and hybrid systems, networks and databases. In conjunction with the planned growth in neuroscience, and the recent establishment of the Interdisciplinary Center for Integrated and Cognitive Neuroscience, we also encourage applications in the area of computational neuroscience. Applicants should have a doctorate or equivalent in computer science, computer engineering, or a closely related discipline. Candidates are expected to develop a strong research program and maintain excellence in teaching.

The EECS department currently has 31 faculty members with a broad range of research interests. The department enrolls approximately 400 undergraduate students in three accredited programs: Computer Engineering, Computer Science, and Electrical Engineering, and about 200 graduate students in electrical engineering, computer science, and the interdisciplinary program in computer engineering. In addition, three research centers associated with the department: the Institute for Software Integrated Systems (ISIS), Center for Asynchronous Learning Networks (ALN), and the Center for Intelligent Systems (CIS) encourage and provide ample opportunities for innovative interdisciplinary research. Vanderbilt University is a founding institute for the Internet2 project. For more information about the department and the school, please visit our website at: http://www.vuse.vanderbilt.edu.

Applicants should send a resume, a complete publication list, copies of three representative publications, and the names, addresses (postal and e-mail) and telephone numbers of five references. In addition, each applicant is required to submit a one page professional statement describing his or her goals in research and teaching. The application package should be mailed to

Faculty Search Committee
Department of Electrical Engineering and Computer Science
Box 1679 Sta B
Vanderbilt University
Nashville, TN, 37235-1679
Electronic submissions and inquiries may be made to: eecs-search@vuse.vanderbilt.edu.

scientists, cognitive scientists, physicians, and social scientists of various stripes. (Roughly a third of the IHMC scientific staff are computer scientists, another third social scientists, with a final third comprised of everything else, including philosophers, engineers, and medical doctors.) This shift in perspective places human/machine interaction issues at the center of focus. The "system" in question isn't "the computer," but instead includes cognitive and social systems, computational tools, and the physical facilities and environment.

Thus, human-centered computing provides a new research outlook, with new research agendas and goals. Building cognitive prostheses is fundamentally different from AI's traditional Turing Test ambitions—it doesn't set out to *imitate* human abilities, but to *extend* them. It gives a methodological framework that provides clear, objective criteria of success and measurable progress (both decisively absent from the Turing Test methodology.) And yet (unlike, say, the ambition of developing artificial insects) it keeps human thought at the center of our science.

As has often been noted, the traditional order of knowledge is changing, and currently much of the most exciting research is taking place outside the traditional academic framework—in fact, in the boundary spaces between disciplines. However, universities are intellectually conservative institutions and adapt to the changing scientific landscape very gradually.

The IHMC acknowledges the changing structure and practice of scientific inquiry by providing an umbrella under which researchers from a broad variety of academic disciplines may gainfully collaborate. In fact, it is a particular strength of IHMC that most of its research projects involve interdisciplinary teamwork and collaboration across traditional academic boundaries. Consequently, IHMC's organizational structure is quite flat, with the scientific and technical staff organized into interdisciplinary project teams and most researchers involved simultaneously in more than one project.

IHMC researchers receive substantial funding from a wide range of federal, state, and private sources. In addition to traditional funding relationships with sponsoring organizations, IHMC works to nurture deeper collaborations with selected research partners. As part of these collaborations, IHMC personnel are often posted to government laboratories and, conversely, government and private-sector scientists are often hosted at IHMC for long-duration visits.

In summary then, IHMC is committed to doing research that makes a difference…that *makes* a difference.

Last year IHMC moved into a new 30,000-sq. ft. facility in historic downtown Pensacola. In addition, IHMC is in the process of opening a new office at the NASA Ames Research Center in the heart of Silicon Valley. As IHMC is experiencing tremendous growth in staffing

New facility of the Institute for the Interdisciplinary Study of Human & Machine Cognition in Pensacola, Florida.

and research programs, it is likely to be hiring research scientists, postdoctoral fellows, and software developers in the coming year.

Dr. Ford is Director of the Institute for Human and Machine Cognition. For more information, visit the IHMC web site at: http://www.coginst.uwf.edu/

This article is part of an ongoing series describing the activities of industry labs and centers that are members of CRA. ∎

Research at the Institute for the Interdisciplinary Study of Human & Machine Cognition

IHMC scientists and staff collaborate extensively with industry and government labs to develop science and technology that can be enabling with respect to society's broader goals. Current active research areas at IHMC include:

- use of haptic displays to mitigate spatial disorientation
- cognitive work/task analysis
- non-alphanumeric pilot displays
- philosophical foundations of AI and computer science
- computer-mediated communication and collaboration
- computers in education
- human perception and psychophysical responses
- performance support systems
- next-generation browsers
- human/machine interfaces
- biologically-motivated computing
- knowledge representation and automatic reasoning
- software agents
- cognitive and applied psychophysiology
- spatial and temporal reasoning
- diagnostic systems
- the nature and modeling of expertise
- EEG-based research
- situated cognition
- knowledge discovery and data mining ∎

six academic departments in the College of Engineering and Architecture at Washington State University. The School presently has forty full-time faculty, and awards B.S., B.A., M.S. and Ph.D. degrees in computer science, B.S., M.S., and Ph.D. degrees in electrical engineering, and the B.S. degree in computer engineering. Major areas of research emphasis include software engineering, embedded systems, algorithmics, graphics, distributed systems, knowledge discovery and databases, and computer networks. The School has six endowed chairs and distinguished professorships in computer science, computer engineering, and electrical engineering. Two NSF IUCRC centers are in EECS: the Center for Design of Analog-Digital Integrated Circuits and the Power Systems Engineering Research Center. In addition, EECS Faculty have recently founded the Radiowave Communication Consortium.

Washington State University was established in 1890 as a land grant college located in the beautiful rolling hills of Eastern Washington. It has met the qualifications for Research I University status under the Carnegie criteria and is one of the largest residential universities west of the Mississippi. It is consistently ranked among the nation's best values in education. It has an enrollment of over 17,000 at the main campus in Pullman. Pullman's small town atmosphere is enriched by the academic and cultural offerings of WSU and the University of Idaho, another land-grant university, just eight miles away. The Pullman region has outstanding K-12 schools, and numerous recreational activities are available year-round.

Applications (curriculum vita, email address, and the names and contact information of at least five references) or nominations should be sent to
    EECS Huie-Rogers Chair Search
    Committee
    School of Electrical Engineering and
    Computer Science
    Washington State University
    Pullman, WA 99164-2752.
Highest consideration will be given to applications received by January 30, 2001. Applications will be reviewed until the position is filled. More information about the School may be found at www.eecs.wsu.edu.

Washington State University is an Equal Opportunity/Affirmative Action educator and employer. Protected group members are encouraged to apply. All new employees must show employment eligibility verification as required by the U.S. Immigration and Naturalization Service.

Western Connecticut State University
Computer Science
Tenure Track Faculty Openings - Fall 2001
[posted 10/25/00]
WCSU is seeking a candidate in Computer Science to teach course in networks as well as other CS courses such as C++ programming, Operating Systems, etc. Other duties include: maintaining and developing the CS curriculum, academic advisement, university and department committee work and continued research. Some night teaching is expected of all faculty members in the department. Appointed academic rank dependent on candidate's background and experience. Ph.D. in CS is preferred; but candidates with a doctorate in a related field and a Master's degree CS will be considered. Preference will be given to candidates who can demonstrate strong teaching ability.

Send a cover letter, a current vita, undergraduate and graduate transcripts, three letters of recommendation (with telephone numbers) along with a statement of teaching philosophy, evidence of research productivity to:
    CS Search Committee
    Department of Mathematics & Computer
    Science
    Western Connecticut State University
    181 White St., Danbury, CT 06810
E-mail submissions (in either Microsoft or plain ASCII format) may be sent to:
cssearch@rosetta.wcsu.ctstateu.edu.

Application review will begin on January 22, 2001, and be continued until the position has been filled. All application materials must be received by the January 22 deadline for the application to receive consideration in the first round of screening.

WCSU is an AA/EEO Educator/Employer.

Yale University
Computer Science Department
The Yale Computer Science Department is looking for highly qualified candidates for junior faculty positions beginning in the 2001-2002 academic year. We seek to expand and broaden both the applied and theoretical sides of our research and teaching program, building on existing strengths in algorithms and complexity theory, artificial intelligence, computational science and applied mathematics, computer engineering, distributed computing, machine learning, programming languages

and compilers, security and cryptology, and vision and robotics. Strong candidates in all areas will be considered; high-priority areas include artificial intelligence, vision and robotics, computational biology, databases, electronic commerce and market-based computation, graphics and multimedia, and networking.

Applicants are expected to excel in both research and teaching. They will find many opportunities for research collaborations both inside and outside the Computer Science department. Interdisciplinary work is encouraged, with Yale's world-class faculty in such computationally active fields as biology, chemistry, economics, engineering, geophysics, management, mathematics, medicine, psychology, physics, and statistics. Yale faculty regularly have the opportunity to teach excellent students, both graduate and undergraduate, in relatively small classes. Candidates should hold a Ph.D. in computer science or related discipline. Applications submitted by February 1, 2001 will be given highest priority.

Our home page may be found at: www.cs.yale.edu. Send vitae and have at least three letters of reference sent to
    Faculty Recruiting Committee
    Department of Computer Science
    Yale University
    P.O. Box 208285
    New Haven, CT 06520-8285.
Qualified women and minority candidates are encouraged to apply. Yale is an affirmative action/equal opportunity employer.

Arizona State University
Computer Science and Engineering Department
Chair of the Department of Computer Science & Engineering
Nominations and applications for the position of Chair of the Department of Computer Science and Engineering in the College of Engineering and Applied Sciences are invited. The expected starting date is August 16, 2001.

The department has a faculty of thirty tenured and tenured-track faculty members and four full-time lecturers. The department has a commitment for a significant number of faculty lines and some lecturer lines. The department offers two B.S. degree programs (Computer Science and Computer Systems Engineering), two master degree programs (Master of Science in Computer Science and Master of Computer Science) and Ph.D. program. The current enrollment is 288 graduate students (77 Ph.D. / 211 master) and 1,500 undergraduate students.

Research strengths are in the areas of artificial intelligence, database and multimedia systems, computer-aided geometric design and graphics, computer networks and distributed systems, embedded systems, and software engineering. Annual research expenditures are approximately $3M.

ASU is a major research university widely recognized as a rapidly emerging educational institution in the US. The main campus is located in the city of Tempe, in the metropolitan Phoenix area. The Department of Computer Science and Engineering provides a stimulating and fast-growing environment for research and teaching, with ample opportunities for partnerships with high-technology industry and emphasis on quality, leading-edge graduate and undergraduate education. For more information about the department, refer to the website:
    http://cse.asu.edu
The chair of the department must provide leadership in continuously improving the educational and research activities of the department, promote academic excellence and industry partnership as well as diversity and outreach programs. It is expected that the chair will collaborate with other College units, the Dean, and other ASU administrators on computer science and information technology initiatives across campus.

Candidates must be qualified to be appointed as a tenured faculty member at the rank of full professor in the department. Candidates must have strong research and teaching record in computer science and engineering. Evidence of scientific and organizational leadership, educational innovation, and administrative effectiveness is desired. Applications received before January 31, 2001 will receive full consideration or will be reviewed bi-weekly after this date until the position is filled. Applicants must submit their curriculum vitae, e-mail addresses, and the names, mailing and e-mail addresses, fax and telephone numbers of four references to:
    Professor Frank Hoppensteadt Chair
    CSE Department Chair Search Committee
    Systems Science and Engineering Research
    Center Goldwater Center Room 606
    Arizona State University
    P. O. Box 877606
    Arizona State University
    Tempe, AZ 85287-7606
ASU is an equal opportunity, affirmative action employer.