COMPUTING RESEARCH NEWS

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Spending Bills Delayed, but NSF Numbers May Improve

Computing Researchers See Increase in Completed Defense Bill

By Peter Harsha

By the start of the 2005 fiscal year (on October 1, 2004) Congress had completed work on just one of thirteen annual appropriations bills necessary to fund the operations of the federal government. It appeared increasingly likely that work on the remaining bills would not be completed until after the November 2nd federal election—and possibly not until the new Congress is seated in January 2005.

As this issue goes to press in early October, Congress has passed a "continuing resolution" providing stopgap funding for federal agencies left without a FY 2005 appropriation through November 20, 2004—an indication that the Congressional leadership does not believe it is likely that agreements can be reached on the remaining bills until Congress returns to Washington in a "lame duck" session after the election.

As a result, agencies like the National Science Foundation,

Department of Energy, and NASA, whose appropriations bills have not yet passed, will operate at FY 2004 spending levels, with no new program starts or new spending until an agreement is reached.

This result was foreshadowed back in April and May of this year when the House and Senate were unable to agree on a joint budget resolution that would have set caps on FY 2005 appropriations. Without the caps in place, appropriations bills that come to the floors of the respective chambers are open to amendments that could significantly increase funding levels (or cut others) for programs within the bills. This, in turn, would put Members of Congress in the politically awkward position of having to vote up or down on spending increases on any number of individual programs—a prospect neither the Republican nor Democratic leadership relished during an election year.

It is likely that the unfinished appropriations bills will be bundled into a single "omnibus" appropriations bill and passed en masse, either during the lame duck session or perhaps as late as January when the new Congress convenes.

Despite the delay, some progress has occurred on a number of appropriations bills, including a few of particular relevance to computing researchers.

Defense (P.L. 108-287)

The FY 2005 Defense Appropriation has the distinction of being the only appropriations bill that has been signed into law (P.L. 108-287). Researchers fared reasonably well under the bill, with overall research and development at the Department of Defense slated to increase 10.3 percent or \$1.2 billion, to \$13.3 billion overall in FY 2005.

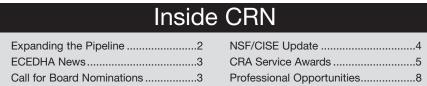
Aggregate basic research funding at the Department of Defense (DOD), so-called "6.1" research in DOD parlance, will rise to \$1.5 billion in FY 2005, an increase of 7.8 percent or \$110 million over the

FY 2004 appropriated level. DOD applied research ("6.2") will increase 11.9 percent to \$4.9 billion, and advanced technology development ("6.3") will rise 9.8 percent to \$6.2 billion in FY 2005.

Of particular importance to computing researchers, the Defensewide "Computing Systems and Communications Technology" program line, which includes much of the funding for IT R&D at DOD and DARPA, has been split into two program lines. The new "Information and Communications Technology" line will receive \$192.7 million in funding in FY 2005, and the new "Cognitive Computing Systems" account will receive \$151.2 million in FY 2005. Their combined \$344 million represents about \$1.2 million more than the President requested for FY 2005 and \$5.5 million more than FY 2004.

The "High Performance Computing Modernization Program" also received an increase of \$32.7 million

Spending Bills Delayed Continued on Page 6



CISE 1994-2004: A Decade in Review

By Peter A. Freeman and Lee Harle

Computing faculty who have recently submitted proposals to CISE have come to understand the increasing demands on CISE's budget. While there has been considerable growth in the budget in recent years, this growth has not kept pace with the escalating number of promising research and education opportunities and challenges in our field. Consequently, proposal success rates in CISE are dropping to new lows. Like you, we are concerned about this. This article seeks to shed some light on CISE budget and funding trends, and a companion article on page 4, "CISE Update: Adjusting to the Increase in Proposals," describes CISE's current plan to adapt in this changing environment.

The CISE budget has grown significantly in the last decade, but most markedly over the past five years as can be seen in Figure 1. A significant change in growth rate can be observed in the 1999-2000 period. Why? In February 1999, the

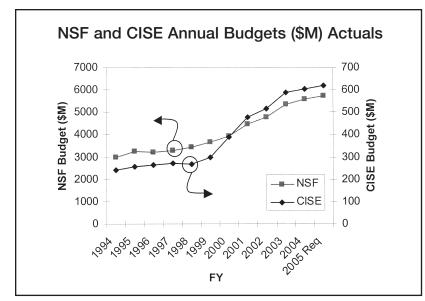


Figure 1: Comparison of NSF and CISE Annual Budget trends for 1994-2004.

President's Information Technology Advisory Committee (PITAC) published a report that asserted that "Federal support for research in information technology is seriously inadequate." In response to PITAC recommendations, NSF deemed Information Technology Research (ITR) a budget priority area and, indeed, Networking and Information Technology Research and Development (NITRD) became CISE 1994-2004 Continued on Page 7

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Computing Research News November 2004

Expanding the Pipeline

Coalition to Diversify Computing (CDC)

By Patricia J. Teller

Computing Research Association

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The Coalition to Diversify Computing (CDC), founded in 1996, is an organization whose primary goal is the enhancement and diversification of the available pool of highly trained scientists and engineers in computer-related fields. It is a joint organization of the Association of Computing Machinery (ACM), Computing Research Association (CRA), and IEEE-Computer Society (IEEE-CS). The CDC membership includes representatives from academia, industry, and federal labs that are involved in a variety of computerrelated disciplines. Each member is engaged in a project aimed at realizing CDC's goal.

Given the importance of diversity in the workplace, the need for growth of the technical workforce, and national demographic trends, CDC partnerships and projects target an increase in the number of students from underrepresented ethnic groups transitioning into computing-related careers. To reach this objective, it is imperative that students perform well in their undergraduate studies and are strongly encouraged to continue their education into graduate school. Similarly, it is essential that graduate students successfully attain M.S. and Ph.D. degrees and take on leadership positions within both societal and technical communities.

Some strategies employed by CDC projects that have been effective in achieving these objectives are: 1) accessibility to role models, 2) enhancement of student confidence, 3) availability of financial and emotional support, and 4) awareness of education and career possibilities. For example, with respect to role models, according to CRA's Taulbee Survey 2002-03, only two percent of the doctorates in computer science and computer engineering went to Hispanics and only one percent went to African-Americans; none were awarded to Native Americans. These statistics translate to very few faculty members from underrepresented ethnic groups being visible to students.

Two CDC projects that specifically address the accessibility of role models from underrepresented ethnic groups are the Distinguished Lecturer Series and the Traveling Academic Forum. The former organizes and supports visits of minority researchers from academia and industry to majority- and minority-serving institutions to give lectures on the opportunities, technologies, and relationships needed to be successful in computer-related disciplines. The latter project organizes and presents workshops that provide information (e.g., hiring, promotion, and tenure processes) that permits better understanding and navigation of the

academic ladder. The workshops offer encouragement to undergraduate students to pursue graduate studies and early exposure to academic careers. The long-term goal of the Traveling Academic Forum is to create a community of faculty to provide support and guidance for each other. Creating community, whether among undergraduate students, graduate students, or faculty, provides a great impetus for success. For example, consider the fact that many faculty members who have succeeded in their pursuit of tenure and senior faculty status have done so only through information exchanges that led to greater awareness, communication, and interactions. Similarly, many successful graduate students have achieved their goals through directed interactions with peers and faculty.

Another CDC project, Sending Students/Mentors to Technical Conferences, encourages undergraduate and graduate students to gain expertise in areas of computing, while providing them with opportunities to network with researchers in these fields. To this end, it provides financial support to students from underrepresented ethnic groups in science, technology, engineering, and mathematics, with a particular focus on the area of computing, to attend and participate in leading technical conferences. It is always easier to attend a conference with someone else; thus, a student is not eligible for support unless a faculty member commits to serving as the student's mentor at the conference. Additionally, students are encouraged to apply in pairs or triplets. Student and faculty mentor pairs who would otherwise be unable to attend such conferences (i.e., who lack individual and institutional means for attending the conferences) are the primary targets of this project.

In supporting the students, the project endeavors to provide access to role models, enhance their confidence, and increase their awareness of educational and career possibilities. Through the faculty mentors, whether supported directly or indirectly (through support of their students), the project seeks to increase the number of faculty who work towards CDC's goals. The project has had some notable successes. For example, after attending the 2003 SIAM Conference on Computational Science and Engineering with his student Omar Santiago, Damian Rouson, Assistant Professor at the City University of New York, let us know that "... Omar decided to join my research group and pursue his Ph.D. He applied, was accepted, and is now a Ph.D. student!" Heather Ann Wake, University of South Carolina,

supported by the project to present a paper at FCCM '03, said of her experience "... I must have done fine because people came up to me afterward to talk about my project and ask for my personal opinions. Overall, this conference was an irreplaceable experience that will help me in the future." Heather received an NSF graduate fellowship, and was the female runner-up in CRA's 2004 Outstanding Undergraduate Award competition. Other current CDC projects

- CREU (Collaborative Research Experiences for Undergraduates)—a joint program between CDC and CRA-W that makes research experiences available to teams of undergraduate students during the academic year at their home institutions.
- CDC Database of minority researchers and graduate students.
- Distributed Rap Sessions, which provide support for minority undergraduate and graduate students by creating a virtual community of peers with common backgrounds, both ethnically and intellectually.
- Traveling Graduate School Forum.

Bringing together the objectives of all of CDC's projects is the biennial Richard Tapia Celebration of Diversity in Computing Conference, which is organized by CDC. This conference, which began in 2001, celebrates the technical contributions and career interests of diverse people in computing fields. The next conference is scheduled for October 19-22, 2005 at the Hyatt Regency in Albuquerque, NM.

If you would like to help CDC attain its goals, 1) be a mentor—you don't need to be a member of an underrepresented ethnic group or an academician to do this, 2) build community among undergraduate and graduate students of underrepresented ethnic groups, 3) provide these students access to role models, even on a limited basis, or 4) submit a CDC project for consideration. Get involved! For more information about CDC, its projects, and the Richard Tapia Celebration of Diversity in Computing Conference, go to http://www.cdc-computing.org.

Patricia J. Teller, Chair of the Coalition to Diversify Computing, is an Associate Professor in the Department of Computer Science at The University of Texas at El Paso.

November 2004 Computing Research News

ECEDHA News and Activities

By Kenneth Jenkins, Stephen Goodnick, and Kenneth Connor

We would like to begin this article by providing some history of the organization currently known as ECEDHA.

In 1963, at the ASEE Annual meeting, the department heads of Electrical Engineering Departments in the United States began to organize, and the organization that grew out of these efforts soon became known as the Electrical Engineering Department Heads Association (EEDHA). EEDHA's purpose was to serve as an advisory group on accreditation and to the IEEE Professional Group on Education. It also provided an independent forum for members to discuss mutual problems, and facilitated the dissemination of educational methods and materials. EEDHA's early meetings were held at the annual ASEE and FIE meetings.

In 1981, EEDHA became independent of ASEE and IEEE Aided by a grant from NSF, EEDHA reorganized on a national level in 1984 and held its first National EEDHA (NEEDHA) meeting in Hilton Head, SC. In 1986, the International Engineering Consortium (IEC) took over the "management" of NEEDHA.

In 2001, NEEDHA changed its name to recognize the emergence of computer engineering curricula among its member institutions, becoming the Electrical and Computer Engineering Department Heads Association (ECEDHA). Its mission is formally stated in the organization's constitution (see Box 1).

ECEDHA expanded further in 2003 when the Canadian Heads of **Electrical and Computer Engineering** (CHECE) were invited as full members of ECEDHA after passage of a constitutional amendment. In December 2003, the ECEDHA membership totaled 286, with members from the United States, Canada, Puerto Rico, Mexico, and

South America. The member institutions supported 339 total accredited programs, representing 85 percent of the total ECE programs in these countries.

ECEDHA maintains a Web site (www.ecedha.org), supports a job posting list server (ecedhajobs@iec.org), and publishes an Annual Departmental Survey and an Annual ECEDHA Newsletter. At its annual national meetings, ECEDHA sponsors an ABET Workshop and a New Chairs Workshop. ECEDHA also sponsors an annual awards program, with awards presented in the categories of Service, Innovative Programs, and Accreditation Advocacy.

ECEDHA's key activities for 2003 included organizing a Special Issue of the IEEE Transactions on Education: Vision for ECE Education in 2013 and Beyond (Vol. 45, No. 4, Nov. 2003); organizing an NSF/ECEDHA/IEC Nano-Engineering Education Workshop in January, 2003; and co-organizing with NSF an NSF/ECEDHA Agents of Change Workshop: Achieving Diversity in Electrical and Computer Engineering Research and Education in June, 2003. Reports from these workshops are available on the ECEDHA Web site.

2004 Annual Meeting

The 2004 ECEDHA Annual Meeting was held in Orlando, Florida, March 16-22, 2004. The meeting was well attended with more than 180 chairs and heads present. Sessions were devoted to varied topics of interest to heads of ECE departments, including future research directions, diversity in ECE programs, ABET and undergraduate education issues, public policy, and engineering education research. Dr. William Wulf, President of the National Academy of Engineering, presented the keynote talk entitled

Box 1. ECEDHA Mission Statement

The purposes of ECEDHA are:

- To advance the fields of electrical and computer engineering and contribute to the development and dissemination of engineering knowledge in the public interest and for the public good;
- To provide a forum for electrical and computer engineering department heads (hereinafter referred to as heads of departments) in the United States to exchange information and ideas for improving the quality and effectiveness of electrical and computer engineering education; and
- To allow the heads of departments to improve electrical and computer engineering education through effective communication with:
 - the electrical and computer engineering profession,
 - ii. the electrical and computer engineering industry,
 - iii. other electrical and computer engineering professional organizations,
 - iv. the institutions with accredited electrical and computer engineering programs,
 - appropriate government agencies.

"Thoughts on the Globalization of Engineering and Its Implications for Engineering Education." This issue is currently at the forefront of public discussion (particularly during this election year), and Dr. Wulf's insights on these issues stimulated a great deal of discussion throughout the 2004 annual meeting. Electrical and Computer Engineering are fields that are heavily impacted by the global economy in areas such as software, electronics manufacturing, and electronic design.

Globalization and the **Engineering Workforce**

As a result of the intense interest in public policy and engineering outsourcing abroad that was stimulated during the 2004 annual meeting, the ECEDHA Board of Directors has initiated an effort to organize a workshop on this topic. Plans are currently being developed to hold the workshop in the Washington, D. C. area in spring 2005. It is hoped that this workshop will stimulate further debate on

outsourcing and globalization, in light of the lack of hard data concerning the impact of this evolution on engineering jobs in the United States. It seems that much recent discussion has been shaped by anecdotal evidence as opposed to aggregate statistics. It was somewhat surprising to learn of May 2004 labor statistics that claimed to show only a minor portion (less than 5%) of job losses in the workforce as being identifiable with outsourcing. One wonders if such statistics truly account for the large growth of offshore facilities, and associated obsolescence of older US-based facilities, as opposed to simply measuring direct loss of individual jobs due to outsourcing.

It is becoming increasingly apparent that there is a growing need to educate engineering students for competitive careers in a global economy. Educators will face the challenge of recruiting students into ECE programs in the face of the negative publicity of outsourcing,

> **ECEDHA News and Activities** Continued on Page 5

Nominees Sought for CRA Board

The Computing Research Association seeks your help in suggesting nominations for its Board of Directors. The deadline for receipt of nominations is January 14, 2005.

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. From the nominations received, the elections committee selects the candidates whose names will appear on the ballot.

In past elections there has often been a shortage of industry nominations. For that reason, the committee particularly encourages the nomination of candidates from the industrial sector.

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.
- importance of computing and computing research in our society. In addition to actively participating in board projects, board members are asked to attend two board meetings per year and pay their travel

costs to the meetings. Further information on CRA and its activities is available on the Web at http://www.cra.org or by e-mailing elections@cra.org.

Improving public and policymaker understanding of the

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. Those who are nominated are required to write a brief statement (not to exceed 100 words) supporting their nominations.

To receive a nomination form, send an e-mail request to elections@cra.org. Nominations must reach CRA by January 14, 2005.

CISE Update: Adjusting to the Increase in Proposals

By Michael Pazzani, Kamal Abdali, Greg Andrews, and Sangtae Kim

The number of proposals submitted to the CISE directorate at NSF has increased substantially over the past five years. A companion article, "CISE 1994-2004: A Decade in Review," discusses the statistics in more detail. Here we discuss how CISE is adapting to the increase in proposals while pursuing its mission.

The Directorate for Computer and Information Science and Engineering has three goals:

- To enable the United States to uphold a position of world leadership in computing, communications, and information science and engineering.
- 2. To promote understanding of the principles and uses of advanced computing, communications, and information systems in service to society.
- 3. To contribute to universal, transparent, and affordable participation in an information-based society.

To achieve its goals, CISE supports research in all areas of computer and information science and engineering, helps to develop and maintain cutting-edge national computing and information infrastructure for research and education, and contributes to the education and training of the next generation of computer scientists.

A few general principles guide our policy decisions:

- Very low proposal acceptance rates are harmful to the computing research and education community and should be avoided. We realize that the community as a whole puts a great deal of effort into writing proposals, and we are grateful to those who volunteer to serve on review panels.
- CISE will continue to fund a broad and diverse group of principal investigators to fulfill its research and educational mission.
- CISE strives to fund the most innovative projects with the potential for the greatest impact, and to seek peer input on both the intellectual merit and broader impacts of projects proposed.
- Collaborative, multidisciplinary research is encouraged. However, CISEfunded research should lead to advances in computer and information science and engineering.
- CISE will continue to emphasize certain areas of

critical importance, such as computer and network security, but will also continue to ensure that funding is available for a broad range of core computer science research. This will ensure that we avoid creating funding gaps that are harmful to the long-term success of computer science.

There are several reasons for the increase in the number of proposals submitted to CISE. First, there has been an increase in computer science faculty nationally. Second, some other funding agencies and some private companies have reduced support for computer science research at universities. Third, the field of computer science has expanded to take on a broader mission (e.g., by including new areas such as bioinformatics).

We will illustrate how CISE is adjusting to the increase in proposals in the Information and Intelligent Systems (IIS) division. IIS received 1,220 proposals in FY2002, 2,029 in FY2003, and 2,636 in FY2004. In FY2003, NSF received a substantial budget increase and IIS funded more awards than in any prior year. However, the budget increase did not keep up with the number of proposals. As a consequence, IIS declined more proposals and a higher percentage of proposals in FY2003 than in prior years.

The growth in proposals in 2004 was not accompanied by a substantial budget increase. Without some adjustments to our plans, acceptance rates in 2004 would be below 10 percent in many competitions. Consequently, only a few IIS solicitations will have their usual winter deadlines; the deadlines for the other solicitations will be delayed from the winter to the spring of 2005.

Specifically, Collaborative Research in Computational Neuroscience, Universal Access, and Science and Engineering Information Integration and Informatics (SEIII) will continue with their December 2004 deadlines as planned. All other IIS solicitations will have their deadlines delayed until mid-April 2005. FY2005 funds will be used to fund some additional proposals that were submitted in FY2004 to the competitions with unacceptably low acceptance rates, as well as 2005 CAREER awards and awards in the solicitations with December deadlines. Proposals submitted in April 2005 will be funded with FY2006 funds. We anticipate that the deadlines for all IIS programs will be the same in 2006 as in 2005 (e.g., proposals submitted in April 2006 will be funded in October 2006 with FY2007 funds).

One advantage of this adaptation is that some high-quality proposals submitted to IIS in FY2004 that would not otherwise have been funded will indeed be funded. If these proposals were not funded, it is likely that updated versions of them would be submitted again, and we would place an additional burden on the CISE community by asking them to review them again.

Another advantage of this adaptation is that funds provided to NSF will be available to the IIS research community earlier in the fiscal year. While in most years the community receives the majority of NSF funding in the last quarter of the fiscal year, in 2005 most funds will be distributed in the first quarter of the fiscal year (allowing students to be hired earlier, for example).

Of course, the disadvantage of this adaptation is that PIs who were intending to write proposals for the winter deadline in hopes of receiving funding in the late summer will not be able to receive funding until the early fall. The effects of this delay can be mitigated by requesting nocost extensions or supplements to existing grants, by applying to grant solicitations with winter deadlines (such as SEIII), and by NSF notifying PIs of award decisions as early as possible so PIs may elect to charge some costs to grants up to 90 days before the grant is received.

CISE is exploring similar strategies in the Computing and Communication Foundations division. The Theoretical Foundations cluster and the Emerging Models and Technologies for Computing cluster will have proposal deadlines in January and February 2005, respectively, and awards will be made during the summer of 2005. The deadline for the Computing Processes and Artifacts cluster will be delayed until May 2005, with awards made in the late fall of that year. The other CISE divisions, CNS and SCI, will have the same or earlier deadlines for their programs in 2005.

Two other adaptations are also worth noting. First, CISE will limit the number of proposals that one may submit to some competitions, and will enforce regulations that prohibit sending virtually identical proposals simultaneously to more than one competition. The goal here is to reduce the number of proposals, while sending the message that it is better to invest one's time in one high-quality, innovative proposal than to spread one's efforts over many proposals of perhaps lesser quality.

Second, CISE is coordinating with a variety of agencies, including the Department of Homeland Security, Defense Advanced Research Projects Agency, Central Intelligence Agency, Library of Congress, and National Institutes of Health to fund proposals of mutual interest. Additional funds provided by these agencies help NSF and these agencies achieve the common goal of supporting innovative research.

Lastly, computing faculty are encouraged to consider funding opportunities not only in CISE, but also in NSF's priority areas (i.e., Nanoscale Science and Engineering, Biocomplexity in the Environment, Mathematical Sciences, and Human and Social Dynamics), centers (e.g., Science and Technology Centers, Science of Learning Centers, and Engineering Research Centers), cross-directorate programs (e.g., Major Research Instrumentation and Integrative Graduate Education and Research Traineeship), and other NSF programs where information technology advances might play an enabling role.

While CISE wishes that it could return to the days of 35 percent acceptance rates, by creatively adapting to the changing environment according to the principles enumerated in this article, we believe that CISE can fulfill its mission by investing in the people, tools, and ideas that enable the United States to uphold a position of world leadership in computing, communications, and information science and engineering.

The authors are Division Directors at NSF in the Directorate for Computer and Information Science and Engineering (CISE): Michael Pazzani, Information & Intelligent Systems (IIS); Kamal Abdali, Computing & Communication Foundations (CCF); Greg Andrews, Computer & Network Services (CNS); and Sangtae Kim, Software and Tools for High-End Computing (SCI).

CRA Welcomes New Members

Academic Departments

Toyota Technological Institute at Chicago

University of Arkansas (CS)

University of Massachusetts, Boston (CS)

University of Southern California (EES)

Industry Labs

NTT DoCoMo USA Labs

November 2004 Computing Research News

ECEDHA News and Activities from Page 3

and the perceived undercutting of the value of an engineering degree in the United States due to global competition. Another challenge is the retraining of engineering professionals in fields that have suffered from excessive outsourcing. Addressing this challenge requires a new emphasis on continuing education in providing opportunities for engineers at all career levels to refresh and change the direction of their evolving careers.

Preview of the 2005 Annual Meeting

The 2005 annual ECEDHA meeting will be held in New Orleans, March 18–22, 2005. The primary technical focus of the 2005 annual meeting will be on the future development of "Biotechnology and the Electrical/Computer Engineer." The 2005 technical program will include panel discussions and specially organized sessions to address what needs to be done to prepare Electrical and Computer Engineering graduates for careers in the biosciences and bioengineering fields. Public policy, globalization, and the offshoring of engineering jobs will be addressed as well. Additional topics that will be highlighted at the next annual meeting include cyber security, collaborations between engineering and fine arts, the role of educational research, and best practices in the recruitment and retention of minorities and women in the Electrical and Computer Engineering profession.

New Relationships between ECEDHA and Canadian ECE Departments

During the past year, a constitutional amendment was approved by a vote of the ECEDHA membership that extends full membership privileges to accredited EE/ECE/EECS departments at Canadian institutions. Prior to the passage of this amendment, ECEDHA membership was open to Canadian departments, but when they joined ECEDHA they were granted Affiliate Membership status even though they paid the same membership fees as US institutions. The Affiliate Membership status limited the ability of the Canadian departments to vote in ECEDHA elections and to fully participate in certain other ECEDHA activities. Under the new constitutional amendment, Canadian departments are granted full membership status upon payment of normal annual membership fees. Furthermore, unaccredited Canadian institutions can also join ECEDHA as Affiliate Members under the same rules and regulations extended to unaccredited US institutions.

Recent Interactions between ECEDHA and CRA on Public Policy Matters

At the recent CRA meeting at Snowbird, ECEDHA attendees (including two ECEDHA board members, Bob Janowiak and Ken Connor) took the opportunity to explore how ECEDHA and CRA can work together more closely in the area of public policy. As a result, CRA has invited Dr. Wayne Bennett, who currently serves on the ECEDHA Board of Directors, to become a member of the CRA Government Affairs Committee as an ECEDHA representative. CRA has also expressed interest in developing a stronger relationship with IEC in the interest of strengthening their relationships with the computer/IT industry.

Kenneth Jenkins (jenkins@engr.psu.edu) is ECEDHA's President; Stephen Goodnick (stephen.goodnick@asu.edu), ECEDHA's Past-President; and Kenneth Connor (connor@rpi.edu), ECEDHA's Vice President. ■

REMINDER TO CS&CE CHAIRS

(Ph.D-Granting Institutions)

Taulbee Surveys Were Due November 1

Please make certain your survey has been submitted to: http://www.cra.org/taulbee

Questions?

Contact: survey@cra.org

Students Receive CRA Awards at Hopper Conference

Eight students were in attendance at the Grace Hopper Celebration of Women in Computing banquet in Chicago on October 7 to receive their 2004 CRA Outstanding Undergraduate Awards.

The female winner award was presented to Anna Cavender (University of Oregon); Heather Wake (University of South Carolina) received the female Runner-Up award; and Honorable Mentions went to Erika Shehan (Purdue); Arati Kurani and Dong-Hui Xu (both from DePaul); Katrina Ligett (Brown); Jane Tougas (Dalhousie); and Kristin Vadas (Georgia Tech).

Jan Cuny, CRA's Vice Chair, and Andy Bernat, CRA's Executive Director presented the awards.

Other winners were presented with their awards in July at the AAAI annual meeting in San Jose (see CRN September 2004).



(L to R): Kristin Vadas, Erika Shehan, Arati Kurani, Heather Wake, Jan Cuny, Anna Cavender, Dong-Hui Xu, Katrina Ligett, Jane Tougas, and Andy Bernat.

February 11 Deadline for CRA Service Award Nominations

The Computing Research Association invites nominations for the CRA Distinguished Service Award and the A. Nico Habermann Award for 2005.

Distinguished Service Award

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

A. Nico Habermann Award

CRA makes an award, usually annually, to a person who has made outstanding contributions aimed at increasing the numbers and/or successes of underrepresented groups in the computing research community. This award recognizes work in areas of government affairs, educational programs, professional societies, public awareness, and leadership that has a major impact on advancing these groups in the computing research community. Recognized contributions can be focused directly at the research level or at its immediate precursors, namely students at the undergraduate or graduate levels.

For a list of previous recipients of these two awards, see: http://www.cra.org/main/cra.projects.html.

Nomination Procedure:

The deadline for receipt of nominations is February 11, 2005. Nominations should not exceed two pages in length and should *describe the contributions* on which the nomination is based. Letters in support of the nomination are welcome but not required. Questions or comments may be addressed to awards@cra.org.

Send nominations electronically to: awards@cra.org (in plain text or as a Word attachment). Alternatively, mail or fax to:

CRA Service Awards Computing Research Association 1100 17th Street, NW, Suite 507 Washington, DC 20036-4632 Tel. 202-234-2111 Fax: 202-667-1066

E-mail: awards@cra.org
http://www.cra.org/main/cra.awards.html

Computing Research News November 2004

Spending Bills Delayed from Page 1

or 15.9 percent over FY 2004, increasing to \$238 million for FY 2005. Full details of the branch-bybranch breakouts are included in table 1.

VA-HUD-Independent Agencies (HR 5041, S 2825)

Both the House and Senate Appropriations Committees have approved their respective versions of the VA-HUD Appropriations bill, which includes funding for the National Science Foundation and NASA; however, as this issue goes to press in early October, neither bill has been considered by the full House or Senate.

The House Appropriations Committee acted first (as we reported in CRN, September 2004, Vol. 16, No. 4), approving a bill that would cut NSF's overall budget by \$110 million over the FY 2004 level to \$5.47 billion in FY 2005, a cut of 2.0 percent. In addition to cuts at NSF, the House committee also approved a \$1.1 billion cut to NASA's FY 2005 budget, earning a veto threat from the Administration.

However, NSF fared much better in the Senate version of the bill, which included an increase of 3.0 percent overall for the agency in FY 2005. Under the Senate bill, NSF funding would rise to \$5.75 billion in FY 2005, an increase of \$167 million over FY 2004. This matched the President's requested level, but is still well beneath the 15 percent per year increases authorized by Congress and approved by the President in the NSF Authorization Act of 2002.

Computing research fared better than most other areas in the Senate version. Under the plan, the Computing and Information Science and Engineering directorate (CISE) would increase 4.1 percent over FY 2004, from \$605 million to \$630 million (\$12 million more than the President's request). Only Social, Behavioral, and Economic Sciences (SBE) and "Integrative Activities" had a higher percentage increase, and those are directorates with considerably smaller baseline budgets.

In addition, the Senate committee, noting the success of the agency's Information Technology Research program at "increas[ing] our understanding of computing, communications, and information systems as well as the areas of largescale networking, new high-end architectures, high-data-volume instruments, and information management," increased funding for the activity to \$190 million for FY 2005. Having completed the five years it was originally slated to run, the ITR program was due to drop in funding to \$178 million for FY 2005.

It is not yet clear how work on the respective VA-HUD bills will proceed. They could move as individual bills for consideration by their respective bodies or get bundled up with all of the other unfinished appropriations bills as part of an omnibus bill and never see individual consideration. However, at

some point, House and Senate negotiators will have to work out the discrepancies between the House and Senate funding levels. As in the past, CRA will work to see the highest possible funding level approved. For the latest updates on that effort, check CRA's Computing Research Policy Blog at http://www.cra.org/govaffairs/blog/index.php.

Commerce, State, Justice, and Judiciary (HR 4754, S 2809)

This bill includes funding for the National Institute of Standards and Technology (NIST) and the National Oceanic and Atmospheric Administration (NOAA). As a result of a very poor FY 2004 appropriation, NIST has found itself in a very dire financial situation. A \$22 million cut in the agency's budget in the appropriation left it unable to move forward on much of its cyber security work and led to layoffs for some lab personnel.

Both the House and Senate Appropriation Committees have approved their FY 2005 CSJJ appropriations bills. The Senate bill would funnel more funding to the NIST Labs than the House version, adding \$43 million to the FY 2004 number for a total of \$384 million for FY 2005. In contrast, the House version would provide \$375 million for FY 2005. Both versions are still well short of the Administration's request of \$423 million.

However, the Senate took a completely different path than the House regarding the controversial Advanced Technology Program. The House bill and the President's budget request both zeroed out the \$177 million ATP program, but the Senate version would actually increase the program by 14.5 percent to \$203 million. It is not clear how this significant divergence of opinion will get resolved.

Of note to computing researchers, the Senate bill would set aside \$3 million for quantum computing research, with the committee noting that a breakthrough in quantum computing technology "would rival that of the transistor 50 years ago."

Homeland Security (HR 4567, S 2537)

Both the House and Senate Appropriations Committees have marked up their respective versions of the Homeland Security bill; both have the same relatively small investment of \$18 million in cyber security research and development for FY 2005 out of a total Homeland Security S&T budget of more than \$1.0 billion.

For the latest updates on the appropriations process, check the CRA Government Affairs website at http://www.cra.org/govaffairs . For commentary and analysis on the latest developments, be sure to check CRA's Computing Research Policy Blog at http://www.cra.org/govaffairs/blog/.

Peter Harsha is CRA's Director of Government Affairs. ■

Table 1 Final Science and Technology Funding Levels, Defense Appropriation

(in Millions)					
Account	FY 2004 Level	President's Budget Request	FY 2005 Appropriated	\$ Change FY 05 vs. FY 04	% Change FY 05 vs. FY 04
Total Science and Technology (6.1, 6.2, 6.3)	\$12,081	\$10,550	\$13,329	\$1,248	9.80%
Total Basic Research (6.1)	\$1.403	\$1,331	\$1,513	\$110	7.80%
Total Applied Research (6.2)	\$4,424	\$3,877	\$4,949	\$525	11.90%
Total Adv. Tech. Development (6.3)	\$6,254	\$5,342	\$6,867	\$613	9.80%
Total Army 6.1, 6.2, 6.3	\$2,626	\$1,784	\$3,010	\$384	14.60%
Basic - 6.1	\$381	\$318	\$408	\$27	7.10%
Applied - 6.2	\$1,040	\$651	\$1,158	\$118	11.40%
Adv. Tech. Dev 6.3	\$1,205	\$815	\$1,444	\$239	19.80%
Total Navy 6.1, 6.2, 6.3	\$2,217	\$1,718	\$2,308	\$91	4.10%
Basic - 6.1	\$484	\$477	\$496	\$12	2.50%
Applied - 6.2	\$724	\$564	\$826	\$102	14.10%
Adv. Tech. Dev 6.3	\$1,009	\$677	\$986	(\$23)	-2.30%
Total Air Force 6.1, 6.2, 6.3	\$2,321	\$1,919	\$2,354	\$33	1.40%
Basic - 6.1	\$331	\$346	\$362	\$31	9.40%
Applied - 6.2	\$807	\$786	\$958	\$61	6.80%
Adv. Tech. Dev 6.3	\$1,093	\$787	\$1,034	(\$59)	-5.40%
Total Defense-Wide 6.1, 6.2, 6.3	\$4,917	\$5,129	\$5,657	\$740	15.50%
Basic - 6.1	\$207	\$190	\$247	\$40	19.30%
Applied - 6.2	\$1,763	\$1,876	\$2,007	\$244	13.80%
Adv. Tech. Dev 6.3	\$2,947	\$3,063	\$3,403	\$456	15.50%

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November 2004 Computing Research News

CISE 1994-2004 from Page 1

a government-wide priority. And more dramatic increases in the CISE budget ensued. Figure 1 describes CISE budget growth over the 1994-2004 period and demonstrates that growth in CISE funding exceeded growth in NSF overall.

Over this same time period, the number of CS and CE faculty nationally has also been rising, with CRA's Taulbee Survey indicating a greater than 35 percent increase from 1998 to 2003 in tenure-track faculty in Ph.D.-granting CS and CE departments. This increase in the number of computing faculty can be attributed to the movement of researchers to academia following the closing or downsizing of industrial labs, and to the growing number of new Ph.D.s accepting tenure-track positions in Ph.D.granting departments in recent years.

The growing number of CS and CE faculty, coupled with NSF's annual solicitations for ITR proposals (2000-04), resulted in a significant increase in the number of proposals submitted to CISE. This growth in what we call 'proposal pressure' should not, however, be attributed only to the growing number of faculty and our ITR competitions. In fact, it is also associated with the expanding mission of our field and the

associated increase in emerging research and education opportunities. Undoubtedly, there is growing recognition of the promise of computing research contributions in society, and as part of that, the expanding role of computing in science and engineering research and education in general (e.g., in science and engineering informatics).

Figure 2 compares the number of proposals received and reviewed by CISE and the number of proposals awarded, and it presents the funding rates calculated from these data over the 1994-2004 period. In 1998, CISE received a total of 2,044 competitive proposals. By 2004, this number had risen to 6,222. Figures 1 and 2 clearly indicate that while the CISE budget more than doubled between 1994 and 2004, the number of proposals received on an annual basis has more than tripled during this ten-year time period. Over the same period, the funding rate for proposals submitted to CISE has dropped considerably, from approximately 36 percent in 1994 to a decadal low of 16 percent in 2004.

While in the early part of the last decade CISE funding rates were higher than NSF's overall funding rate, more recently CISE funding rates have dropped below the overall rate by quite a significant margin, even while the CISE budget was growing at a faster rate, as demonstrated in Figure 3.

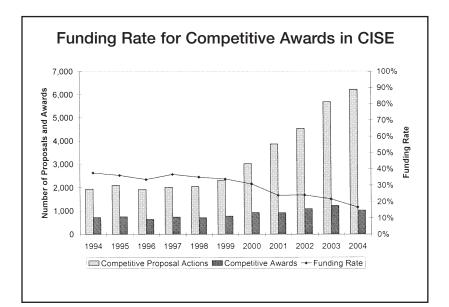


Figure 2: Competitive proposals received, proposals awarded, and successful funding rate trends for CISE, 1994-2004. Competitive proposals are initiated through the normal NSF review process in a specific fiscal year. The data do not include amendments to existing grants such as supplements.

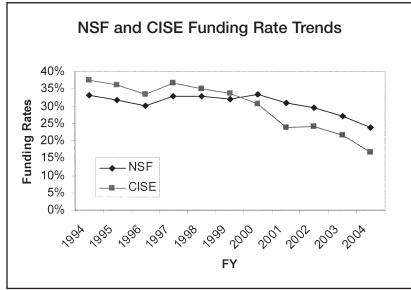


Figure 3: Comparison of NSF and CISE Funding Rates for 1994-

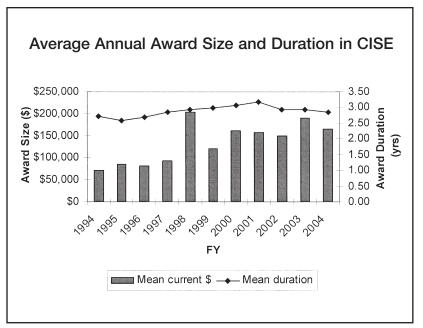


Figure 4: Average Award Size and Duration in CISE, 1994-2004.

Funding rates within CISE programs vary. However, direct comparisons across programs cannot readily be made due to different funding histories and proposal solicitation strategies. For example, some programs carry significant mortgage obligations, upwards of 60 percent of their annual budget, due to awards recommended for funding in previous years. Some programs impose restrictions on the number of proposals a PI can submit while others do not, which of course modulates funding rate data. Yet others are new programs that may be either oversubscribed or undersubscribed at their inceptions before reaching relatively steady-state conditions. What is clear, though, is that funding rates for CISE as a whole have halved in a decade.

Also contributing to the decline in funding rates is the desire to increase average grant size. As indicated in Figure 4, although award duration has remained relatively constant over the ten-year period, the average grant size has risen steadily—from an annual level of \$72,000 in 1994 to an annual level of \$165,000 in 2004. This growth in average grant size is consistent with NSF's goals and is responsive to PITAC's recommendations.

We think you can see that a combination of a number of factors—increasing numbers of

proposals, an increased number of awards, increasing average annual award amounts, and budget growth that has not kept pace with demand—has resulted in significantly reduced proposal funding rates.

The companion article, "CISE Update: Adjusting to the Increase in Proposals," describes CISE's current plan to adapt to this changing environment. However, as we make and implement these plans, the community must also think about its funding needs, priorities, and strategies. With computing advances increasingly important to advances in other science and engineering fields, computing faculty must continue to explore funding opportunities from all sources, including CISE and other organizations within NSF. Moreover, the computing research and education community needs to speak with one voice about the critical contributions that they can, and indeed must, be empowered to make towards creating a safe, healthy and vibrant civil society, both in the United States and around the world.

Peter Freeman (pfreeman@nsf.gov) is the Assistant Director of Computer and Information Science and Engineering at the National Science Foundation. Lee Harle is an NSF AAAS Fellow.

Transitions

The NSF Directorate for Computer and Information Science and Engineering has announced the selection of two new CISE Division Directors.

Dr. Wei Zhao has been selected Director, CISE Division of Computer and Network Systems, effective January 3, 2005. Dr. Wei will join NSF from Texas A&M University, where he is Associate Vice President for Research and a Professor of Computer Science.

Dr. Michael Foster has been selected Director, CISE Division of Computing and Communication Foundations, effective October 31, 2004. Dr. Foster has served as a program director at NSF since 1992, and most recently was a program director in the CISE Division of Shared Cyberinfrastructure (SCI).

CRN Advertising Policy

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

Boston College

Biology Department Computational Biology/Bioinformatics Tenure-track Faculty Position

The Boston College Biology Department invites applications for a tenure-track faculty position in the area of computational biology/bioinformatics. This search is at the Assistant Professor level, although exceptional senior candidates will be considered.

The university provides extremely competitive start-up funds and research space with the expectation that the successful candidate will establish a vigorous, externally funded research program. We would welcome a colleague pursuing computational biology research in silico or one who is pursuing a research program that involves laboratory experimentation combined with development and use of bioinformatics tools. Particular areas of interest include genomics and biological networks, though all areas of computational biology and bioinformatics will be considered. The successful candidate will be expected to train graduate students and to participate in the teaching mission of the department, which has added five new tenuretrack faculty members over the past four years.

The university is committed to the vigorous expansion of bioinformatics. The Biology Department currently has two bioinformatics faculty with postdoctoral associates; and the Computer Science Department will conduct a separate search in bioinformatics this year. The successful candidate in Biology will join a department with established and growing research strengths in bioinformatics, molecular and cell biology, developmental biology, genetics, signal transduction, neuroscience, cell cycle biology, and insect vector/pathogen interactions.

Applicants should submit a curriculum vitae and a statement of present and future research plans, and arrange to have three letters of reference sent to:

Bioinformatics Search Committee
Boston College
Biology Department
140 Commonwealth Avenue
Higgins Hall
Chestnut Hill, MA 02467
This appointment will begin on or after

This appointment will begin on or after July 1, 2005. Applications should be received by December 1 to assure full consideration. Review of applications will continue until the position is filled.

Boston College is an affirmative action, equal opportunity employer. Women and minority group members are especially encouraged to apply.

Boston College

Computer Science Department Clare Boothe Luce Professorship in Bioinformatics

The Computer Science Department at Boston College invites applications for the Clare Boothe Luce Professorship in Bioinformatics. The position is limited to women applicants at the assistant professor level. Boston College and the Luce Foundation are providing a highly competitive startup package for this position. The ideal candidate would have a PhD in computer science with training in bioinformatics. We would welcome a colleague with areas of interest in computational genomics, genomic data mining, systems biology (biological networks), structural biology or protein and RNA structure determination. Other areas of computational biology and bioinformatics will also be considered. The successful candidate will train both undergraduate and graduate students and will establish a vigorous externally funded research program.

Boston College is committed to expanding the role of computer science at the university. The Computer Science Department expects to move into a new facility in 2006 and to establish a doctoral program starting in 2007. The Biology Department currently has two bioinformatics faculty with postdoctoral associates and is conducting a separate search in bioinformatics this year. A new interdepartmental center for bioinformatics research is planned.

Applicants should prepare a curriculum vitae, a statement of present and future research plans as well as a teaching statement. Applicants should also request three letters of reference. The preferred method of submission is to send the documents as email attachments

to faculty-search@cs.bc.edu <mailto:faculty-search@cs.bc.edu>. Letters of reference may also be sent via email. Applicants who prefer to submit hardcopy should send the materials to:

Clare Boothe Luce Professorship Computer Science Department Boston College 140 Commonwealth Avenue Chestnut Hill, MA 02467

This appointment will begin on or after July 1, 2005. Applications should be received by January 15 to assure full consideration. Review of applications will continue until the position is filled.

Boston College is an affirmative action, equal opportunity employer. Minority group members are especially encouraged to apply.

California Polytechnic State University, San Luis Obispo

Computer Science Department Tenure-track Faculty Positions in Computer Science and Computer Engineering

Full-time academic year tenure-track Computer Science and Computer Engineering faculty positions beginning September 2005 at Assistant/Associate levels. 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 computer engineering or computer science; and service to the department, the university, and the community.

Applicants from all mainstream areas of computer science, software engineering, and computer engineering are encouraged to apply. A doctorate in Computer Science, Computer Engineering, Electrical Engineering, Software Engineering, or a closely related field is required.

Candidates must have a strong commitment to teaching excellence and laboratory-based instruction; dedication to continued professional development and scholarship; and a broad-based knowledge of computer science/computer engineering. Demonstrated ability in written and oral use of the English language is required. Rank and salary is commensurate with qualifications and experience.

Cal Poly offers BS and MS degrees in Computer Science, BS in Software Engineering, and a BS in Computer Engineering. 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.

To apply, please visit
WWW.CALPOLYJOBS.ORG and complete
an online faculty application. Computer
science applicants apply to requisition
#100392. Computer engineering applicants
apply to requisition #100393. Review of
applications will begin December 1, 2004;
applications received after that date may be
considered. For full consideration, candidates
are required to attach to their online
application: (1) resume, (2) cover letter, (3)
statement of goals and plans for teaching and
research. Three letters of reference and official
transcripts are required for final consideration,
and should be mailed to:

Recruitment Committee Computer Science Department Cal Poly San Luis Obispo, CA 93407

Questions can be emailed to: recruit@csc.calpoly.edu. Please include requisition number(s) in all correspondence. For further information about the department and its programs, see www.csc.calpoly.edu and www.cpe.calpoly.edu.

Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of all qualified individuals. EEO.

Caltech's Center

Center for the Mathematics of Information Caltech's Center for the Mathematics of Information (CMI) announces openings in the CMI Postdoctoral Fellowship Program, starting in fall 2005. The CMI is dedicated to fundamental mathematical research with an eye to the roles of information and computation as resources throughout science and engineering. Areas of interest include

algorithms, complexity, applied combinatorics, applied probability, statistics, information and coding theory, geometry processing, multiresolution methods, control and optimization.

Please apply and have three reference letters sent directly as instructed at http://www.ist.caltech.edu/joinus/positions.htm l. All materials are due by January 14, 2005.

Positions are contingent upon completion of the PhD.

Caltech is an affirmative action/equal opportunity employer; women, minorities, veterans, and disabled persons are encouraged to apply.

Carleton College

Mathematics and Computer Science
Assistant Professor of Computer Science

Carleton College invites applications for a tenure-track position in computer science, in any area of specialization, to begin in September 2005. This is an entry-level Assistant Professor position, but we may consider appointment at a higher level.

Carleton is among the nation's most selective liberal arts colleges and has outstanding, enthusiastic students. We seek an equally enthusiastic computer scientist to teach, to participate in the development of our curriculum, to develop a program of ongoing research, and to help us guide our students in undergraduate research.

Carleton's Mathematics and Computer Science department includes fifteen faculty, six of whom teach computer science, and an experienced full-time system administrator. Each year, between 10 and 30 students graduate with a computer science major.

To apply, send us a letter of application, a CV, a graduate transcript, and brief statements describing your research interests and teaching philosophy. Also arrange to have sent to us three letters of recommendation, at least one of which addresses your teaching. Send your application to:

cssearch@mathcs.carleton.edu

cssearch Math/CS Department
Carleton College
1 North College Street
Northfield, MN 55057

Review of the applications will begin January 3, 2005 and will continue until the position has been filled.

For a detailed description of this position, see

http://webapps.acs.carleton.edu/curricular/cs/fa c_pos/. If you have questions, please contact Professor Jeff Ondich at jondich@carleton.edu.

Carleton is an affirmative action/equal opportunity employer. We are committed to developing our faculty to better reflect the diversity of our student body and American society. Women and members of minority groups are strongly encouraged to apply.

Center for Visualization and Virtual Environments PhD Studies in Computer Vision, Image

PhD Studies in Computer Vision, Image Processing and Graphics

The Center for Visualization and Virtual Environments has open positions for PhD students in computer vision, image processing and graphics.

The center is associated with the Department of Computer Science at the University of Kentucky, Lexington, Kentucky. Successful candidates will have a BSc or MSc in computer science, mathematics, electrical engineering, physics or similar. A strong background in mathematics and programming is a must. Prior experience with computer vision, image processing or graphics is a plus. The positions are available immediately as of Sept 20, 2004, and will remain open until filled.

Interested candidates should place inquiries or send their resume to:

Dr. David Nister Assistant Professor of Computer Science Center for Visualization and Virtual Environments

For email and more information, see: http://www.vis.uky.edu/~dnister/

Clemson University

Department of Computer Science Tenure-track faculty positions

The Department of Computer Science at Clemson University expects openings for tenure-track faculty positions at the rank of Assistant Professor. The search will focus on research and technical infrastructure for information technology. Areas of interest include graphics and visualization, networking, programming languages, software engineering, and theory. Applicants should have a Ph.D. in Computer Science or a related discipline, and should be able to establish a synergistic relationship with other IT disciplines on campus.

The department, housed in a new building, has 20 faculty members, about 500undergraduate majors, and over 100 graduate students. B.A., B.S., M.S., and Ph.D. degrees in Computer Science, B.S. degree in Computer and Information Science, interdisciplinary programs in E-Commerce and Digital Production Arts are offered. Clemson is the land grant university of South Carolina and has an enrollment of approximately 17,000. TIME magazine named Clemson the Public College of the Year for year 2001. U.S. News & World Report ranks Clemson 32nd nationally among public universities in 2004. Clemson University is located in Clemson, a small college town on beautiful Lake Hartwell at the foothills of the Blue Ridge Mountains. The area offers numerous outdoor activities. For additional details, please see www.cs.clemson.edu.

Electronic applications, including names of three references, should be sent to: search@cs.clemson.edu as a *single PDF* attachment. If unavoidable, hard copies may be mailed to:

Faculty Search Committee Department of Computer Science Clemson University Clemson, SC 29634-0974

We will begin accepting and reviewing applications immediately. Applications received by January 15 will receive full consideration. If positions are not filled, the search will continue until May 1, 2005.

Clemson University is an Affirmative Action/Equal Opportunity Employer.

College of William & Mary Faculty Positions in Computer Science

Applications are invited for three tenuretrack faculty positions in Computer Science for the Fall 2005 at all academic ranks. Applicants must hold a Ph.D. in computer science or a related field. Appointment at the assistant professor level requires that the applicant must hold a Ph.D. at the time of appointment and demonstrate a strong research record and high interest in teaching. Appointment at a senior level requires a documented record of sustained excellence in teaching and a demonstrated research leadership at the national/international level. We are primarily interested in individuals with research expertise in the following areas: computational biology, data mining and information management, graphics and visualization, computer system security, and compilers and programming languages. However, strong applicants from all other areas of computer science will be considered.

The College of William and Mary, consistently ranked in the elite group of the Best National Universities - Doctoral by U.S. News and World Report, has committed to a multi-year effort to further strengthen its Computer Science research program. The department currently consists of fifteen faculty members who support B.S., M.S., and Ph.D. programs. More information about the department and the University can be obtained at http://www.cs.wm.edu.

Applicants should submit a resume, statements of research and teaching purposes, the names of at least three references and any supporting documents to:

Faculty Search Committee
Department of Computer Science
College of William & Mary
P.O. Box 8795
Williamsburg, VA 23187—8795

Questions and application materials can be e-mailed to search@cs.wm.edu. Review of candidates will begin immediately and continue until all positions are filled.

The College is an EEO/AA employer.

Colorado School of Mines

Department of Mathematical and Computer Sciences

Assistant Professor of Computer Science
The Department of Mathematical and

Computer Sciences, which offers B.S., M.S., and Ph.D. degrees, invites applications for an anticipated tenure-track faculty position at the Assistant Professor level, beginning in August 2005. The computer science program within the department is experiencing a period of strong growth in both research and teaching. Research interests include mobile ad hoc and sensor networks, databases, graphics, algorithms, machine learning, simulation, and parallel and distributed computing. Applicants in all areas of Computer Science consistent with the research interests of the department are encouraged to apply. More information about the department can be obtained from: http://www.mines.edu/Academic/macs

The Colorado School of Mines is located in Golden, Colorado, in the foothills of the Rockies, 13 miles west of Denver and 21 miles south of Boulder. Interested individuals are asked to visit our web page to obtain a

complete job announcement and information about how to apply:

 $http://www.is.mines.edu/hr/Faculty_Jobs.sh$

CSM is an EEO/AA employer and is committed to enhancing the diversity of its campus community. Women, minorities, veterans, and individuals with disabilities are encouraged to apply.

Colorado State University

Department of Computer Science Tenure-track Faculty

The Department of Computer Science at Colorado State University solicits applications for a tenure-track faculty position preferably at the level of assistant professor, beginning fall 2005. Applicants must have a Ph.D. in computer science or a related field, and demonstrate potential for excellence in research and teaching.

The department has over 400 undergraduate majors and 150 graduatestudents in Master's and Ph.D. programs. The department has 17 faculty with strong research programs in artificial intelligence, computer vision, software engineering, security, parallel computation and embedded systems.

Colorado State University, with an enrollment of 25,000 students, is located in Fort Collins, at the base of the Rocky Mountains, 65 miles north of Denver. More information about the department can be obtained from the department home page at: http://www.cs.colostate.edu.

Applications must be received by January 25, 2005. Applicants should upload their PDF format curriculum vitae, and a list with names, postal and e-mail addresses, and telephone numbers of three references at: http://cns.natsci.colostate.edu/searches/compsc i/index.cfm.

Inquiries may be directed to facultysearch@cs.colostate.edu. Anticipated start date is August 16, 2005.

When semi-finalists are identified, their files will be open to all faculty in the Department of Computer Science.

Colorado State University is an EEO/AA employer.

D. E. Shaw Research and Development, L.L.C.

Research on Algorithms and Architectures for Computational Biochemistry

Extraordinarily gifted computer scientists, systems architects, electrical engineers and systems software professionals are sought to join a rapidly growing New York-based research group pursuing an ambitious, longterm project aimed at achieving major scientific advances in the field of biochemistry and fundamentally transforming the process of drug discovery. This research effort is being financed by the D. E. Shaw group, an investment and technology development firm with approximately US \$8 billion in aggregate

capital, and operates under the direct scientific leadership of its founder, Dr. David E. Shaw. Among the group's current research activities is a project aimed at developing a massively parallel special-purpose supercomputer and innovative mathematical and computational techniques to direct unprecedented computational power toward the solution of key scientific and technical problems in the fields of molecular simulation and molecular design.

Successful candidates will be working closely with a number of the world's leading computational chemists and biologists, and will have the opportunity not only to participate in an exciting entrepreneurial venture with considerable economic potential, but to make fundamental contributions within the fields of biology, chemistry and medicine. Serious candidates will have an exceptionally distinguished history of academic and/or industrial accomplishment in computer science, electrical engineering, applied mathematics, or a related area. Particularly relevant areas of expertise might include parallel computation, high-speed interconnection networks, scientific computing, numerical analysis, optimization, the analysis of algorithms, operating systems, digital systems simulation, reconfigurable computing, and ASIC design, but specific knowledge of any of these areas is less critical than exceptional intellectual ability and a demonstrated track record of achievement. We are prepared to reward exceptionally wellqualified individuals with above-market compensation

Please send your curriculum vitae (including list of publications, thesis topic, and advisor, if applicable) to: career93@desrad.deshaw.com

The D. E. Shaw group members do not discriminate, in employment matters, on the basis of race, color, religion, gender, national origin, age, military service eligibility, veteran status, sexual orientation, marital status, disability, or any other protected class

D. E. Shaw Research and Development, L.L.C.

Systems Architects and ASIC Engineers Specialized Supercomputer for Computational Drug Design

Extraordinarily gifted systems architects and ASIC design and verification engineers are sought to participate in the development of a special-purpose supercomputer designed to fundamentally transform the process of drug discovery within the pharmaceutical industry. This early-stage, rapidly growing project is being financed by the D. E. Shaw group, an investment and technology development firm with approximately US \$8 billion in aggregate capital. The project was initiated by the firm's founder, Dr. David E. Shaw, and operates under his direct scientific leadership.

This project aims to combine an innovative, massively parallel architecture incorporating 90-nanometer "system on a chip" ASICs with novel mathematical techniques and groundbreaking algorithmic advances in computational biochemistry to direct unprecedented computational power toward the solution of key scientific and technical problems in the field of molecular design. Successful candidates will be working closely with a number of the world's leading computational chemists and biologists, and will have the opportunity not only to participate in an exciting entrepreneurial venture with considerable economic potential, but to make fundamental contributions within the fields of biology, chemistry, and medicine.

The candidates we seek will be unusually intelligent and accomplished, with a demonstrated ability to design and implement complex, high-performance hardware solutions based on the latest semi-custom technologies. We are prepared to reward exceptionally well-qualified individuals with above-market compensation.

Please send resume, along with GPAs, standardized test scores (SAT, GRE), and compensation history, to:

career93@desrad.deshaw.com D. E. Shaw Research and Development, L.L.C. does not discriminate in employment matters on the basis of race, color, religion, gender, national origin, age, military service eligibility, veteran status, sexual orientation, marital status, disability, or any other protected class.

Dartmouth College

Department of Computer Science Faculty Positions

The Department of Computer Science seeks candidates for a faculty position starting in September 2005. We have a tenure-track opening at the Assistant Professor level. A senior faculty appointment may also be possible. We particularly encourage applicants in Programming Languages or Compilers, but strong candidates in all areas of computer science will be seriously considered.

Persons interested should submit a curriculum vitae, a research statement, and a teaching statement. Please ask at least four professionals to send letters of reference, at least one of whom can comment on teaching. Full consideration will be given to applications that arrive by December 1, 2004. Please send application materials and general inquiries to:

Emily Holt Foerst Computer Science Recruiting Department of Computer Science Dartmouth College 6211 Sudikoff Laboratory

Hanover, NH 03755-3510 Specific questions or emailed applications can be sent to Scot Drysdale, at recruit@cs.dartmouth.edu.

Information on faculty and their research, facilities, and graduate students is available at http://www.cs.dartmouth.edu. Our department is affiliated with the Institute for Security Technology Studies, and further information can be found at http://www.ists.dartmouth.edu.

Dartmouth is an equal opportunity/ affirmative action employer and encourages applications from women and members of minority groups

Duke University

Department of Computer Science Tenure-track positions

We invite applications and nominations for two tenure-track or tenured faculty positions at any rank in the Department of Computer Science at Duke University, to start September 2005, in the following areas Systems and architecture, with emphasis on networking, distributed systems, databases, security, and computer architecture Computational biology and artificial intelligence. A successful candidate must demonstrate promise of becoming an outstanding scholar in every respect, including research and teaching, and must have a solid disciplinary foundation. For more information about the faculty, facilities and other resources, please refer to www.cs.duke.edu.

Applications should be submitted online at www.cs.duke.edu/facsearch. Applications should include a curriculum vitae, a list of publications, and copies of the most important publications. A Ph.D. in computer science or related area is required. Assistant Professor applicants should arrange for at least three letters of reference to be sent preferably via email (facsearch@cs.duke.edu) to the Faculty Search Chair. Senior candidates should provide the names and contact information of three potential references. To guarantee full consideration, applications and letters of reference should be received no later than January 14, 2005.

Duke University is an affirmative action, equal opportunity employer

Emory University

Department of Mathematics and Computer Science Tenured or Tenure-track Position

The Emory University Department of Mathematics and Computer Science invites applications for an anticipated tenure-track Assistant Professorship or a tenured appointment at higher ranks in areas of databases, starting Fall 2005. Preference will be given to candidates with research in data models and query languages, database systems, data mining, scientific and biological databases, text databases and information retrieval, and digital libraries. Exceptional candidates in other areas of computer science related to departmental interests and development plans will also be considered. Applicants must have a PhD in computer science or a closely related field, with demonstrated promise in research and a strong commitment to teaching in a liberal arts environment. Senior candidates must have an established research program.

Emory is a nationally ranked, highlyselective research university located on a 600 acre campus, 15 minutes from downtown Atlanta. The University is committed to development of both computer science and scientific computing, both within the department and in collaboration units across the campus including BIMCORE, the Emerson Center for Scientific Computation, and the the Digital Library Research at the Emory Library.

Applicants must send a letter of application, a CV, which includes names of at least 3 recommenders, and arrange to have recommendation letters sent to:

Screening Committee, CS Search Department of Mathematics and Computer Science Emory University Atlanta GA 30322

Screening of applications will begin on 1, December 2004, with initial interviews planned for mid-January and continuing until position is filled.

Interested parties are encouraged to contact the screening committee chair (csfs2005@mathcs.emory.edu) or one of the faculty members listed in the detailed version of this announcement:

http://www.mathcs.emory.edu/News/Ops/ Emory University is an Affirmative Action/Equal Opportunity Employer.

The Florida State University

Department of Computer Science Tenure-track Professorship Positions

The Department of Computer Science invites applications for one or more tenuretrack positions at all ranks, beginning August 2005. Our areas of preference are: information security, networking, databases, grid computing, computer vision, multimedia systems, architecture and compilers. Strong applicants with expertise in other areas will also be considered.

Applicants for a full or associate professorship position should have an established research and leadership record. We may also be able to consider visionary individuals who are established internationally as leaders in their field for an endowed professorship.

Applicants for an assistant professorship position should hold a PhD in Computer Science or a closely related field, and have excellent research and teaching accomplishments / potential.

The department offers degrees at the BS, MS, and PhD levels. It is in a period of significant growth and has hired six tenuretrack faculty since 2003. Further information can be found at http://www.cs.fsu.edu. FSU is classified as a Carnegie Research I university. Its primary role is to serve as a center for advanced graduate and professional studies while emphasizing research and providing excellence in undergraduate education.

FSU is located in the beautiful and picturesque Florida capital - a city of approximately 250,000, about an hour's drive from the Gulf Coast.

Screening will begin November 1, 2004 for full and associate professorship positions and January 15, 2005 for assistant professorships, and will continue until the position(s) are filled. Please use the on-line application form at http://www.cs.fsu.edu/positions/apply.html. Questions can be e-mailed to recruitment@cs.fsu.edu. Upon request from the search committee, the candidate will be expected to arrange for at least 3 letters of reference to be sent to:

Virginia Commonwealth University

Professor and Chairperson Department of Computer Science, School of Engineering

Virginia Commonwealth University invites applications for the position of Professor and Chairperson of Computer Science. VCU is a Carnegie Doctoral/Research University offering over 162 baccalaureate, master's, doctoral, professional and certificate degree programs to over 26,000 students. VCU is also home to the VCU Medical Center, which includes the nation's fourth largest university-based medical school and hospital. Computer Science, one of six programs of study offered by the VCU School of Engineering, currently has nine faculty members VCU School of Engineering, currently has nine with research interests in the areas of Software Engineering, Networking, Software Testing, Medical Applications, Database, Neural Networks, Parallel Programming and Programming The computer science program has strong ties to the Bioinformatics program in Life Sciences, and excellent working relationships with both Information Systems and Computer

The Computer Science Program has offered baccalaureate, certificate, and master's degrees for over 20 years. It was the first in the state to become accredited by the Computer Accreditation Committee of ABET in 1988. In Fall of 2001, the program was moved to become part of the School of Engineering. At this time the School of Engineering also initiated a Ph.D. program in Engineering. Computer Science students can now complete a Ph.D. in Engineering by following a computer science track. The faculty in the computer science program are committed to maintaining a standard of excellence in undergraduate teaching while expanding research activities in conjunction with this newly instituted Ph.D. program.

Candidates for this position must be eligible for employment in the United States and indicate their citizenship or visa status. A Ph.D. in Computer Science is required. We seek a chairperson with a strong research record who can support the teaching and research missions of the computer science program. The Chairperson's responsibilities include direction of and contribution to the undergraduate and graduate teaching mission of the program; promoting the continued growth of the faculty's teaching and research efforts; balancing the teaching, research and service commitments of the faculty, and facilitating research opportunities for the faculty. The Chairperson also manages departmental expenditures, and supervises assessment and improvement of the program to maintain ABET accreditation. Applicants should submit a statement of their teaching and research interests, curriculum vitae, and the contact information for at least four references to Dr. Robert Klenke, Chair of the Search Committee, Virginia Commonwealth University, P.O. Box 843072, Richmond, VA 23284-3072. Review of applications will continue until the position is filled.

Virginia Comnonwealth University is an Equal Employment Opportunity/Affirmative Action Employer. Women, minorities, and persons with disabilities are encouraged to apply

(continued)

Faculty Search Committee Computer Science Department 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.

Georgia State University Department of Computer Science Assistant Professor

The Department of Computer Science of Georgia State University invites applications for an anticipated tenure-track position for assistant professor beginning the Fall semester, 2005. Earned Ph.D. in Computer Science, or a closely related discipline, and an excellent record of publications in computer science are required with preference for extramural funding. Preference is for individual with specialty in networking, databases, digital image processing, bioinformatics or operating

The department offers programs leading to the B.S., M.S., and Ph.D. degrees in computer science. Departmental computing facilities for research and instruction include a departmental network of PCs, Unix/Linux workstations, two interconnected Beowulf clusters, and a 24-processor shared-memory high-performance computer, and five labs, including a hypermedia and visualization research laboratory. A full-time systems programmer supports the departmental computing facilities.

Applicants should send a letter of application, vitae without birth date, but with citizenship status, and three letters of reference and transcripts of all graduate work to:

Chair Department of Computer Science Georgia State University 34 Peachtree Street, Suite 1450

Atlanta, GA 30303 Or e-mail to: mfraser@cs.gsu.edu Applications will be accepted until position is filled.

Georgia State University is an EEO/AA

Harvey Mudd College

Computer Science Department
Assistant Professor of Computer Science

The Computer Science Department of Harvey Mudd College intends to appoint a tenure-track Assistant Professor of Computer Science, to start 1 July 2005 (classes begin in September). We are searching for a candidate with a PhD in Computer Science who is excited by the undergraduate experience, and is devoted to excellence in teaching, as well as to the development of a research program involving undergraduates. Outstanding candidates in all areas of computer science will be considered. We are particularly interested in applicants with strengths in software architecture, databases bioinformatics, and knowledge discovery. Applicants for one-year visiting appointments or partial appointments (such as sabbatical visitors) will also be considered.

Harvey Mudd College is a highly-selective undergraduate college (700 students) emphasizing science, mathematics, and engineering. It is a member of the Claremont Consortium that includes Pomona College, Scripps College, Pitzer College, Claremont-McKenna College, Claremont Graduate University, and the Keck Graduate Institute of Applied Life Sciences. Visit http://www.cs.hmc.edu for more information about our department and the position.

Applicants should respond with a curriculum vitae, a statement regarding teaching and research philosophy or plan, and supporting materials such as reprints. Concurrently, please ask three references to write to us directly. Reviews of applications will commence 15 December 2004. Please send hardcopy of applications and reference letters to:

Search Committee
Computer Science Department
Harvey Mudd College
301 E. Twelfth Street
Claremont, CA 91711
Harvey Mudd College is an Equal
Opportunity Employer and is committed to
the recruitment of candidates traditionally
underrepresented on college faculties.

Hobart and William Smith Colleges

Department of Mathematics and Computer

Assistant Professor Tenure-track Position

The Department of Mathematics and Computer Science at Hobart and William Smith Colleges invites applications for a tenure-track faculty position in computer

science to begin in the Fall of 2005. Desirable specialties include operating systems, networking, and software engineering, but all fields will be considered. Duties include teaching all levels of undergraduate computer science and participating in the Colleges' interdisciplinary general curriculum. Experience with and/or interest in working in a multicultural environment are highly desirable.

A strong commitment to teaching and promise of continued scholarly activity are required. The teaching load is five courses over two semesters. Hobart College for men and William Smith College for women are coordinate, four year, liberal arts colleges committed to teaching and interdisciplinary study. The Colleges have a combined enrollment of 1800 students.

Interested persons should consult the complete position description at http://campus.hws.edu/ADM/hr/Employment/Faculty.asp. To learn more about the department, visit our web pages starting at: http://math.hws.edu/

Hobart and William Smith Colleges are committed to attracting and supporting a faculty of women and men that fully represent the racial, ethnic, and cultural diversity of the nation, and actively seek applications from under-represented groups. The Colleges do not discriminate on the basis of race, color, religion, sex, marital status, national origin, age, disability, veteran's status, sexual orientation, or any other protected status.

Application: Applicants should expect to have completed their doctorates by Fall 2005. Send detailed resume, statement of research interests and plans, description of teaching philosophy, three letters of recommendation (at least one including comments on teaching), and undergraduate and graduate transcripts (photocopies acceptable) to:

Professor David Eck
Department of Mathematics and
Computer Science
Hobart and William Smith Colleges
Geneva, NY 14456
eck@hws.edu

Evaluation of applications will begin January 15, 2005 and will continue until the position is filled.

Iowa State University

Department of Computer Science College of Liberal Arts and Sciences Tenure-track Position

The Department of Computer Science has one tenure-track faculty position open for Fall 2005. We are especially interested in hiring an experimentalist at the assistant professor level in Software Engineering, Networks and Systems. The position requires a Ph.D. in Computer Science or a closely related field and outstanding potential for research in computer science and promise of effective teaching at undergraduate through graduate levels. Candidates who are in the final stages of obtaining a Ph.D. will also be considered.

The department currently consists of 26 full-time tenure-track faculty and offers B.S., M.S., and Ph.D. degrees in Computer Science. It also participates in interdepartmental graduate programs in Bioinformatics and Computational Biology, Computational Intelligence, Learning and Discovery, Human-Computer Interaction, and Information Assurance. The department has about 500 undergraduates, 40 M.S. students and 100 Ph.D. students. Almost all graduate students are supported either as RA or TA. The department has strong research and educational programs in Algorithms and Complexity, Artificial Intelligence Bioinformatics and Computational Biology, Databases, Data Mining, Parallel and Distributed Computing, Information Assurance, Programming Languages, Multimedia Systems, Operating Systems and Networks, and Software Engineering.

A dynamic faculty, moderate teaching load (typically 3 courses per year for active researchers with further reductions for junior faculty), strong graduate program, and well-funded research program provide an excellent academic environment. In addition, cutting-edge research and education are nurtured through interdisciplinary interactions facilitated by the Laurence H. Baker Center for Bioinformatics and Biological Statistics, the Information Assurance Center, DOE Ames Laboratory, and the Virtual Reality Application Center.

Iowa State University is a major landgrant university located in Ames, Iowa. It is a pleasant, small, cosmopolitan city with a population of over 50,000 (including about 27,000 students), a vibrant cultural scene, an excellent medical clinic, and a secondary school system that ranks among the best in the United States. In 2002, Ames was ranked as the 20th best place to live in North America. Applicants should send a curriculum vitae, including the names and addresses of at least three references, to:

Chair of Search Committee
Department of Computer Science
Iowa State University
Ames, Iowa 50011-1041
Tel: 515-294-4377
Fax: 515-294-0258
E-mail: faculty-search@cs.iastate.edu
URL: www.cs.iastate.edu

Review of applications will begin on November 15, 2004 and will continue until the position is filled.

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

La Salle University

Department of Mathematics and Computer Science

Assistant Professor, Computer Science

We invite applications for a tenure-track faculty position in our undergraduate and graduate computing programs, beginning Fall, 2005. A Ph.D. in Computer Science is preferred. This position entails teaching nine to twelve hours each semester, student advising, and committee assignments.

Send cv, three letters of recommendation, and statements regarding your teaching and research philosophies to:

Chair
Department of Mathematics and
Computer Science
La Salle University
1900 West Olney Avenue
Philadelphia, PA 19141-1199
elliott@lasalle.edu

Screening of applications will begin immediately upon receipt of curriculum vitae.

La Salle University is a Roman Catholic university in the tradition of the La Salle Christian Brothers and welcomes applicants from all backgrounds who can contribute to its unique educational mission. For a complete mission statement, please visit our Web site at www.lasalle.edu.

AA/EOE.

Lafayette College

Computer Science Department Tenure-track position

Applications are invited for a tenure-track assistant-professor starting in the fall of 2005. Qualifications include a love of teaching, a research program in any mainstream area of computer science, and a Ph.D. — completed or nearing completion — in Computer Science. For more information about our program, please check out our home page:

http://www.cs.lafayette.edu Please have three letters of recommendation sent, and send a resume and an unofficial transcript of your graduate work in computer science to:

Bill Collins, Head Computer Science Department Lafayette College Easton, PA 18042-1781 610-330-5228 collinsw@lafayette.edu

Applications will be considered as they are received. Recruiting will continue until the position is filled. Lafayette College is a most competitive, private liberal-arts college with excellent students and small classes. Nestled in the Lehigh Valley of Pennsylvania, the college is 70 miles north of Philadelphia and 70 miles west of New York City.

The college is an Equal Employment Opportunity employer and encourages applications from women and minorities.

Massachusetts Institute of Technology

Department of Electrical Engineering and Computer Science Faculty Positions

The Department of Electrical Engineering and Computer Science (EECS) seeks candidates for faculty positions starting in September 2005. We anticipate faculty openings for individuals who are completing, or who have recently completed, a doctorate. In special cases, a senior faculty appointment may be possible. Faculty duties include teaching at the graduate and undergraduate levels, research, and supervision of student research. We will consider candidates with backgrounds and interests in all areas of electrical engineering and computer science.

Candidates must register with the EECS search website at https://eecs-search.eecs.mit.edu. Materials may be submitted preferably electronically to the website or sent to the address below. Candidate applications should include a description of professional interests and goals in both teaching and research. Each application should include a curriculum vitae and the names and addresses of three or more

individuals who will provide letters of recommendation. Letter writers should submit their letters directly to MIT, preferably on the website or by mailing to the address below. Please submit complete application by January 15, 2005.

Send all materials not submitted on the website to:

Professor Rafael Reif, Department Head Electrical Engineering and Computer Science

Massachusetts Institute of Technology 38-403 77 Massachusetts Avenue Cambridge, MA 02139

 $\ensuremath{\text{M.I.T.}}$ is an equal opportunity/affirmative action employer.

McGill University

School of Computer Science Tenure-track positions

The School of Computer Science at McGill University wishes to invite applications for a tenure-track position, at the assistant professor Level, to begin June 1st, 2005. Areas of priority include, but are not limited to, software architecture, systems design, distributed systems, model driven development, software testing and validation.

Hardcopy applications, including a curriculum vitae, a list of publications with copies of one or two sample reprints, a research proposal and the names and E-mail addresses of three references should be sent to:

Head, Search Committee
School of Computer Science
McGill University
McConnell Engineering Building, #318
3480 University Street
Montreal, QC H3A 2A7
The review process will begin immediately

The review process will begin immediately and the search will continue until the position is filled. Information about our department can be found at http://www.cs.mcgill.ca.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.

McGill University is committed to equity in employment.

McGill University

School of Computer Science Tenure-track positions

The School of Computer Science at McGill University wishes to invite applications for tenure-track positions, at the assistant professor level, to begin June 1st, 2005. Applications for more senior positions are also welcome. We are searching for computational biologists who are interested in either of the following areas: bioinformatics database and system design, bioinformatics algorithms and data structures, machine learning approaches in bioinformatics, and computational modeling of biomolecules.

Bioinformatics at McGill University has greatly expanded over the past four years and candidates would benefit from the world class medical school and biomedical research programs. The McGill Center for Bioinformatics is comprised of approximately 15 members who are involved in large scale projects that include (but are not limited to) areas such as genomics, functional genomics, proteomics, protein- protein interaction, structural biology, clinical informatics, phylogeny, genome evolution, neuroscience, medical imaging and cellular simulation.

Hardcopy applications, including a curriculum vitae, a list of publications with copies of one or two sample reprints, a research proposal and the names and E-mail addresses of three references should be sent to:

Head, Search Committee School of Computer Science McGill University McConnell Engineering Building, #318 3480 University Street Montreal, QC H3A 2A7

The review process will begin immediately and the search will continue until the positions are filled. Information about our department can be found at http://www.cs.mcgill.ca. Information regarding the McGill Center may be found at http://www.mcb.mcgill.ca.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.

McGill University is committed to equity in employment.

Miami University

Department of Computer Science and Systems Analysis

Assistant/Associate Professor of Computer Science

The Department of Computer Science and Systems Analysis seeks applicants for a faculty positions in computer science beginning fall 2005. Miami University, located 35 miles north of Cincinnati, has 14,000 undergraduate and 1,800 graduate students. Miami, one of

the eight original "Public Ivy" schools, is consistently recognized as one of the nation's premiere public universities by such publications as The Fiske Guide to Colleges, the Kaplan-Newsweek College Catalog, and US News & World Report. The School of Engineering and Applied Science ranks among the nation's top engineering programs among schools that do not offer a Ph.D. in engineering. Learn more about the university at www.muohio.edu.

Successful candidates will be expected to teach courses, conduct labs, perform service and maintain an active research program. We are primarily seeking applicants to begin at the rank of assistant professor, but will consider applicants qualified for associate professor. A doctorate in computer science or related field is expected. ABDs will be accepted, but the doctorate must be completed by the time of the appointment August 2005.

Send resume, visa status, (if applicable) and teaching experience and current research

Kathy Ketcham Computer Science & Systems Analysis Miami University Oxford, OH 45056 Phone: 513-529-9269 Fax: 513-529-1524 Web address: www.muohio.edu/jobs Email: CSsearch@MUOhio.edu

Electronic submissions are encouraged. Screening of all applications will begin October 2004 and continue until positions are filled.

We encourage applications from a broad spectrum of individuals, including women and members of ethnic minorities. Miami University is an affirmative action/equal opportunity employer.

Montclair State University

Department of Computer Science Tenure-track position

The Department of Computer Science invites applications for a tenure-track professor in computational science starting September 1, 2005. The Department's 14 faculty support the BS with an ABET CAC accredited track and the MS in Computer Science. Qualifications include work with Object Oriented technology with C++ or Java, modern architecture (RISC), UNIX, a willingness to teach a rich variety of computer science courses at all levels to ethnically diverse students, and a PhD in Computer Science with research experience using data mining, image processing, and/or parallel computing in scientific, mathematical, and/or engineering phenomena

Candidates need to demonstrate the ability to work as a member of an interdisciplinary team and to carry out team leadership for developing graduate CS degrees. All faculty are expected to have an ongoing research plan, to commit to quality teaching, to be involved in professional activities, and to pursue grants. The position is subject to available funding. Rank and salary are dependent on qualifications.

Candidates should send (No Emails) hardcopy of resume, statement of research interests, teaching philosophy and professional

Dept. of Computer Science Montclair State University Box C316 # F- 20 Upper Montclair, NJ 07043 Screening begins immediately and continues until the position is filled.

Dr. Dorothy Deremer, Chairperson

Montclair State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to

National Science Foundation, Arlington, VA

Division of Computer and Network Systems Program Director

NSF's Directorate for Computer and Information Science and Engineering (CISE), Division of Computer and Network Systems (CNS) is seeking qualified applicants for the position of Program Director in the Computing Research Infrastructure Cluster. The Program Director will have primary responsibilities involving proposal evaluations, project development and support, program planning, and related administrative duties. Additional responsibilities will include coordination, Foundation-wide education efforts, and advising on logistics requirements of the computer science and education technology field. Additional information about CNS and their programs can be found at http://www.nsf.gov/home/cise.

Appointment to this position will be filled under the terms of the Intergovernmental Personnel Act (IPA). Applicants must have a Ph.D. or equivalent experience in computer science, computer engineering computational science, communication information science, or allied disciplines, and significant experience in education. Six year or more of successful research experience beyond the Ph.D. are required. Women and underrepresented minority candidates are especially encouraged

The announcement E20040121-IPA, which includes position requirements and applications procedures, is located on NSF's Division of Human Resource Management Website http://www.nsf.gov/jobs.

Applications may be transmitted electronically to: rotator@nsf.gov.

Telephone inquiries may be referred to Jacqueline Jackson, at (703) 292-4358.

For technical information, contact: Dr. Gregory Andrews, CNS Division Director at (703) 292-8950.

Hearing impaired individuals may call TDD &903) 292-8044.

Applications must be received by October 29, 2004.

NSF is an equal opportunity employer committed to employing highly qualified staff that reflects the diversity of our nation.

New York University

Department of Computer Science Faculty Openings

The department expects to have several regular faculty positions beginning in September 2005 and invites candidates at all levels. We will consider outstanding candidates in all areas; high priority areas are bioinformatics, machine learning, programming languages and formal methods, scientific computing, and systems (including networking, mobile and autonomous computing, distributed and secure systems, and operating systems). Also, see our web page regarding a search with an earlier deadline for a joint position with biology. Faculty members are expected to be outstanding scholars and to participate in teaching at all levels from the undergraduate to the doctoral. New appointees will be offered highly competitive salaries, competitive startup packages, and low-cost university housing within short walking distance of the department. New York University is located in Greenwich Village, one of the most attractive residential areas of Manhattan.

The department has 32 regular faculty members and several adjunct, clinical, research, and visiting faculty members. Current strengths of the department lie in algorithms, computational biology, computer graphics, computer vision and image processing, distributed and parallel computing, multimedia, machine learning, natural language processing, operating systems, programming languages and verification, and scientific computing. There are specialized laboratories and research facilities for computer graphics and multimedia, computer vision, and parallel and distributed computing

Collaborative research with industry is facilitated by the geographic proximity to the main research centers of AT&T, IBM, Lucent, Matsushita, NEC, Siemens and Telcordia.

Applications should include a resume, a statement of career objectives and key publications; junior candidates also need to have at least three letters of reference sent to the address below. Applicants are encouraged to provide a URL for a description of their activities. To guarantee full consideration, applications should be received no later than Jan. 4, 2005; however, this is not a hard deadline, as all candidates will be considered to the extent feasible, until all positions are filled.

Please send applications to either: jobs@cs.nyu.edu <mailto:jobs@cs.nyu.edu>

Faculty Search Committee c/o Shanta Stroud Department of Computer Science 251 Mercer Street New York, NY 10012-1185 New York University is an equal opportunity/affirmative action employer.

Oak Ridge National Laboratory (ORNL) and Vanderbilt University Computational Biology Institute Director (50196262)

The newly formed Computational Biology Institute (CBI) within the Center for Computational Sciences (CCS) at the Oak Ridge National Laboratory (ORNL) and Vanderbilt University (VU) seeks candidates for a Director to take a lead role in the labwide computational biology program at ORNL. As currently envisioned, this position reports jointly to the CCS Director at ORNL and the Associate Vice Chancellor for Research at Vanderbilt. The candidate would also become a faculty member at Vanderbilt,

in an appropriate school and department with all the attendant benefits, support and reporting relationships.

The CCS recently moved into a new 170,000 sq. ft. world-class facility specifically designed to promote multidisciplinary research. The facility includes a 40,000 sq. ft. computer center—the nation's largest for unclassified, open scientific research designed to deploy leadership-class computers for grand challenge science and engineering.

Vanderbilt University is establishing significant bioinformatics capabilities to complement its world-class medical informatics program. The University has recently made substantial investment in transinstitutional computing, creating the Advanced Computing Center for Research and Education (ACCRE).

Responsibilities

The CBI Director will guide a team of computational biologists, computer scientists and applications domain scientists drawn from the Computer Science and Mathematics Division and the Life Sciences Division at ORNL, and the schools of Medicine, Engineering, and Arts and Science at Vanderbilt to develop the CBI in its formative stages. The initial programmatic direction of the CBI will be aligned with the goals and objectives of the DOE Office of Advanced Scientific Computing Research and the DOE Office of Biological and Environmental Research programs.

The CBI Director must have a demonstrated record of drawing upon scientists from diverse backgrounds relevant to computational biology to create innovative solutions and new tools. The Director should also have credentials and experience consistent with Associate or Full Professor rank at VU.

Program development and group leadership are primary tasks of this position, including development of new research directions as a basis of continued funding and thus, the health of the Institute. These efforts are expected to lead to identification of new dimensions of systems biology that maximize computing, computational science and life science resources available at ORNL and through research community partnerships The CBI will constitute an intellectual hub for the expertise needed to meet challenges in biology and its nexus with mathematics and computational science. The CBI Director must be responsive to the Laboratory agenda in computing and biology and must be able to articulate a multidisciplinary research agenda across relevant areas of the Laboratory and the broader scientific and sponsor community.

Requirements

Applicants should have an advanced degree (PhD or MD and a mature research program in computational biology preferred). The position requires the demonstrated ability to develop and maintain research programs and substantial extramural funding, and to manage and develop programmatic ventures in a diverse research environment involving jointly appointed university faculty. Personnel management skills are essential, along with the ability to communicate effectively verbally and in writing to diverse audiences. Knowledge of government laboratory business practices is a plus, specifically within the Department of Energy or closely related federal departments.

For additional information about ORNL, visit: http://compbio.ornl.gov, http://www.ccs. ornl.gov or http://www.ornl.gov For additional information about VU and ACCRE. visit: http://www.vanderbilt.edu/, http://www.mc.vanderbilt.edu/ or http://www.accre.vanderbilt.edu/

Qualified candidates are encouraged to submit a statement of qualifications for the position and a resume, along with a list of at least three references, to:

Staffing Computer Science and Mathematics Division

Oak Ridge National Laboratory P.O. Box 2008

Oak Ridge, TN 37831-6164 Email: CCSD_Staffing@ornl.gov

Please include the number of the position for which you are applying in the subject line of your email.

Alternatively, interested candidates may contact our search consultant in full confidence:

P. J. O'Hare

Executive Search Consultant 2956 Missy Drive NE Marietta, GA 30062-4329 Phone: 404-642-9105

Email: pjosearch@mindspring.comORNL, a multipurpose research facility managed by UT-Battelle, LLC, for the U.S. Department of Energy is an equal opportunity employer committed to building and maintaining a diverse work force.

Oak Ridge National Laboratory Scientific Applications Support *Group Leader* (50216897)

The Group Leader for Scientific Applications Support in the DOE Center for Computational Sciences is responsible for managing and conducting leading-edge research and application support for the users of high-performance computing (HPC) systems and for performing research on HPC tools and algorithms. Support will cover a wide range of HPC applications, such as climate modeling, astrophysics, materials science, chemistry, and database searching.

The major duties and responsibilities of the position include, but are not limited to, the following:

Develop and lead a successful program in scientific applications research (quality of science, staffing and budget oversight). Interact with the appropriate program offices and other agencies to develop and maintain program funding for basic and applied research. Perform and publish high quality research. Collaborate with application scientists in the Laboratory on advancing the scientific mission of the Laboratory. Take responsibility for personnel management, including but not limited to, creation of personnel performance appraisals and employee development plans. Represent group-level work to review committees and outside non-government bodies as appropriate. Program development and development of new research directions as a basis of continued funding and the overall health of the Group Provide leadership in all areas of ES&H and full implementation of integrated safety management in the Group. Ensure staff compliance with Laboratory policies, standards and procedures and other regulations. Select and retain highly qualified staff, develop capabilities of staff, and ensure that staff is competent, trained and qualified for assigned work. Provide effective and meaningful performance feedback to individual staff members. Ensure that staff are effectively utilized, rewarded and motivated. Support the professional development of staff consistent with Laboratory and individual development plans. Prepare plans and budgets, and manage assigned resources (people equipment, facilities).

Experience and Education Requirements: An advanced degree in computer science (or an equivalent combination of education and experience). Additionally, the position requires five years of directly related research experience with a substantial publications record in HPC research and applications. Requires a demonstrated ability to develop and maintain research programs and substantial programmatic funding. Personnel management skills are essential, along with the ability to communicate effectively verbally and in writing. Knowledge of government laboratory business practices is a plus, specifically within the Department of Energy or related federal departments. Candidates must have a proven capability to work effectively in a team environment.

Inquiries and expressions of interest may be directed to: Staffing

Computing and Computational Sciences Directorate

Oak Ridge National Laboratory

P.O. Box 2008 Oak Ridge, TN 37831-6163

Email: CCSD_Staffing@ornl.gov

Please include the number of the position for which you are applying in the subject line of your email.

Alternatively, interested candidates may contact our search consultant in full confidence:

P.J. O'Hare Executive Search Consultant 2956 Missy Drive NE Marietta, GA 30062-4329 Phone: 404-642-9105

Email: pjosearch@mindspring.com More information about the Oak Ridge National Laboratory is available at http://computing.ornl.gov/ and http://www.ornl.gov

ORNL, a multiprogram research facility managed by UT-Battelle, LLC, for the U.S. Department of Energy, is an equal opportunity employer committed to building and maintaining a diverse work force.

Oak Ridge National Laboratory Large Scale Simulations

Computer Scientists (040281)

The Computer Science and Mathematics Division at the Oak Ridge National Laboratory (ORNL) is the premier division for research in high-performance computing, (continued)

Page 11

computer science and applied mathematics. Basic and applied research programs focus on ultra-scale computation and the scientific applications that require it.

The successful candidate will join an interdisciplinary team of computer scientists, mathematicians and engineers working at the National Leadership Computing Facility (NLCF) on projects of national interest including fusion simulation, nanotechnology modeling, genomics, and computational

Position requires a PhD in computational science or a related discipline with 3-5 years of research experience, or an equivalent combination of education and experience Candidates must have a proven record of research accomplishments, including a strong record of scientific publications. Candidates should have excellent communications and a strong desire to work in a team environment. Project management experience is preferred. Some travel may be required.

Inquiries and expressions of interest may be directed to:

Staffing

Computing and Computational Sciences Directorate

Oak Ridge National Laboratory P.O. Box 2008

Oak Ridge, TN 37831-6163

Email: CCSD_Staffing@ornl.gov

Please include the number of the position for which you are applying in the subject line of your email.

Alternatively, interested candidates may contact our search consultant in full confidence:

P.I. O'Hare Executive Search Consultant 2956 Missy Drive NE Marietta, GA 30062-4329 Phone: 404-642-9105

Email: pjosearch@mindspring.com More information about the Oak Ridge

National Laboratory and the Computer Science and Mathematics Division is available at: www.ornl.gov

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Oak Ridge National Laboratory

Ultrascale Computing Project Manager (50211322)

The basic function of this position is to investigate the architecture of and software systems for high-end computer systems. Areas of interest include microprocessor and interconnect technology, computer systems performance evaluation and simulation, performance modeling and prediction, tools for performance analysis, programming languages, messaging software, emerging programming models, workload characterization, fault-tolerance, operating systems for HPC, and use of advanced statistical methods and machine learning for performance analysis.

Major Duties and Responsibilities:

The successful candidate will analyze architecture and application performance of on-site high performance computers to be located in the DOE's National Leadership Computing Facility (NLCF), create and deploy prototype software, publish results in journals and at conferences, and collaborate with external researchers. Research activities include, but are not limited to: Evaluation of high-performance software systems and testing the effectiveness of supercomputer architectures in solving complex problems in biology, astrophysics and other scientific disciplines. Studying the performance of highperformance computer systems (both vector processing and massively parallel processing) under various workload characteristics through measurement, modeling and simulation Publishing papers in high-quality refereed conferences and journals. Actively collaborating with partner government laboratories, academia, and industry applications developers.

Education, Experience, Skills:

The position requires an advanced degree (PhD preferred) in computer science or one of the computational sciences, with five or more years of recent leading-edge research experience with experimental highperformance computing software and parallel

computer architectures. Requires demonstrated experience in software development on parallel computers using message passing, OpenMP, and Fortran 90, C, or C++, along with expertise in architectures, operating systems, compilers, runtime systems and programming tools.

Candidates must have a proven record of research accomplishments and a strong desire to participate in research efforts in a team environment. Demonstrated experience communicating clearly and concisely both orally and in writing is also needed

The chosen candidate will be required to obtain an L clearance.

Inquiries and expressions of interest may be directed to:

Staffing

Computing and Computational Sciences Directorate

Oak Ridge National Laboratory

P.O. Box 2008

Oak Ridge, TN 37831-6163 Email: CCSD_Staffing@ornl.gov

Please include the number of the position for which you are applying in the subject line of your email.

Alternatively, interested candidates may contact our search consultant in full confidence:

P.J. O'Hare Executive Search Consultant 2956 Missy Drive NE

Marietta, GA 30062-4329 Phone: 404-642-9105 Email: pjosearch@mindspring.com More information about the Oak Ridge

National Laboratory is available at http://computing.ornl.gov/ http://www.ccs.ornl.gov/nlcf/ and http://www.ornl.gov

ORNL, a multiprogram research facility managed by UT-Battelle, LLC, for the U.S Department of Energy, is an equal opportunity employer committed to building and maintaining a diverse work force.

Oak Ridge National Laboratory Systems Analyst (040302)

Basic Function of Position: Research Staff Member to provide technical support skills and program development experience in the Systems Engineering and Technology Group that supports development of fundamental and applied research across ORNL in advanced prototype database concepts. Position will involve developing, enhancing and managing a prototype database in support of Homeland Security. The staff member will work as part of an ORNL multidisciplinary team consisting of hardware, software, database and programming

specialists. Major Duties and Responsibilities: There are multiple requirements for this position. The main responsibility will be to manage, maintain and support database development in a prototype system currently under design. This will include design of conversion codes from any number of formats to SQL for database population purposes. Individual may be required to develop software applications for analytical staff in a number of languages on short notice, help design taxonomies and entity relationships, post information to web portals and verify validity of data population processes.

Experience Education and Skills

Requirements:

Position requires a minimum of a BS in Computational Sciences, Computer Programming or System Engineering with at least three years (preferably five) of experience in a relevant area of database or software development for prototype systems. Candidates should be familiar with both Microsoft and Linux operating systems Requires experience in relational database design and implementation using a relational database management system (RDBMS) such as Microsoft SQL Server, Oracle 9i or 10g. Requires some experience troubleshooting and resolving hardware and/or network problems. Expertise with Veritas or Bru software is a

The candidate should be highly motivated with good communications skills and a desire to work with multidisciplinary teams as well as initiate good research concepts and protocols. Strong problem solving ability under novel and/or less structured environments is highly desirable. Some travel may be required.

The chosen candidate will be required to obtain a O clearance.

Inquiries and expressions of interest may

be directed to: Staffing

> Computing and Computational Sciences Directorate

Oak Ridge National Laboratory

P.O. Box 2008

Oak Ridge, TN 37831-6163 Email: CCSD_Staffing@ornl.gov

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P.J. O'Hare

Executive Search Consultant 2956 Missy Drive NE Marietta, GA 30062-4329 Phone: 404-642-9105

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Oak Ridge National Laboratory Computer Science and Mathematics Division

Visualization Task Leader (50196260) The Computer Science and Mathematics Division of Oak Ridge National Laboratory

(ORNL) seeks a Visualization Task Leader to perform research in advanced visualization and to manage the production PowerWall and reconfigurable CAVE Automatic Virtual Environment facilities.

The successful candidate will be responsible for integrating interdisciplinary teams of computer scientists, applications scientists, mathematicians and engineers in high-end visualization applications; immersive virtual reality; high-end conventionally driven systems; pc-based, cluster-driven systems; collaborative desktop-to-CAVE environments; advanced rendering techniques; and advanced interactive visualization.

The position requires a PhD in computer science or one of the computational sciences (or a closely related discipline) and extensive management and research experience with visualization user facilities. Candidates must have a proven record of research accomplishments, excellent communications, interpersonal and organizational skills and a strong desire to work in a team environment. Experience managing client-vendor-contractor relationships and contracts is required, as is supervisory experience and strong personal motivation. Project management experience is preferred. Hands-on parallel computing and visualization creation experience is desirable.

Inquiries and expressions of interest may be directed to:

Staffing

Computing and Computational Sciences Directorate

Oak Ridge National Laboratory

P.O. Box 2008

Oak Ridge, TN 37831-6163 Email: CCSD_Staffing@ornl.gov

Please include the number of the position for which you are applying in the subject line of your email.

Alternatively, interested candidates may contact our search consultant in full confidence:

P.J. O'Hare

Executive Search Consultant 2956 Missy Drive NE Marietta, GA 30062-4329

Phone: 404-642-9105

Email: pjosearch@mindspring.com More information about the Oak Ridge National Laboratory, the Computer Science and Mathematics Division, and Visualization is available at: http://www.ornl.gov http://www.csm.ornl.gov/ or

http://www.csm.ornl.gov/viz/index.html

ORNL, a multiprogram research facility managed by UT-Battelle, LLC, for the U.S. Department of Energy, is an equal opportunity employer committed to building and maintaining a diverse work force.

Oak Ridge National Laboratory (ORNL)

Center for Computational Sciences, National Leadership-Class Computing Facility Director (50215970)

The Oak Ridge National Laboratory (ORNL) in East Tennessee seeks an outstanding scientist with exceptional leadership experience and skills to serve as the Director of the Center for Computational Sciences (CCS) and the recently announced National Leadership-Class Computing Facility (NLCF), in accordance with recently announced U.S. Department of Energy's Office of Science, Advanced Scientific Computing Research initiatives.

The CCS is the premier organization at ORNL for applied computational sciences, high-performance research systems and intelligent and emerging computational systems. The position reports to the Associate Laboratory Director for Computing and Computational Sciences



Dean of the School of Science & Mathematics

The Citadel invites nominations and applications for the position of Dean of the School of Science and Mathematics and the Bryan S. Traubert Chair in Science and Mathematics. Candidates should possess an earned doctorate and have a strong commitment to promoting teaching and research at a predominantly undergraduate institution. The Dean's primary responsibilities include general administration of the School and oversight of the curricular, budgetary, program and faculty development. The School seeks a proven leader who will provide vision for both the undergraduate and graduate programs. The successful candidate will be expected to facilitate relations with the local community (schools and industry) and the college alumni. The Dean is expected also to engage in enhancing the College through fundraising efforts.

- Earned Doctorate in a basic sciences field or from one of the disciplines included in the School and demonstrated evidence of distinguished teaching, research, and significant scholarly work to qualify for appointment as a tenured
- A proven record of administrative experience in higher education that should include skills in planning, faculty development, and budgeting.
- Strong interpersonal, communication, and decision-making abilities to interact effectively with the public and a commitment to excellence and diversity in the recruitment and retention of students, faculty, and staff.
- Commitment to shared governance and participatory faculty involvement in determining the goals and mission of the College.
- Proven ability to:
- Develop and maintain relationships with external constituencies including alumni, local business, local schools and government agencies.
- Acquire external resources through nationally competitive grants and
- Work effectively and collaboratively with the faculty through shared governance at the departmental and college level.
- Foster teaching, research and professional development of the faculty in a student-centered environment.

Compensation is highly competitive and commensurate with education and experience. Applications should include a statement of educational and leadership philosophy and a vision for the School. The application should also include curriculum vitae; the names, mailing addresses, e-mail addresses, and telephone numbers of at least three references. Send all material to: The Office of Human Resources, The Citadel, 171 Moultrie Street, Charleston, SC 29409. Please reference JA #F04-33CRA. All questions and inquiries should be directed to: Dr. Dennis J. Fallon, Chair of the Search Committee, 843-953-6588. The review of nominations and applications will start on November 15, 2004 and continue until the position is filled. (122649)

The Citadel is an affirmative action/equal opportunity employer, dedicated to multi-cultural diversity in campus and leadership positions.



November 2004 Computing Research News

Professional Opportunities

(http://www.ornl.gov/info/news/cco/ccsfact.

This high-profile position will require managing a base of activities (basic research, applied research, systems, services, engineering, technical development, assessment, etc.) and multidisciplinary research project areas (organized as institutes) that are highly complex and represent a significant portion of the Center's work. The CCS Institutes are an outreach activity, providing an intellectual home and computational infrastructure for community building. The Institutes share common goals for promoting scientific discovery and application. The ideal candidate will have an advanced technical degree with extensive training and experience in the computational sciences. The candidate must also have a proven ability to plan, organize, lead and manage activities of a major organizational unit within a major R&D facility, including a working knowledge of policies and guidelines that relate to administration and management of complex R&D organizations. Candidates must, of course, possess excellent communications skills and a strong desire to work in a team environment.

Inquiries and expressions of interest may be directed to:

Staffing

Computing and Computational Sciences

Directorate Oak Ridge National Laboratory

P.O. Box 2008

Oak Ridge, TN 37831-6163

Email: CCSD_Staffing@ornl.gov Please include the number of the position for which you are applying in the subject line of your email.

Alternatively, interested candidates may contact our search consultant in full confidence:

P.J. O'Hare Executive Search Consultant 2956 Missy Drive NE Marietta, GA 30062-4329 Phone: 404-642-9105

email: pjosearch@mindspring.com More information about the Oak Ridge National Laboratory is available at http://www.ornl.gov.

ORNL, a multiprogram research facility managed by UT-Battelle, LLC, for the U.S. Department of Energy, is an equal opportunity employer committed to building and maintaining a diverse work force

The Ohio State University

Department of Computer Science and Engineering Department Chair

The Department of Computer Science and Engineering at The Ohio State University seeks nominations and applications for the position of Department Chair. Applicants should have an established research reputation in Computer Science and Engineering or a closely related discipline, and possess strong leadership skills and research vision.

The Department of Computer Science and Engineering has a very active research program, with a quadrupling of research funding over the last decade. Current areas of research strength include Artificial Intelligence, Graphics, Networking, Software Engineering, and Systems. The department has a strong emphasis on multi-disciplinary research, including active collaborations with the Ohio Supercomputer Center, Advanced Computing Center for the Arts and Design, Center for Cognitive Science, Department of Electrical and Computer Engineering, Department of Biomedical Informatics, and many other units in the university.

Faculty positions and other resources will be made available to the new Chair to facilitate further growth of the department. Qualified candidates will also be considered for an endowed Professorship.

Applicants are requested to send a curriculum vitae, preferably by e-mail to:

Chair-fsearch@cse.ohio-state.edu

or by mail to:

Chair Search Committee Department of Computer Science and

Engineering

The Ohio State University 2015 Neil Avenue, DL395 Columbus, OH 43210-1277

Review of applications will begin immediately and will continue until the

position is filled. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Applicants from under-represented groups are especially sought.

The Pennsylvania State University

Department of Computer Science and Engineering

Faculty Position Vacancies

Applications are invited for several tenuretrack faculty positions at all ranks. Outstanding candidates in all areas of computer science and engineering will be considered. Areas of particular interest are Software Systems with an emphasis on operating systems, distributed and peer-to-peer systems, and embedded systems; Cryptography; Data Management with a focus on databases; and Compilers and Programming Languages. Applicants with research on trustworthy aspects of these disciplines, for example "trusted computing" will be given preference. Candidates are also sought for interdisciplinary joint positions in the areas of Computational science with a focus on systems for multiscale modeling with applications to bio/nano-materials; VLSI including Analog and Mixed-Mode Circuits; Bioinformatics; and Medical Imaging.

The Department of Computer Science and Engineering (CSE) has 24 collegial, tenuretrack faculty. The undergraduate and Doctoral programs are ranked in the top 20 by the US News and World Report. The university is committed to growing the faculty ranks over the next several years. Eight members of our faculty are recipients of the NSF Career Award. Our faculty also received 7 NSF ITR Grants and a \$2.5M Research Infrastructure Grant in recent years. There are state-of-theart research labs for microsystems design and VLSI, computer vision and robotics, virtual environments, high performance computing, bioinformatics, networking and security. The Department offers a graduate program with about 42 Masters students and 142 Ph.D. students, and undergraduate programs with minimum GPA requirements in computer science and computer engineering. In December, 2003, the Department relocated into a new 100,000 square feet building housing both CSE and IST (http://www.cse.psu.edu/ist.html).

Penn State is a major research university and is ranked second in the nation in industry-sponsored research among universities. 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 the beautiful college town of State College in the center of Pennsylvania. State College has 40,000 inhabitants and offers a variety of cultural and outdoor recreational activities nearby. The university offers outstanding events from collegiate sporting events to fine arts productions. Many major population centers on the east coast (New York, Philadelphia, Pittsburgh, Washington D.C., Baltimore) are only a few hours drive away and convenient air services to several major hubs are operated by three major airlines out of State College

Applicants should hold a Ph.D. in computer science, computer engineering, or a closely related field and should be committed to excellence in both research and teaching. Support will be provided to the successful applicants for establishing their research programs. We encourage dual career couples to apply. Applications should be received by January 31, 2005 to receive full consideration. To apply by electronic mail, send your resume (including curriculum vitae and the names and addresses of at least three references) as a postscript file or pdf file to recruiting@cse.psu.edu. Applications may also be sent by mail to:

Chair, Faculty Search Committee The Pennsylvania State University Department of Computer Science and Engineering 111 Information Sciences and Technology

Building, 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. Click on the link to fill out and print an Affirmative Action Applicant Data Card. NOTE: This will require you to have Adobe Acrobat Reader 4.0 or better to download this form and fill it in prior to printing it. This form can then be faxed to Beth Kennedy at 814-865-3176.

Pomona College

Computer science Department Associate Professor or Professor

Senior appointment in computer science, associate professor or professor, to begin July, 2005. Teaching load equivalent to four courses

Pomona College, founding member of the

Claremont Colleges, is a highly selective liberal arts college attracting a diverse, national student body. Send letter of application, detailed cv, names of three references (one evaluating teaching), and description of research accomplishments and plans to:

Search Committee Computer Science Program Pomona College 610 North College Avenue Claremont, California 91711-6348 Further information from:

www.cs.pomona.edu/search05.html. Applications received by January 10, 2005,

will receive full consideration. Pomona College is an equal opportunity employer and strongly encourages applications from women and members of underrepresented groups.

Princeton University

Council on Science and Technology Postdoctoral Teaching Fellowships (http://www.princeton.edu/~stcweb)

The Council on Science and Technology at Princeton University solicits applicants to its Postdoctoral Research-Teaching Fellowship Program. The program seeks outstanding scientists at the cutting edge of their research field, who are also committed to excellence in undergraduate teaching. Support will be provided for up to three years of research and teaching. The fellows will be involved in Princeton's undergraduate teaching program and will conduct research with a Princeton University science or engineering faculty

Applications are currently being accepted for fall 2005. The application deadline is December 1, 2004. Interviews of the top candidates will be conducted at Princeton during the week of January 10, 2005.

Princeton University is an equal opportunity/affirmative action employer. Eligibility requirements, applications and other information can be found on the Council's Website above.

Carol Prevost Associate Director of the Council on Science and Technology 5 Peyton Hall Princeton University Princeton, NJ 08544 Tel.: 609-258-4316, Fax: 609-258-1020 Email: cprevost@princeton.edu

Purdue University

School of Electrical and Computer Engineering Faculty Positions

The School of Electrical and Computer Engineering at Purdue University invites applications for faculty positions across the breadth of computer science/engineering at all levels.

The Computer Engineering Area of the school (http://engineering.purdue.edu/ECE/Research/ Areas/CompEngr) has nineteen faculty members who have active research programs in areas including: AI, architecture, compilers, distributed systems, graphics, haptics, HCI, machine learning, machine vision, multimedia systems, networking, NLP, OS, security, software engineering, and speech processing. We will consider outstanding applicants in any area of computer science/engineering. We require a PhD in computer science/engineering or a related field and a significant demonstrated research record

applied for. Applications should consist of a cover letter, a cv, a research statement, names and contact information for five references, and URLs for three to five papers. Applications, in the form of a single attached PDF file, and inquiries can be sent to:

commensurate with the level of position

compengr@ecn.purdue.edu.

Applications will be considered as they are received, but for full consideration should arrive by 1 January 2005.

Purdue University is an equal access, equal opportunity, affirmative action employer.

Purdue University

Department of Computer Sciences

Tenure-track Positions The Department of Computer Sciences at Purdue University invites applications for tenure-track positions beginning August 2005. 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. Of particular interest are candidates in the areas of programming languages and compilers, software engineering, operating systems, data mining, and bioinformatics.

The department also plans to fill, in a school-wide effort, a number of computer science faculty positions in multidisciplinary areas. Within this effort, the department seeks to fill positions in the areas of bioinformatics, data mining, graphics and visualization, as well as all aspects of computational science/nanoscience. Applicants in these fields should address the multidisciplinary contributions of their work in their research statement. For more information see http://www.science.purdue.edu/COALESCE/.

The Department of Computer Sciences offers a stimulating and nurturing academic environment. Forty-one faculty member direct research programs in analysis of algorithms, bioinformatics, databases, distributed and parallel computing, graphics and visualization, information security, networking, programming languages and compilers, scientific computing, and software engineering. The department is implementing a strategic plan for future growth supported by the higher administration. This plan includes a new building expected to be operational in 2006 to accommodate 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, 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. Applicants are strongly encouraged to apply electronically by sending a detailed curriculum vitae, research and teaching statements, and names and contact information of at least three references in PDF to fac-search@cs.purdue. edu. Hard copy applications can be sent to:

Faculty Search Committee Chair 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.

Purdue University is an Equal Opportunity/Equal Access/Affirmative Action employer.

San Francisco State University Computer Science Department Assistant Professor

The Department of Computer Science invites applications for a tenure-track position at the Assistant Professor level. We are especially interested in expertise in areas related to Software Engineering, large-scale open software development, embedded systems, sensor networks, collaborative technologies, security, and multimedia. Other areas will also be considered. We are looking for a candidate who can teach a range of core courses, can direct Masters student projects and theses, and can collaborate across department and discipline boundaries to produce high-quality research. Industrial and practical experience, including a track record in applied research, is a plus. The position begins Fall semester 2005

San Francisco State University, a member of the California State University system serves a diverse student body of 27,000 undergraduate and graduate students. The mission of the University is to promote scholarship, freedom, human diversity, excellence in instruction, and intellectual accomplishment. San Francisco State University faculty are expected to be effective teachers and demonstrate professional achievement and growth through continued research, publications, and/or creative activities.

The campus is located in beautiful San Francisco in close proximity to the major universities and high-tech companies of the Bay Area. The Department of Computer Science serves about 1000 students (approximately 150 at the graduate level). We offer an ABET-accredited undergraduate program and a new Master of Science program. We are creating centers of excellence in Computing for Life Sciences, Global Software Engineering, Multimedia and HCI. An integral part of our graduate program involves collaboration with other departments within the University (such as Biology) and with local industry. For more information about the position and the department, please visit our website at: http://cs.sfsu.edu.

The successful candidate should have a Ph.D. in Computer Science or equivalent, and will be expected to teach courses at the graduate and undergraduate levels, to maintain an active record of funded research, to participate in the development of the centers of excellence, and to provide service to the campus and the community.

(continued)

Interested candidates should send curriculum vitae, statements of research and teaching interests, and copies of three representative publications to:

Chair, Hiring Committee Computer Science Department San Francisco State University 1600 Holloway Avenue San Francisco, CA 94132 or e-mail all the material to hiring@cs.sfsu.edu. Candidates should also arrange

Candidates should also arrange to have at least three letters of recommendation sent to the same address. Application deadline is January 10, 2005.

SFSU is an Affirmative Action/ Equal Opportunity Employer; women and minorities are strongly encouraged to apply.

Southern Illinois University Carbondale

Computer Science Faculty Positions

Applications are invited for up to two tenure-track faculty positions at the Assistant Professor or Associate Professor level. The positions will begin on August 16, 2005.

Basic requirements include a Ph.D. in computer science or related field by date of hire, evidence of ongoing and future research, and teaching competency in a reasonable number of computer science subjects at both the undergraduate and graduate levels. Applicants with a research specialty in any area of computer science will be considered. Associate Professor position applicants should have at least six (6) years of university-level teaching and research experience, and should have an excellent record of publication and external funding.

Review of completed applications will begin on January 17, 2005 and continue until the position is filled. Applicants should send a letter of interest, curriculum vitae, and have at least three of your references send their recommendation letters directly to:

Faculty Search Committee
Department of Computer Science
Faner 2125 Mailcode 4511
Southern Illinois University
Carbondale IL 62901-4511
For more information about the
Department of Computer Science, visit our
web site at http://www.cs.siu.edu. Questions

may be directed to the Faculty Search

Committee, via georgia@cs.siu.edu.

SIUC is an affirmative action/equal opportunity employer that strives to enhance its ability to develop a diverse faculty and staff and to increase its potential to serve a diverse student population. All applications are welcome and encouraged and will receive consideration.

Stanford University

Departments of Electrical Engineering and Computer Science Faculty Openings

The Departments of Electrical Engineering and Computer Science at Stanford University invite applications for a tenure-track faculty positions at the junior level (Assistant or untenured Associate Professor). We are conducting three searches, with the following themes. In general we give higher priority to the overall originality and promise of the candidate's work than to the sub-area of specialization. The appointments may be in one, or both departments, or could be joint with other Engineering departments if appropriate.

We are seeking applicants interested in creating the complex systems that are of growing importance in almost all areas of EE and CS research, ranging from applications such as the creation of more robust and secure networks and distributed systems to systems for extracting useful information from new interfaces to the physical world. Areas of interest include but are not limited to networking, distributed systems, embedded systems, information management, operating systems, and compilers.

We are seeking applicants knowledgeable in some aspect of sensor networks, e.g., applicants with interest in gathering and interpreting information from large numbers of possibly dispersed sensors, or applicants who design and build sensors for networked applications. We expect candidates to have experience in one or more of the following areas: signal processing, sensor design, graphics and vision, networking and protocols, data bases and information management, security, distributed algorithms, or other areas related to sensor networks. We are also interested in candidates with expertise in applications that may use sensor networks, such as health care, transportation, and environmental science.

We are seeking applicants from all areas of Computer Science, including Foundations, Artificial Intelligence, Graphics, Databases, Systems, Human Computer Interaction, and Networking. We are also interested in applicants doing research at new frontiers in computer science, for example biological computing, bio-informatics, computation and the arts, and computational economics.

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

Applications should include a curriculum vitae, brief statements of research and teaching interests, and the names of at least four references. Candidates are requested to ask references to send their letters directly to the search committee. Applications and letters should be sent to:

Search Committee Chair c/o Laura Kenny-Carlson Stanford University Gates Hall 278 Stanford, CA 94305-9025 or via electronic mail to search@cs.stanford.edu.

The review of applications will begin on January 3, 2005, and applicants are strongly encouraged to submit applications by that date; however, applications will continue to be accepted until February 1, 2005.

Stanford University is an equal opportunity, affirmative action employer.

Texas A&M University-Corpus Christi

College of Science & Technology *Tenure-track positions*

Texas A&M University-Corpus Christi, the Island University, located on the sunny South Texas coast, is seeking applicants for tenure-track faculty positions in computer science at the Assistant Professor to Professor levels.

TAMU-CC is the fastest growing university in Texas, and has been ranked the top public regional university in Texas two years in a row by U.S. News & World Report. The Department of Computing and Mathematical Sciences currently offers academic programs in computer science (BS, MS) that strongly emphasize the application of computing.

We are planning to offer a Ph.D. in Applied Computing with an emphasis in environmental applications. Thus, for the senior-level position we are seeking an individual with research interests compatible with the research direction of the department who has experience in advising Ph.D. students. The successful candidate will have the opportunity to play a major role in planning and developing our new Ph.D. program. For the junior-level positions we are also seeking individuals with research interests compatible with the research direction of the department. A Ph.D. in computer science or closely related area is required.

Applicants should send a letter of application, a curriculum vitae, unofficial copies of graduate transcripts, and arrange to have three letters of recommendation sent to:

College of Science & Technology ATTN: Ken Brown, Administrative Assistant

Texas A&M University-Corpus Christi 6300 Ocean Drive (FC-179) Corpus Christi, TX 78412

The positions are available Fall 2005. Applicants are encouraged to submit applications by March 1, 2005.

TAMU-CC is an Equal Opportunity Employer committed to diversity. http://www.tamucc.edu

Texas State University, San Marcos

Department of Computer Science Tenure-track positions

Applications are invited for two assistant professor level tenure-track positions to begin Fall 2005. Although candidates from all areas of Computer Science and Computer Engineering will be considered, preference will be given to candidates in the areas of Computer Architecture and Security. Applicants must have an earned doctorate in Computer Science or Computer Engineering or an equivalent degree. A commitment to excellence in teaching, research and service is

The Department of Computer Science has 21 faculty members, 485 undergraduate majors and 249 graduate students in Computer

Science and Software Engineering. The Bachelor of Science program in Computer Science is accredited by the ABET. We have a thriving master's program and the Ph.D. program proposal is in process.

For further details and application directions, visit our website at: www.cs.txstate.edu/recruitment or

contact: hiring2005@cs.txstate.edu
Texas State is an Equal Opportunity,
Affirmative Action employer. Texas State is
committed to increasing the number of
women and minorities in faculty and
administrative positions.

Tufts University

Computer Science Department Faculty Positions

The Department of Computer Science at Tufts University invites applications for a tenure-track faculty position to commence in Summer or Fall 2005. We seek outstanding candidates in all applied areas of computer science, and especially welcome candidates with research and teaching interests in software engineering, embedded systems, operating systems, networking, and compilers. Located just three miles from Boston, the Tufts CS department offers the BA, BS, masters and PhD degrees. We are part of the Tufts Engineering school which has recently entered an exciting growth phase. For more information about the department, this position, and instructions on how to apply, please visit:

http://www.cs.tufts.edu/facultysearch05/ Screening of applications will begin December 1, 2004, and continue until the position is filled; all applications received by February 1, 2005 are assured of full consideration.

Tufts University is an Affirmative Action/Equal Opportunity Employer. We are committed to increasing the diversity of our faculty. Members of underrepresented groups are strongly encouraged to apply.

University at Buffalo, The State University of New York

Computer Science and Engineering Department Faculty Positions

The Department of Computer Science and Engineering (CSE) has faculty openings at all levels. We seek excellent candidates in all core areas of CSE. Of special interest are applicants in biometrics, databases, security and bioinformatics.

The CSE faculty are affiliated with the world-class Center for Computational Research, the Center of Excellence in Document Analysis and Recognition, the Center of Excellence in Bioinformatics, the NSA Center of Excellence for Information Assurance, the Center for Cognitive Science, Center for Unified Biometrics and Sensors, and the National Center for Geographic Information and Analysis. The faculty include AAAI, ACM, and IEEE Fellows and several award winners. The faculty are active in research and have generated \$9 million external funding in the last one year.

Junior candidates are expected to have a Ph.D. in Computer Science/Engineering or related field by August 2005, with a good publication record and potential for developing an externally funded research program. Senior candidates are expected to have an excellent record of publications and funded research as well as international stature commensurate with rank.

All applications should include a cover letter, curriculum vitae, and the names of at least three references; applicants for senior positions should have five references. In addition, all applicants should have letters of reference sent to the address below. The due date for applications and letters of reference is January 15, 2005.

Address for correspondence: Chair, Faculty Search Committee Department of Computer Science and Engineering 201 Bell Hall University at Buffalo

Buffalo, NY 14260-2000 Email: cse-search@cse.buffalo.edu For more information about the

department, the university, the city of Buffalo and Western New York, please visit our website, http://www.cse.buffalo.edu. The University at Buffalo is an Equal

Opportunity Employer/Recruiter.

The University of Alabama Department of Computer Science Tenure-track position

University of Alabama, Department of Computer Science, invites applications for a tenure-track faculty position at the Assistant Professor level to begin August 16, 2005.

Candidates must have an earned Ph.D. in

computer science or a related field, with an evidence of research potential, commitment to teaching, and willingness to participate in the Department's graduate and undergraduate programs. Applicants from all areas of computer science will be considered. Those who specialize in software engineering, database systems, operating systems, or networking are particularly encouraged to apply.

The Department of Computer Science currently has 20 faculty (14 tenured/tenure-track), over 350 undergraduates in a CSAB-accredited B.S. degree, and over 50 M.S. and Ph.D. students. Areas of current research emphasis include algorithms, artificial intelligence, database systems, human-computer interface, networking, operating systems, programming languages, and software engineering. The University of Alabama is a charter member of Internet2. Outstanding applicants should send a curriculum vitae and the names and addresses of at least three references to:

Dr. Susan Vrbsky, Chair Computer Science Search Committee Department of Computer Science Box 870290

The University of Alabama Tuscaloosa, AL 35487-0290

For additional information, please visit http://cs.ua.edu, or contact Susan Vrbsky at vrbsky@cs.ua.edu.

Review of applications will begin January 10, 2005 and will continue until the position is filled.

The University of Alabama is an equal opportunity/affirmative action employer. Women and minorities are particularly encouraged to apply.

The University of Arizona

College of Science
Department of Computer Science
http://www.cs.arizona.edu
Assistant Professor, Associate or
Professor

Applications are invited for multiple tenure-track faculty positions at the rank of Assistant Professor, Associate Professor, or Professor. Candidates must hold a doctorate in computer science or related field, have a commitment to excellence in teaching, and demonstrated excellence in research appropriate to the candidate's rank. The department is committed to hiring in networks and systems. Applications from exceptional candidates in other areas will also be considered.

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. Major funding has included four 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, computer vision, and computational biology.

For full details and to apply, submit an online application for Job# 31504 at: http://www.hr.arizona.edu.

Be prepared to attach a curriculum vitae and the names of at least three references.

Review of applications will begin January 15, 2005 and continue until the position is filled.

As an equal opportunity and affirmative action employer, the University of Arizona recognizes the power of a diverse community and encourages applications from individuals with varied experiences, perspectives, and backgrounds. M/W/D/V

The University of Arizona

Department of Computer Science Faculty Position in Bioinformatics Assistant, Associate or Full Professor http://www.cs.arizona.edu

Applications are invited for a tenure-track faculty position in the Department of Computer Science at the rank of Assistant, Associate, or Full Professor starting August 2005. Candidates must hold a doctorate in computer science or a related field, be committed to excellence in teaching, and demonstrate excellence in bioinformatics research.

The position is associated with the University of Arizona's *BIO5 Institute* http://bio5.org. The Institute, to be housed in a new building under construction, is one of the highest-priority initiatives for the University, integrating research across the five disciplines of Science and Engineering, Agriculture, Medicine, and Pharmacy. This position is the first of several hires planned in bioinformatics.

The ideal candidate would apply expertise in computer science (such as algorithms,

machine learning, or data mining) to important problems in computational biology, and have a strong interest in interfacing with researchers in the BIO5 Institute.

To apply, submit an online application for Job # 31560 at http://www.hr.arizona.edu. Applicants should attach or mail a curriculum vitae, copies of representative publications, research and teaching statements, and the names of four references.

Review of applications will begin January 15, 2005 and continue until the position is filled. As an equal opportunity and affirmative action employer, the University of Arizona recognizes the power of a diverse community and encourages applications from individuals with varied experiences, perspectives, and backgrounds. M/W/D/V

University of California, Berkeley Computational Biology Department Faculty Position #949

The University of California, Berkeley invites applications for a position in the area of computational biology at the assistant (tenure track), associate or full professor level starting July 1, 2005 (appointment subject to budgetary approval). The University has committed to establishing Berkeley as the premier institution for education, training and research in Computational Biology, with numerous inter-campus research activities, full integration between multiple UC campuses through QB3, and relevant programs at the Lawrence Berkeley National Laboratory (LBNL) and the Joint Genome Institute (JGI). The position is associated with the newly created Center for Computational Biology along with a primary appointment in a traditional department, tailored to the individual, among Bioengineering, Biology (Molecular and Cell, Plant and Microbial, Integrative), Biostatistics (Public Health), Electrical Engineering and Computer Science (Engineering), College of Natural Resources, Mathematics, or Statistics, creating an exceptional environment for both research and training in this rapidly growing field. The successful candidate will have a unique opportunity to provide intellectual and technological leadership in computational biology and facilitate programmatic interactions across the University of California system.

Applicants should have (or be about to receive) a doctoral degree or equivalent in a quantitative field from one of the above departments, and a research focus in the broad area of computational biology. Specialized areas may include, but are not limited to:

- Statistical learning: methodology, algorithms and computing
- Biological inference from heterogeneous data sources, e.g. nucleotide and protein sequences, microarray data, SNPs,
- evolutionary processes, etc
 Methods and algorithms for mathematical/biophysical modeling of proteins, molecular machines, and cells

We seek individuals with demonstrated excellence in research, and the potential for excellence in teaching and leadership. Successful applicants will be expected to establish a pre-eminent research and educational program, and develop and teach courses in appropriate areas of the computational sciences.

Applicants should send a complete curriculum vitae, a selection of publication reprints (five or less), a brief statement of future research plans and teaching interests, and the names of at least three references to:

Professor Mark van der Laan Center for Computational Biology University of California, Berkeley 227 Hildebrand Hall Berkeley, CA 94720-3220

The review of applications will commence on December 1, 2004; all applications must be received by March 1, 2005 for consideration in this year's recruitment cycle.

The University of California is an equal opportunity affirmative action employer, committed to excellence through diversity.

University of California, Berkeley Electrical Engineering and Computer Sciences Assistant Professor

University of California, Berkeley announces several approved tenure-track positions in Electrical Engineering and Computer Sciences at level, beginning Fall 2005, subject to budgetary approval. We will also consider the possibility of joint searches with other Berkeley departments. Applicants should have (or be about to receive) Ph.D. in Computer Science, Electrical Engineering, Computer Engineering, or a related field. A principal requirement is demonstrated excellence in research; potential for excellence in teaching and leadership are important requirements. Successful applicants

will be expected to establish a quality research program and teach both graduate and undergraduate courses in their general area of specialty.

Interested persons should send an application consisting of a resume, a one- to two-page statement of their future research and teaching interests/plans, a select subset of publications, and the names of three references you have asked to send recommendations. We will not consider applications received after March 1, 2005. However, review of completed applications will begin December 15, 2004.

Recommendation writers should send letters directly to the appropriate address below, to arrive before January 1, 2005. Reference letters will NOT be requested directly by the department.

Send Computer Science applications to: Debra Zaller

CS Academic Personnel 381 Soda Hall EECS Department UC Berkeley, CA 94720-1776

Send Electrical Engineering applications

Jean Richter
EE Academic Personnel
231 Cory Hall
EECS Department UC
Berkeley CA 94720-1770
University of California is an Equal
Opportunity, Affirmative Action Employer.

University of California at Davis Department of Statistics

Tenure-track position

One tenure-track Assistant Professor position beginning July 1, 2005. Requires Ph.D. in Statistics or related field and demonstrated potential for outstanding teaching and research in Computational Statistics

Send vitae, at least three letters of reference, statement of research interests, reprints/preprints, and transcripts (Ph.D. in 2003 or later) by 12/1/04 to:

Search Committee Chair Dept. of Statistics University of California Davis, CA 95616 All email to: search@wald.

All email to: search@wald.ucdavis.edu. Affirmative action/equal opportunity nployer.

University of California, Riverside Marlan and Rosemary Bourns College of

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 2005-2006 academic year.

Applicants must have a Ph.D. in Computer Science or in a closely related field. Areas of particular interest include: software engineering/programming languages, computational science and engineering computer systems and graphics and visualization, but applications are welcome in all areas of Computer Science and Engineering. Emphasis will be given to candidates at the Associate and Full Professor levels. 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 ten-campus University of California System, widely regarded as the most distinguished system of public higher education in the United States. The Campus- and College-wide expansion programs include a new state-ofthe-art building soon to house the CSE and EE departments. Annual research expenditures in the College are close to \$352K/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 951-827-5639 or by e-mail to: search@cs.ucr.edu

or by e-mail to: search@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 24, 2005. Early applications are encouraged, however, late applications will be considered until the positions are filled.

The University of California, Riverside is an Equal-Opportunity/Affirmative-Action Employer.

University of California, Santa Cruz

Computer Science Department Assistant Professor and/or Associate/Full Professor

The UCSC Computer Science Department welcomes outstanding applicants for the following tenure-track and tenured faculty positions within the rapidly growing Baskin School of Engineering:

Assistant Professor

Concentration: Computer Systems, Storage, Database Systems Position #: 582-05 Assistant Professor, or (Tenured)

Associate/Full Professor
Concentration: Machine/Comp Learning

Position #: 710-05, 710T-05
Visit http://www.soe.ucsc.edu/jobs/faculty
for detailed job descriptions and application
instructions. Please refer to the position
number in all correspondence and materials.
Full consideration for applications arriving by
January 10, 2005.

UCSC is an EEO/AA/IRCA employer.

University of Central Florida

The School of Computer Science in the College of Engineering & Computer Science Faculty Positions

UCF Computer Science is looking for talented faculty in all areas of specialization. We expect to fill over 10 faculty lines in the next few years, and seek outstanding candidates for tenured and tenure-track faculty positions at all levels for appointments in 2005. We are particularly interested in candidates with research interests in artificial intelligence, bioinformatics, compilers, computer architecture, computer graphics, computer vision, database and information systems, mobile systems, multimedia applications, networking, operating systems,

parallel and distributed computing, performance evaluation, quantum computing, and security/cryptography.

We offer competitive salary and start-up packages and our faculty enjoy generous benefits. New faculty have graduate student support and significantly reduced teaching loads. Special senior-level positions are available to exceptionally qualified individuals, and we welcome candidacies from coordinated groups of faculty. In the past five years, nine distinguished faculty have joined UCF Computer Science, and we seek to add to the growing strength of our program.

Applicants should have a Ph.D. and a strong commitment to the academic process, including teaching, scholarly publications, and sponsored research. Candidates at the Associate or Full Professor level should have demonstrated leadership in their fields at the national/international level. Those applying for Assistant Professorships should have a track record of high quality publications, and be recognized for their potential.

UCF Computer Science is the oldest Ph.D. granting CS program in the state of Florida. We have a rapidly growing educational and research program with over \$2.8MM in annual expenditures from grants and contracts, with over 300 graduate students and 850 undergraduate CS majors. In addition, we offer a B.S. degree in Information Technology (IT), with over 400 undergraduate majors. We also encourage faculty candidates for the IT program to respond to this ad. The University is strongly committed to continue the buildup of strength in CS, with significant special monetary support dedicated to maintain and expand the excellence of the School of Computer Science.

Our Federal research sponsors include NSF, NASA, and the Department of Transportation, as well as ARO, ONR, PEOSTRI, RDECOM, and other agencies of the Department of Defense. We enjoy the support of numerous industrial sponsors including established companies such as Adaptec, ATI, Boeing, Canon, Electronic Arts, Harris, Honeywell, IBM, Imagesoft, Intel, Lockheed Martin, Lucent, Oracle, Schwartz Electro-Optics, and Sun Microsystems as well as local hi-tech start-ups.

(continued)

TENURE-TRACK FACULTY POSITIONS All Levels Ref: APW#1

Located in the Finger Lakes region of New York State, Cornell University is committed to creating a more diverse and inclusive campus in which to work, study, teach and serve.

Applications are invited for tenure-track positions. Depending on experience, available positions are at the assistant, associate, or full professor level. Applicants must possess a Ph.D. in computer science or in a closely related field. The department requires demonstrated research accomplishment at the highest level as well as outstanding teaching ability and leadership qualities. We are part of a new administrative structure on campus that promotes interdisciplinary research and teaching in the computing and information sciences. Candidates must be enthusiastic about the central role that computer science can play on the campus of a large research university.

The Department of Computer Science at Cornell University encompasses a wide range of research areas, including artificial intelligence, concurrency and distributed computing, databases, algorithms, information organization and retrieval, applied logic and semantics, numerical analysis and scientific computing, theory of computation, programming languages and methodology, computer vision, computational biology, graphics, theory, networks, operating systems, and natural language processing. Although we are especially interested in programming languages, theory of computation, systems, databases and computational biology, outstanding applicants in all areas of computer science will be considered.

RESEARCH

Also available: Research Associate positions Ref: RESW#3

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

The Department is administered by the Office of Computing and Information Science (CIS), a larger unit that can co-sponsor faculty positions in the Faculty of Computing and Information Science (CIS) with any department on campus. Applications that are not appropriate for the Department of Computer Science will automatically be evaluated in this larger context by the CIS. In particular, there is a campus-wide initiative in information science that involves the Departments of Communication, Economics, Science & Technology Studies, and the School of Operations Research & Industrial Engineering. CIS and the College of Architecture, Art, and Planning are also interested in Digital Arts and Graphics.



Further information about the department and the Faculty of Computing and Information Science is available on the World Wide Web at http://www.cs.cornell.edu and http://www.cis.cornell.edu/

Cornell University is an equal opportunity, affirmative action employer and educator.

Applications from women and minorities are encouraged.

http://chronicle.com/jobs/profiles/2377.htm

UCF has over 43,000 students and is among the nation's fastest growing universities. We are located in Orlando, FL at the center of the I-4 High Tech Corridor with a thriving industrial base in telecommunications, computer systems, semiconductors, defense and space, lasers, simulation and software, and the world renowned entertainment industry. The Orlando metropolitan area enjoys an exceptional climate with rapid access to the Atlantic seashore and the Gulf of Mexico. Because of the presence of major theme parks such as Disney World, Sea World and Universal Studios, we benefit from a major airport with numerous direct international and national connections. Orlando is also a major center for national and international technical conferences

Please send applications electronically (PDF format is preferred) to:

cs-positions@cs.ucf.edu.

Applications should include a cover letter clearly indicating their primary research area, a detailed CV, a Research Statement, a Teaching Statement, and five names of references. Screening begins upon receipt of application. Applications will be accepted until all positions are filled. Alternatively, though not preferred, hardcopy applications may be sent to:

Chair, Computer Science Search Committee

School of Computer Science University of Central Florida Orlando, FL 32816-2362

The University of Central Florida is an Equal Opportunity/Affirmative Action employer. Women and minorities are particularly encouraged to apply. As an agency of the State of Florida, UCF makes all application materials and selection procedures available for public review

The University of Chicago Department of Computer Science Faculty Positions

The Department of Computer Science at the University of Chicago is recruiting faculty at the junior level. The Department is particularly interested in candidates in networking and distributed systems, but exceptionally qualified candidates in other areas will be considered. The University of Chicago has the highest standards for scholarship and faculty quality, and encourages collaboration across disciplines. The Computer Science Department's charge and goal is substantial growth through appoint ments that will enhance the quality and prestige of our University. The Chicago metropolitan area provides a diverse and exciting environment. The local economy is vigorous, with international stature in banking, trade, commerce, manufacturing, and transportation, while the cultural scene includes diverse cultures, vibrant theater, world-renowned symphony, opera, jazz, and blues. The University is located in Hyde Park, a pleasant Chicago neighborhood on the Lake Michigan shore

Please send nominations or applications

Professor David B. MacQueen, Chairman Department of Computer Science The University of Chicago 1100 E. 58th Street, Ryerson Hall Chicago, IL. 60637-1581 or to recruit@cs.uchicago.edu

(attachments in pdf, postscript, or Word). Please quote ref. # 68326

Complete applications consist of (a) a curriculum vitae, including a list of publications and citizenship information, (b) three letters of reference (including one, which addresses teaching ability), (c) a research and teaching statement, discussing both past research and future plans. Applicants must have completed, or will soon complete, a doctorate. Applications must arrive by January 31, 2005.

The University of Chicago is an equal opportunity/affirmative action employer.

University of Connecticut Computer Science & Engineering Tenure-track Faculty Openings

The Department of Computer Science & Engineering (CSE) seeks outstanding candidates for two tenure-track assistant or associate professor positions starting in fall 2005. Applicants must have a Ph.D. by June 30, 2005.

The first position (Search # 04A419) is for our computer engineering program, with research interests sought in computer architecture, digital system design and testing, hardware-software co-design, operating systems, real-time and embedded systems, and other related areas.

The second position (Search # 05A155) is for our computer science & engineering and

computer science programs, with research interests sought to supplement and complement our current strengths in artificial intelligence, bioinformatics, databases graphics, parallel/distributed computing, programming languages/compilers, security, software/performance engineering, and theory/algorithms.

The CSE Department has 19 faculty, and $350\ undergraduate$ and $100\ graduate$ students. The University of Connecticut is the flagship graduate degree-granting institution in Connecticut ranked as the number one public university in New England by U.S. News & World Report. For further information please see http://www.cse.uconn.edu.

Email your application (indicate Search # 04A419 or Search # 05A155 in the email header) consisting of a resume including a full publication list, names of at least three references, and separate statements of research and teaching interests to:

cse_search@ansible.engr.uconn.edu. To expedite the selection process, we request that the reference letters be emailed to us at the time of application. Review of applications will proceed on their arrival and continue until the positions are filled. UConn is an EEOE

University of Illinois at Urbana-Champaign

Department of Computer Science Tenure Track Faculty Position http://www.cs.uiuc.edu Search 9427

The Department of Computer Science, UIUC, invites applications for full-time tenure-track and tenured professors. All areas of computer science research will be considered, including, in particular, bioinformatics, computational science, HCI and social computing, security, software engineering, and theory and algorithms. Candidates working in interdisciplinary areas are strongly encouraged to apply.

Tenure-track applicants must have demonstrated excellence in research; tenured applicants must have recognized national and international stature.

Computer Science at Illinois is internationally recognized for its breadth and depth of research and has strong collaborative relations with many other departments and institutes on campus. The department is targeted to grow aggressively to over 60 faculty; it has recently moved into the newly completed Thomas M. Siebel Center for Computer Science, a large, technologically advanced facility that provides outstanding support to research and education in Computer Science and is used by the department as a living lab.

Successful candidates must initiate and conduct independent research and perform academic duties associated with our BS, MS, and PhD programs. Qualifications: PhD in Computer Science or a closely related field (or imminent completion of degree), outstanding academic credentials, and the ability to teach effectively at both the graduate and undergraduate levels. Starting date: August 16, 2005. The salary is open, based on qualifications.

To ensure full consideration, applications must be received by January 7, 2005. Early applications are strongly encouraged. Interviews may take place during the application period, but a final decision will not be made until ad closing.

Applicants should submit online an application letter, curriculum vitae, and statement of career objectives to www.cs.edu/employment/faculty.html. If you have questions or are unable to apply using this URL, please send email to: admin@cs.uiuc.edu for further instructions.

The University of Illinois is an Affirmative Action, Equal Opportunity Employer.

The University of Iowa

Computer Science Department Faculty Positions, Fall 2005

The University of Iowa Computer Science Department is soliciting applications for two tenure-track positions commencing August 2005. Tenured appointments are also possible.

Applications from all areas of computer science are invited, including applied algorithms, databases, graphics/HCI, informatics, programming languages, security, and systems. The department is committed to growth in research in emerging and interdisciplinary areas of computer science, especially in connection with our highly regarded programs in the health sciences. More emphasis will be placed on innovation and promise of the candidate's scholarship than on specific area.

The University of Iowa is a major national research university of about 30,000 students with a tradition of fostering interdisciplinary

research and scholarship. Candidates must hold a PhD in computer science or closely related discipline. Competitive salary and benefits are offered; applications received by January 15, 2005, are assured of full consideration.

For more information, visit http://www.cs.uiowa.edu/hiring. Applications may be completed online or send a CV, research statement, and three letters of recommendation to:

cs_hiring@cs.uiowa.edu.

The University of Iowa is an affirmative action/equal opportunity employer. Women, minorities and individuals with disabilities are encouraged to apply.

University of Maryland, Baltimore County

An Honors University in Maryland Information Systems Department Tenure-track position

The Information Systems Department invites applications for a tenure-track faculty position at the Assistant Professor level.

The Department is multi-disciplinary, placing a strong emphasis on the application of information systems. We are particularly interested in candidates with research expertise in the area of Decision Support Systems including, but not limited to, the following areas of specialization: Collaborative Agents, DSS Analysis and Design, Decision Theory, Intelligent DSS, Management Science, Supply Chain Management, and Web-based DSS. Outstanding candidates in other areas, including Database or Data Mining, will also be considered. An interest in teaching management information systems, emphasizing the application and management of information and information technology in organizations to meet strategic and tactical objectives, is also desired. Candidates must have an earned PhD in a relevant area. Nontraditional candidates with significant industrial or governmental background are encouraged to apply. All candidates must show strong potential for excellence in research and teaching in an academic environment.

The Department offers a wide variety of courses at the Bachelors, Masters, and Doctoral levels, has one of the highest IS enrollments in the USA, and offers the only PhD in Information Systems in Maryland. Further details on research, programs, and the faculty may be found at http://www.is.umbc.edu/. Consistent with the UMBC vision, the Department has excellent technical support and teaching facilities as well as outstanding laboratory space and state of the art technology. UMBC's Technology Center, Research Park, and Center for Entrepreneurship are major indicators of active research and outreach.

Interested applicants should send a cover letter, a one-page statement of teaching interests, a one-page statement of research interests, and a curriculum vitae and have three letters of recommendation sent to:

Dr. Andrew Sears Chair of Faculty Search Committee Information Systems Department UMBC

1000 Hilltop Circle Baltimore, MD 21250-5398

For inquiries, please call Barbara Morris at (410) 455-3795 or e-mail: bmorris@umbc.edu. Electronic submission of cover letter and curriculum vitae as PDF documents (sent to the preceding e-mail address) are preferred.

Review of applications will begin immediately and will continue until the positions are filled. This position is subject to the availability of funds.

UMBC is an Affirmative Action/Equal Opportunity Employer and welcomes applications from minorities, women and individuals with disabilities.

University of Massachusetts, Amherst

Computer Science Department Tenure-track positions

We invite applications for tenure-track faculty positions at the assistant professo level. Applicants must have a Ph.D. in Computer Science or related area and should show evidence of exceptional research promise. Candidates with an established record of strong research may also apply for positions other than at the assistant professor level. We particularly welcome candidates who would thrive in a highly collaborative environment in which projects often span several research groups. Applicants in all areas of Computer Science will be considered. Areas of particular interest include programming languages, software engineering, databases, security, architecture, and theory. One to three positions are expected.

The Department of Computer Science has 42 tenure and research track faculty and 169

Ph.D. students with broad interdisciplinary research interests. The department offers firstclass research facilities. Please see http://www.cs.umass.edu for more information. Applications should reference search R23012.

We also invite applications for research faculty positions (search R23011) in all areas of Computer Science. Applicants should have a Ph.D. in Computer Science or related area and should show evidence of exceptional $% \left\{ \left(1,0\right) \right\} =\left\{ \left(1,0\right) \right\}$ research promise. These positions are grantfunded; appointments will be contingent upon continued funding.

To apply, please send a cover letter with your vitae, a research statement, a teaching statement and at least three letters of recommendation. Please refer to search R23012 (tenure-track position) or R23011 (research faculty position) in the cover letter. A teaching statement is not required for research positions

Electronic submission of application materials is strongly recommended. Application materials may be submitted in pdf format to facrec@cs.umass.edu. Likewise, letters of recommendation may be submitted electronically to facrec@cs.umass.edu either in ascii text or pdf format.

If electronic submission is not possible, hard copies of the application materials may

Search {fill in number from above} c/o Chair of Faculty Recruiting Department of Computer Science University of Massachusetts Amherst, MA 01003-9264

We will begin to review applications on November 1, 2004 and will continue until available positions are filled. Salary commensurate with qualifications and experience; comprehensive benefits package.

Inquiries and requests for more information can be sent to: facrec@cs.umass.edu

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

The University of Michigan, Ann Arbor

Department of Electrical Engineering and Computer Science Computer Science and Engineering Division Faculty Positions

Applications and nominations are solicited for multiple 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 are encouraged to apply, especially those in theory, programming languages, security, databases, and robotics

The University of Michigan is a Non-Discriminatory/Affirmative Action Employer. Please send resume, url and names of three

or more references to: Professor Karem Sakallah, Chair CSE Faculty Search

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 inquires and applications in pdf or word format via email to: csesearch@eecs.umich.edu.

University Of Minnesota - Twin Cities

Department of Computer Science and Engineering Faculty Positions http://www.cs.umn.edu

The Department of Computer Science and Engineering at the University of Minnesota-Twin Cities invites applications for several open tenure-track and tenured faculty positions. These positions are primarily at the assistant professor level, but highly qualified applicants at higher ranks will also be considered. Accomplished researchers from all areas of computer science and engineering are encouraged to apply. Requirements include a Ph.D. in computer science, computer engineering, or a closely related discipline, a commitment to quality teaching, and the ability to carry out outstanding, high-impact research. Senior candidates must possess a distinguished record of research, teaching, and

The research and teaching missions of the Department encompass a wide range of areas, including networking and distributed multimedia, internet technologies, grid computing, cryptography and security, databases, data mining, software engineering,

computer architecture, compilers, operating systems, programming languages, artificial intelligence, robotics and computer vision, natural language processing, computer graphics and visualization, algorithms and complexity theory, geometric computing and applications, human-computer interaction, geographic information systems, parallel/distributed computing, and scientific computing. Its faculty members, numbering thirty-eight, have access to outstanding computing and research facilities both within the Department and at the various research centers on campus, including the Army High Performance Computing Research Center (http://www.ahpcrc.org/), the Minnesota

Supercomputing Institute (http://www.msi.umn.edu/), and the Institute for Mathematics and its Applications (http://www.ima.umn.edu). The Department also plays a prominent role in the Digital Technology Center (http://www.dtc.umn.edu) established recently at the University, and is conducting with the Center a separate search to fill chaired faculty positions in networking and wireless communications. External research funding in the department has grown significantly over the past several years and annual research expenditures topped \$5.5 Million recently. Additional information about the Department is available at its World Wide Web home page, listed above.

The Twin Cities metropolitan area is a major center for the computer and medical technology industry, among others, and offers numerous opportunities for collaborative research and consulting. The Department enjoys an excellent rapport with local industry. The Twin Cities area is also renowned for its high quality of life, excellent public schools, and opportunities for yearround recreational activities, and consistently ranks highly in national surveys.

Applicants should submit a curriculum vitae, a research summary, and the names of at least three references electronically to:

applications@cs.umn.edu. (Submissions as a single PDF document are preferred.) Applicants who are unable to submit electronically may submit a hardcopy to: Chair, Faculty Recruiting Committee Department of Computer Science and Engineering University of Minnesota 4-192 EE/CSci Building 200 Union Street S.E. Minneapolis, MN 55455

For full consideration, applications and reference letters should be received by February 1, 2005. However, the search will remain open until all positions are filled.

The University of Minnesota is an equal opportunity educator and employer

University of North Carolina at Charlotte

Department of Software and Information

Tenure-track positions

The Department of Software and Information Systems at UNC Charlotte has multiple tenure-track faculty positions available at the assistant and associate professor levels. The Department is dedicated to research and education in Information Technology and applications, with emphasis in the areas of Information Integration & Environments and Information Security & Assurance; it offers degrees at the Bachelors, Masters, and Ph.D. levels. Current faculty members have strong research programs with substantial funding from both federal agencies and industrial partners.

The Department is particularly interested in faculty with research expertise in: Human-Computer Interaction, Software Engineering Trusted Information Infrastructures, and Trusted Software Development. Highly qualified candidates in other areas will also be considered. Salary will be highly competitive. Applicants must have a Ph.D. in Computer Science, Information Technology, Software Engineering, or a related field, as well as a strong commitment to research and education. For further details, please visit www.sis.uncc.edu. Application review will start in January 2005.

Please send a detailed CV together with four references, copies of scholarly publications, and other support material to:

Search Committee Chair Department of Software and Information Systems

UNC Charlotte 9201 University City Blvd

Charlotte, NC 28223 Email: search-sis@uncc.edu

Women, minorities, and individuals with disabilities are encouraged to apply.

UNC Charlotte is an equal opportunity/affirmative action employer.

University of Notre Dame

Department of Computer Science and Engineering Faculty Positions

The Department of Computer Science and Engineering at the University of Notre Dame (http://www.cse.nd.edu/) invites faculty applications. Rank and area of specialty are open. Senior applicants are especially welcome, as are applicants in algorithms, AI / robotics, data mining, machine learning, and VLSI / architecture.

Our faculty are actively engaged in highquality, externally-funded research in a variety of areas. The blend of small class size, low teaching load, and a "PhD only" graduate program allows us to emphasize true excellence in both research and teaching. Faculty must be committed both to quality teaching at the undergraduate level and to an externally-funded research program of major

Notre Dame is ranked 18th among national universities in the most recent US News and World Report survey. Notre Dame's heritage and values are unique among topranked national universities, resulting in a distinctive character of campus life.

Screening of applications will begin immediately and continue until positions are filled. Applicants should send cover letter, cv, statement of research interests, statement of teaching interests, and names and addresses of at least three references to facultysearch@cse.nd.edu.

The University of Notre Dame is an Affirmative Action/Equal Opportunity

University of Oregon

Computer and Information Science Faculty Position

The Department of Computer and Information Science invites applications for one tenure-track faculty position open for fall 2005. The department's primary recruiting emphases are in the areas of networking, programming languages and distributed informatics. Programming languages is broadly construed to include compiler construction, domain-specific languages, program analysis, etc. Distributed informatics may include distributed database systems, web engineering, distributed document architecture, and other aspects of future distributed information systems. Networking areas of interest include but are not limited to network security, measurement, forensics, multimedia streaming, peer-to-peer systems, and group communication. Outstanding applicants in other areas may also be considered. Applicants must have a Ph.D. in computer science or a closely related field, a demonstrated record of excellence in research, and a strong commitment to teaching. We are recruiting primarily at the assistant professor level, but exceptional candidates may be considered for the rank of associate

The CIS department has seventeen research faculty and two senior instructors and offers B.S., M.S., and Ph.D. degrees. We offer a stimulating and friendly environment for collaborative research both within the department and with other departments on campus. The CIS Department is associated with the Computational Intelligence Research Laboratory, the Cognitive and Decision Sciences Institute, the Computational Science Institute, and the Neuro-Informatics Center. More information about the department, its programs and faculty can be found at http://www.cs.uoregon.edu, or mail your request to:

University of Oregon Dept. of Computer and Information

Eugene, OR 97403-1202

The University of Oregon is an AAU research university located in Eugene and within one hour drive of both the Pacific Ocean and the snow-capped Cascade

Applicants should send their curriculum vitae, 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 University of Oregon

Eugene, ÓR 97403-1202 Email: faculty.search@cs.uoregon.edu

Review of applications will begin in December 2004 and continue until the positions are filled.

University of Oregon

Office of the Vice President for Research Research Associate in Computational

The University of Oregon seeks applications for a Research Associate in the area of computational science. The position will be responsible to the Vice President for Research and the Director of the Neuroinformatics Center.

Responsibilities for the Neuroinformatics Center include but are not limited to: providing systems administration support for Bioinformatics/NIC activities; providing software support for "computational grid" initiative; promoting research cooperation and collaborations through the use of computational techniques and networking capabilities; coordinating and providing training for researchers using scientific platforms and enhancements to researchspecific systems; maintaining and creating databases for the use and needs of the NIC/CSI researchers; and providing troubleshooting support to the NIC/CSI researchers on hardware/software applications utilized in that environment.

Responsibilities for the Office of Research include interacting with the research community to foster greater utilization of computational activity in areas such as neuroscience, chemistry and molecular, developmental and evolutionary biology and engaging in special projects at the behest of the Vice President for Research. Requirements include a doctorate in Math, Computer Science or one of the Physical or Biological sciences; demonstrated understanding of the needs of researchers for computing services; and experience with active scholarly research.

Candidates should possess outstanding analytic and collaborative skills. Send a letter of application, current resume and a list of three references with complete contact information to:

Moira Kiltie

Assistant Vice President for Research 1258 University of Oregon Eugene, Oregon 97403-1258

The position is open until filled; review of files will begin on October 22, 2004. The anticipated start date is January 2nd or earlier.

For more information, please go to the University of Oregon website at http://www.uoregon.edu and click on jobs - see

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 Faculty Positions

The University of Pennsylvania invites applicants for tenure-track appointments in both experimental and theoretical computer science to start July 1, 2005. Tenured appointments will also be considered. Faculty duties include teaching undergraduate and graduate students and conducting high-quality

Successful applicants will find Penn to be a stimulating environment conducive to professional growth. The Department of Computer and Information Science is undergoing a major expansion, including new faculty positions and a new building, Levine Hall, which was opened in April 2003. Over the last three years, we have successfully recruited faculty in artificial intelligence, computer architecture, databases, machine vision, programming languages, and security. We are now especially interested in candidates in graphics and animation, systems and networking, bioinformatics and computational biology, and security, although outstanding candidates in other areas might also be

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, the Wharton School, the Annenberg School of Communication, Nursing, Law, and Fine Arts. The University campus and the Philadelphia area support a rich diversity of scientific, educational, and cultural opportunities, major technologydriven industries such as pharmaceuticals and aerospace, as well as attractive urban and suburban residential neighborhoods. Princeton and New York City are within commuting distance.

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

School of Engineering and Applied Science

University of Pennsylvania Philadelphia, PA 19104-6389

Applications should be received by January 15, 2005 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 values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, gender identity, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic, or other University administered programs or employment.

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

University of South Florida

Computer Science and Engineering Department

Tenure-track faculty positions

Applications are invited for several tenuretrack faculty positions in the Department of Computer Science and Engineering. We are particularly interested in candidates with expertise in systems and software areas including databases, distributed systems, operating systems, security and software engineering. Applications are also invited for several non-tenure-track faculty positions with primary responsibilities for teaching in all areas of computer science and engineering.

Rank and salary commensurate with qualifications and experience. Screening of applications will begin on Nov 15, 2004 and will continue until the positions are filled. For the tenure-track positions candidates are preferred who have completed or are near completion of a Ph.D. degree in computer science, computer engineering, electrical engineering or related areas. For the nontenure-track positions, candidates are preferred who have completed or are near completion of a Ph.D. degree in above areas and also, those with a M.S. degree and considerable teaching experience will be considered.

The Department of Computer Science and Engineering (http://www.csee.usf.edu) has 22 faculty members and offers BS, MS, and PhD degrees. The graduate program serves some 150 students. The research program is well supported (\$3.3M in 2003) by federal and state agencies including DARPA, NIH, NSF, ONR, and USGS, as well as industry. A strong partnership for inter-disciplinary research exists with the other research centers at the university as well as the H. Lee Moffitt Cancer Center and Research Institute.

The application package should include a cover letter, curriculum vitae, brief statement outlining research and teaching goals, and the names and contact information of at least three references. It is preferred that the applications are sent via email to: facultysearch@csee.usf.edu.

Hardcopy applications may be mailed to

Search Committee Chair, Box C Computer Science and Engineering University of South Florida 4202 E. Fowler Avenue, ENB-118 Tampa, FL 33620-5350

The University of South Florida with about 42,000 students is among the 20 largest schools in the nation. It is located in the Tampa Bay metropolitan area with a population of about 2.5 million. According to Florida law, applications and meetings regarding them are open to the public.

The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Institution. Women and minorities are strongly encouraged to apply. Dual career couples with questions about opportunities are encouraged to contact the department chair.

The University Of Texas at Arlington

Computer Science and Engineering Department

Faculty Openings for Fall 2005

The University of Texas at Arlington (UTA), Computer Science and Engineering (CSE) Department - CSE@UTA invites applications for tenure-track faculty positions (continued)

in two high priority areas of bioinformatics and security (computer and network). For the bioinformatics area, preference will be given to applicants at the rank of Associate or Full Professor (with Tenure); while for the security area preference will be given to applicants at the rank of Assistant Professor (in tenuretrack). Applicants in other areas of computer science, with an established record of accomplishment in the above high priority areas, will also be considered, including: software engineering; pervasive computing; multimedia and video processing; intelligent systems; networking; databases; 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 service. We are in the Fifth year of our "Top 25 Initiative" plan to reach a national top 25 ranking within 10 years. The initiative is strongly supported by all CSE@UTA stakeholders including the UTA administration, faculty, students and alumni, and industry partners. Since 2000, we have added 10 new tenure-track faculty and 5 new full-time non-tenure-track faculty to our roster of 40 full-time faculty. The number of our PhD students has more than doubled since 2000 and the actively funded research awards exceeded \$6.3 million in 2003-04 academic

Applicants must have an earned doctorate in computer science, computer engineering, or closely related fields and a commitment to teaching and scholarly research. Applicants are expected to have an excellent record of professional accomplishments, commensurate with their academic level. The faculty opening is anticipated for September 2005. Screening of applications will begin immediately and will continue until all positions are filled. Interested persons should submit a letter of application, a resume, and reference letters

http://www.cse.uta.edu/recruiting/ Please note that we do not accept

http://www.isi.edu

hardcopy submissions. For additional information, please contact:

Dr. David Kung Chair of Search Committee Department of Computer Science and Engineering

The University of Texas at Arlington Arlington, TX 76019 Phone: 817-272-3605; Fax: 817-272-3070

Email: search@cse.uta.edu Or, visit the departmental website at http://www.cse.uta.edu.

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

University of Texas at Austin Department of Computer Sciences

Tenure-track Faculty

The Department of Computer Sciences of the University of Texas at Austin invites applications for tenure-track positions at all levels. Excellent candidates in all areas will be seriously considered.

All tenured and tenure-track positions require a Ph.D. or equivalent degree in computer science or a related area at the time of employment. Successful candidates are expected to pursue an active research program, teach both graduate and undergraduate courses, and supervise graduate students.

The department is ranked among the top ten computer science departments in the country. It has 42 tenure-track faculty members across all areas of computer science. The department participates in the University's Computational and Applied Mathematics interdisciplinary program. Austin, the capital of Texas, is located on the Colorado River, at the edge of the Texas Hill Country, and is famous for its live music and outdoor recreation. Austin is also a center for high-technology industry, including companies such as IBM, Dell, Motorola, Sematech, AMD, National Instruments, Tivoli, Trilogy, Computer Sciences Corporation, and Intel. For more information please see the department web page: http://www.cs.utexas.edu/.

The department prefers to receive applications online, beginning November 1, 2004. To submit yours, please visit

http://recruiting.cs.utexas.edu/faculty/ If you cannot apply online, please send a curriculum vitae, home page URL, description of research interests, and selected publications, and ask three referees to send letters of reference directly to:

Faculty Search Committee Department of Computer Sciences The University of Texas at Austin 1 University Station C0500 Austin, Texas 78712-0233 USA Inquiries about your application may be directed to:

faculty-search@cs.utexas.edu For full consideration, please apply by January 14, 2005. Women and minority candidates are especially encouraged to apply. The University of Texas is an Equal

Opportunity Employer

University of Texas at El Paso Department of Computer Science Assistant Professor

UTEP's Faculty of Computer Science invites applications for tenure-track faculty positions at all ranks to begin in Fall, 2005. The faculty of Computer Science value excellence in education and research, environment of collegiality, faculty collaboration across a wide range of interests, and academic involvement with students outside the classroom. The Faculty favors collaborative methods in both teaching and research. Candidates should share these values, be willing to build a strong research program, and enjoy working in a culturally diverse community.

Research areas of primary interest are High-Assurance Systems and High-Productivity Computing. Preference will be give to candidates that have expertise in:

- Parallel, distributed, networked and grid computing, for both scientific computing and large-scale transaction systems
- Computer security
- Human-computer interaction, including spoken-dialogue systems and other areas relevant to our research focal areas

Candidates will be expected to contribute to and help create a number of cross-cutting research areas promoted by UTEP's College of Engineering. Descriptions of these crossdisciplinary areas can be found at http://academics.utep.edu/eng/. UTEP offers BS, MS and PhD degrees in Computer Science. The CS Faculty has an internationally distinguished record of research, and its teaching program is a nationally recognized model of excellence. UTEP is a Carnegie doctoral-intensive university with an enrollment of 19,000 students. Its campus, situated where the Rocky Mountains meet the Rio Grande, echoes the beauty of the surrounding high desert. El Paso is a highly livable, bi-cultural community of 700,000 people that offers affordable homes and is a major meeting point for the United States and Latin America.

Qualifications Required: Candidates must hold a Ph.D. in Computer Science or a closely related field.

Application Procedure: Send a curriculum vitae, a list of publications, a statement of teaching and research interests, and contact information for at least four professional references to:

Faculty Recruiting Committee

College of Engineering

El Paso, TX 79968-0517 Information about the department and El Paso is available at http://www.cs.utep.edu. Send e-mail applications and inquiries to facultyrecruiting@utep.edu.

The University of Texas at Dallas

Erik Jonsson School of Engineering and Computer Science Computer Engineering

Faculty Positions - System-Level Design, Computer/Processor Architecture, Real Time Systems and Electronic Design Automation

The Erik Jonsson School of Engineering and Computer Science at the University of Texas at Dallas invites applications for computer engineering tenure/tenure-track faculty position in: System-level design, synthesis and optimization; co-design, embedded systems Computer/processor architecture; high performance, power-aware superscalar and embedded processors; operating systems and compiler interactions with computer architecture; special purpose and DSP architectures Real time systems Electronic design automation VLSI verification; synthesis and related areas. Position is at the assistant, associate or full professor levels, starting spring, summer or fall 2005. The successful candidate would be appointed a faculty position in either the Department of Electrical Engineering or the

Department of Computer Science; a joint appointment is possible. Candidates must have a Ph.D. degree in Computer Science, Electrical Engineering, Computer Engineering or equivalent. Candidates should have a strong record of research, teaching. Candidates for associate or full professor position should have strong record of external funding. A significant start-up package has been budgeted for this position.

The Erik Jonsson School of Engineering and Computer Science offers an interdisciplinary Ph.D. degree in Computer Engineering; M.S. Degree in Computer Engineering. Faculty for the computer engineering program consists of members from Computer Science and Electrical Engineering. Currently there are 18 CE affiliated faculty. In fall 2002, a new 152,000 sq. ft. building opened for Computer Science and Engineering to supplement the existing 1994, 150,000 sq. ft. engineering and computer science building. The engineering & computer science buildings provide extensive laboratory facilities for research in computer engineering, electrical engineering, telecommunications engineering, software engineering and computer science.

The University is located in the most attractive suburbs of the Dallas metropolitan area. There are over 900 high-tech companies within 5 miles of the campus, including Texas Instruments, Nortel Networks, Alcatel, Ericsson, Hewlett-Packard, Nokia, Fujitsu, MCI, EDS, and Perot Systems. Almost all the country's leading telecommunication's companies have major research and development facilities in our neighborhood. Opportunities for joint university-industry research projects are excellent. The Jonsson School has experienced very rapid growth in recent years and will become a top-ranked engineering school in the next five years. The Jonsson School is strengthening and expanding its programs by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs. The Jonsson School will benefit from a \$300 million program of funding from public and private sources over the next five years (see www.utdallas.edu/utdgeneral/news/). For more information, view the Internet webpage at www.ce.utdallas.edu or contact Dr. Dinesh Bhatia, Search Chair, at dinesh@utdallas.edu or 972-883-4663. The search committee will begin evaluating applications as soon as possible and will continue until the position is filled.

Applicants should mail their resume with a list of at least five academic or professional references as soon as possible to:

Academic Search # 767 The University of Texas at Dallas P.O. Box 830688, M/S AD 23 Richardson, TX 75083-0688 The University of Texas at Dallas is an

Equal Opportunity Affirmative Action employer and strongly encourages applications from candidates who would enhance the diversity of the University's faculty and administration.

The University of Texas at Dallas

Eric Jonsson School of Engineering and Computer Science Department of Computer Science Faculty Positions - Speech Recognition

Technology The Department of Computer Science of the University of Texas at Dallas invites applications for a tenure-track faculty position in Speech and Natural Language Processing, at the level of Assistant or Associate Professor, starting Spring, Summer or Fall 2005. Candidates must have a Ph.D. degree in Computer Science, Software Engineering, Computer Engineering or equivalent. Candidates should have a great potential for excellence in research, teaching, and external funding. A significant start-up package has been budgeted for this position.

The Department offers Ph.D. degrees in Computer Science, Software Engineering; M.S. degrees in Computer Science with emphases (tracks) on Networks and Telecommunications, Traditional Computer Science, Intelligent Systems, and a Major in Software Engineering; Bachelor's degrees in Computer Science, Software Engineering (the first in the State of Texas). In addition, the department is part of Ph.D. and master's programs in two interdisciplinary fields, Computer Engineering and Telecommunications Engineering, whose faculty consists of members from Computer Science and Electrical Engineering. Currently the Department has a total of 41 tenure-track faculty and 15 senior lecturers. In Fall 2002, the Department of Computer Science moved into a new 152,000 sq. ft. building. In addition to individual faculty workstations, the



ISI is a computer science and engineering research institute overlooking the Pacific in Marina del Rey, California, with a satellite facility in Arlington, Virginia. ISI is

part of the sixth-ranked USC Viterbi School of Engineering (VSoE).

Is mission is to combine world class research with the development of deployable prototype systems to solve prob-lems of national importance while supporting the university and the community

Project leaders at ISI combine the freedom to set their own research agenda with the responsibility of maintaining funding for their research group. Our goal is to recruit a handful of top people who are already well established in their careers, roughly at the level of associate professor or equivalent.

We are seeking people who are interested in leveraging what is unique about ISI while contributing to the overall enhancement of ISI's

environment and stature.

Ambitious, entrepreneurial researchers can grow large-scale, interdisciplinary projects in a collaborative environment built upon a supportive R&D infrastructure and a long history

of successful interaction with funding agencies. Academically oriented researchers also have the opportunity to teach and to work with students through faculty appointments in departments of the VSoE.

ISI offers a strong set of colleagues cover-ing a wide swath of computer science and engineering with particularly strong groups in artificial intelligence, networking, hardware systems

and grid computing.

ISI has especially close ties with USC's Department of Computer Science as well as working relationships with faculty from across the university



Positions available in both Marina del Rey, CA and Arlington, VA Apply at: www.usc.edu/jobs, reference Req. #18770 under "Search/Apply for job" AA/EOE

department has many computer/research laboratories, equipped with around 300 high performance workstations and high-end PCs. The Academic Computer Center supports both UNIX based workstations and PCs as well as high-speed dial-in access to campus

computing facilities.

The University is located in the most attractive suburbs of the Dallas metropolitan area. There are over 900 high-tech companies within 5 miles of the campus, including Texas Instruments, Nortel Networks, Alcatel, Ericsson, Hewlett-Packard, Nokia, Fujitsu MCI, EDS, and Perot Systems. Almost all the country's leading telecommunication's companies have major research and development facilities in our neighborhood. Opportunities for joint university-industry research projects are excellent. The Jonsson School has experienced very rapid growth in recent years and will become a top-ranked engineering school in the next five years Based in large part on a 5-year, \$300 million initiative involving the State of Texas, the University of Texas System, and Texas Instruments, the School is strengthening and expanding its programs by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs (see

www.ecs.utdallas.edu/welcome.html).-For more information, contact Dr. D.T. Huynh, Department Head, at 972-883-2169, or send e-mail to cs-search@utdallas.edu, or view the Internet Web page at

http://www.utdallas.edu/dept/cs/. The search committee will begin evaluating applications as soon as possible and will continue until the position is filled.

Applicants should mail their resume with a list of at least five academic or professional references as soon as possible to:

Academic Search #760 The University of Texas at Dallas P.O. Box 830688, M/S AD 23 Richardson, TX 75083-0688

The University of Texas at Dallas is an Equal Opportunity Affirmative Action employer and strongly encourages applications from candidates who would enhance the diversity of the University's faculty and administration.

The University of Texas at Dallas

Eric Jonsson School of Engineering and Computer Science Department of Computer Science Faculty Positions

The Department of Computer Science of the University of Texas at Dallas invites applications from outstanding applicants for tenure-track faculty positions in all areas, at all levels, starting Spring, Summer or Fall 2005. Candidates must have a Ph.D. degree in Computer Science, Software Engineering, Computer Engineering or equivalent. The successful applicants must have a distinguished research and publication record. Applicants for senior positions must have an outstanding funding record and demonstrated leadership ability in developing and expanding funded research programs. Positions for Distinguished Chaired Professors are available.

The Department offers Ph.D. degrees in Computer Science, Software Engineering; M.S. degrees in Computer Science with emphases (tracks) on Networks and Telecommunications, Traditional Computer Science, Intelligent Systems, and a Major in Software Engineering; Bachelor's degrees in Computer Science, Software Engineering (the first in the State of Texas). In addition, the department is part of Ph.D. and master's programs in two interdisciplinary fields, Computer Engineering and Telecommunications Engineering, whose faculty consists of members from Computer Science and Electrical Engineering. Currently the Department has a total of 41 tenure-track faculty and 15 senior lecturers. In Fall 2002, the Department of Computer Science moved into a new 152,000 sq. ft. building. In addition to individual faculty workstations, the department has many computer/research laboratories, equipped with around 300 high performance workstations and high-end PCs. The Academic Computer Center supports both UNIX based workstations and PCs as well as high-speed dial-in access to campus computing facilities.

The University is located in the most attractive suburbs of the Dallas metropolitan area. There are over 900 high-tech companies within 5 miles of the campus, including Texas Instruments, Nortel Networks, Alcatel Ericsson, Hewlett-Packard, Nokia, Fujitsu, MCI, EDS, and Perot Systems. Almost all the country's leading telecommunication's companies have major research and development facilities in our neighborhood. Opportunities for joint university-industry research projects are excellent. The Jonsson

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www.ecs.utdallas.edu/welcome.html). For more information, contact Dr. D.T. Huynh, Department Head, at 972-883-2169, or send e-mail to cs-search@utdallas.edu, or view the Internet Web page at

http://www.utdallas.edu/dept/cs/. The search committee will begin evaluating applications as soon as possible and will continue until the positions are filled.

Applicants should mail their resume with a list of at least five academic or professional references as soon as possible to:

Academic Search # 762 The University of Texas at Dallas P.O. Box 830688, M/S AD 23 Richardson, TX 75083-0688

The University of Texas at Dallas is an Equal Opportunity Affirmative Action employer and strongly encourages applications from candidates who would enhance the diversity of the University's faculty and administration.

The University of Texas at Dallas

Eric Jonsson School of Engineering and Computer Science

Department of Computer Science
Faculty Positions – Network Security and Information Assurance

The Department of Computer Science of the University of Texas at Dallas, invites applications for a tenure-track faculty position in all areas of Information Security including Network Security, Information Assurance, Data and Applications Security, at the assistant or associate professor levels, starting Spring, Summer or Fall 2005. Candidates must have a Ph.D. degree in Computer Science, Software Engineering, Computer Engineering or equivalent. Candidates should have a great potential for excellence in research, teaching, and external funding. A significant start-up package has been budgeted for this position.

The Department offers Ph.D. degrees in Computer Science, Software Engineering; M.S. degrees in Computer Science with emphases (tracks) on Networks and Telecommunications, Traditional Computer Science, Intelligent Systems, and a Major in Software Engineering; Bachelor's degrees in Computer Science, Software Engineering (the first in the State of Texas). In addition, the department is part of Ph.D. and master's programs in two interdisciplinary fields, Computer Engineering and Telecommunications Engineering, whose faculty consists of members from Computer Science and Electrical Engineering. The Department has established a CyberSecurity Research Center with a well-funded security laboratory, which is part of the School's CyberSecurity and Emergency Preparedness Institute. The Institute is also building a Security Analysis and Information Assurance Laboratory for testing network security research. The University of Texas at Dallas has been designated by the National Security Agency and the Department of Homeland Security as one of the National Centers of Academic Excellence in Information

Assurance Education. Currently the Department has a total of 41tenure-track faculty and 15 senior lecturers. In Fall 2002, the Department of Computer Science moved into a new 152,000 sq. ft. building. In addition to individual faculty workstations, the department has many computer/research laboratories, equipped with around 300 high performance workstations and high-end PCs. The Academic Computer Center supports both UNIX based workstations and PCs as well as high-speed dial-in access to campus computing facilities.

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http://www.utdallas.edu/dept/cs/. The search committee will begin evaluating applications as soon as possible and will continue until the positions are filled.

Applicants should mail their resume with a list of at least five academic or professional references as soon as possible to:

Academic Search # 761 The University of Texas at Dallas P.O. Box 830688, M/S AD 23 Richardson, TX 75083-0688

The University of Texas at Dallas is an Equal Opportunity Affirmative Action employer and strongly encourages applications from candidates who would enhance the diversity of the University's faculty and administration

University of Victoria

Department of Computer Science Canada Research Chair

The Department of Computer Science, University of Victoria, is seeking an outstanding candidate for a Tier 1 Canada Research Chair whose research focus will complement existing research strengths. While there will be particular interest in candidates in Software Engineering and Foundations of Computer Science, the emphasis will be on the excellence of the candidate and the research proposal rather than a particular area.

Tier 1 Chair candidates will be experienced researchers whose peers acknowledge them as world leaders in their field. They should be, or have the qualifications to be, full professors or associate professors who are expected to be promoted to the full professor level within one or two years of the nomination; and able to make a positive contribution to undergraduate and graduate teaching.

Full details are at htp://www.csc.uvic.ca/ career/CRCTier1Ad

University of Virginia

Department of Computer Science Tenure-track positions

The Department of Computer Science at the University of Virginia invites applications for tenure-track faculty positions at all levels and in all areas of computer science. These positions are intended for outstanding individuals who are committed both to excellence in research, education, and service, and to diversity in community.

The University of Virginia ranks consistently as one of the top public universities in the country. Its highly valued Department of Computer Science has a diverse population with more than 300 undergraduate students, 110 graduate students, and 28 faculty members. The department offers baccalaureate, master, and doctoral degrees in Computer Science and Computer Engineering. The department is undergoing significant growth and programmatic evolution and aims to be one of the top departments in experimental systems research and the leading institution in undergraduate computer science education. Its existing strengths include algorithms, architecture, compilers, distributed systems, graphics, grid computing, mobile computing, networks, operating systems, programming environments, real-time and embedded systems, security, sensor networks, and software engineering.

Candidates must have an earned doctorate in an appropriate discipline and a genuine desire to contribute to the Department's goal of becoming a world-class computer science

institution. Applications will be reviewed as they are received and until the positions are filled. Applicants are encouraged to visit the departmental website for more information at: www.cs.virginia.edu.

Applicants should submit a letter of application, curriculum vitae, URLs of selected reprints, and statements of research plans and teaching interests and philosophy. Applicants should also ensure that at least three letters of recommendation are sent directly to the Department.

We prefer the electronic submission of application materials in PDF form by email to: positions@cs.virginia.edu.

If necessary, PS is also acceptable. Application materials can be alternatively mailed to:

Alfred C. Weaver Search Committee Chair School of Engineering and Applied Science University of Virginia

151 Engineer?s Way P. O. Box 400740 Charlottesville, VA 22904-4740 Phone: 434-982-2200

Applicants are encouraged to submit applications by the beginning review date of December 1, 2004. Applications will continue to be accepted until February 15, 2005. Applications received after this date will be reviewed until the positions are filled.

The University of Virginia is an equal opportunity, affirmative action employer.

University of Waterloo

School of Computer Science Tenure-Track Positions

The University of Waterloo invites applications for several tenure-track faculty positions in the School of Computer Science, with priority for researchers in the areas of human-computer interaction, bioinformatics, scientific computing, and software security. Candidates at all levels of experience are encouraged to apply. Successful applicants who join the University of Waterloo are expected to develop and maintain a productive program of research, attract and develop highly qualified graduate students, provide a stimulating learning environment for undergraduate and graduate students, and contribute to the administration of the School. A Ph.D. in Computer Science, or equivalent, is required, with evidence of excellence in teaching and research. Rank and salary will be commensurate with experience, and appointments are expected to commence during the 2005 calendar year. Exceptional candidates may be considered for a Tier 2 Canada Research Chair.

With over 65 faculty members, the University of Waterloo's School of Computer Science is one of the largest in Canada. It enjoys an excellent reputation in pure and applied research and houses a diverse research program of international stature. Because of its recognized capabilities, the School attracts exceptionally well-qualified students at both undergraduate and graduate levels. In addition, the University has an enlightened intellectual property policy which vests rights in the inventor: this policy has encouraged the creation of many spin-off companies including iAnywhere Solutions Inc., Maplesoft Inc. and Open Text Corp. For further information on the School of Computer Science, please see our web page at:

http://www.cs.uwaterloo.ca Applications should be sent by electronic mail to: cs-chair@cs.uwaterloo.ca, or by post

Chair, Advisory Committee on Appointments School of Computer Science University of Waterloo Waterloo, Ontario Canada N2L 3G1 An application should include a

curriculum vitae, statements on teaching and research, and the names and contact

(continued)

CRA-W Anita Borg Early Career Award

Nomination Deadline February 15, 2005

For details see:

http://www.cra.org/Activities/craw/borg/index.php

information for at least three referees. Applicants should ask their referees to forward letters of reference to the address above. Applications will be considered as soon as possible after they are complete, and as long as positions are available.

The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

University of Wisconsin-Madison Computer Sciences Department Faculty Position/Professor

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 part of this endeavor we have multiple faculty positions available beginning August 2005.

We invite applications from outstanding candidates in /all/ areas of Computer Science. Applicants should have a Ph.D. in Computer Science or in a closely related field, and demonstrated strength in scholarly research. Appointment will be at Assistant Professor level, exceptional candidates at the senior level (Associate or Full Professor) 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.

Applicants should submit a curriculum vitae, a statement of research objectives and 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 W. Dayton Street Madison, WI 53706-1685

Applicants are encouraged to submit their applications (along with supporting material) as soon as possible, but no later than January 24, 2005.

The University is an Equal Opportunity/ Affirmative Action employer and encourages women and minorities to apply. Unless confidentiality is requested in writing, information regarding the applicants must be released on request. Finalists cannot be guaranteed confidentiality.

For further information, send mail to recruiting@cs.wisc.edu.

University of Wisconsin-Milwaukee

Department of Electrical Engineering & Computer Science

Faculty Recruitment in Computer Science The Computer Science Program in the Department of Electrical Engineering & Computer Science is continuing its development and growth. Our Program has established a strong good record in recruiting outstanding junior faculty and in providing them with a nurturing, as well as stimulating environment for their career development. Several of our faculty have been the recipients of the NSF EARLY CAREER Awards. The Computer Science faculty is engaged in research in many areas including Artificial Intelligence, Theory, Cryptography and Data Security, Distributed Systems, Networks, Programming Languages, Software Engineering, and Medical Informatics. We are also engaged in collaborative efforts with several academic units at our University as well as other institutions, including the Medical College of Wisconsin with whom we have developed an interdisciplinary Ph.D. program in Medical Informatics.

We invite applications for faculty positions from strong candidates in the following areas of Computer Science: Software Engineering, Databases, and Computer Graphics. Recently our university received a major NSF

collaborative grant in Cyber Security that involves several university of Wisconsin campuses. We are the lead institution in this project. All candidates should have a demonstrated promise for excellence in research and in teaching. Candidates for senior positions should have excellent research credentials.

Our University is located in a pleasant residential neighborhood of Milwaukee close to the shores of Lake Michigan. Our metropolitan location facilitates each interaction with many businesses and industries and affords numerous cultural and recreational activities. Applicants should send a hard copy of a vitae by regular mail. We also request that at least three references be asked to send letters by regular mail to:

Faculty Recruitment Coordinator for Computer Science

Department of Electrical Engineering & Computer Science

University of Wisconsin-Milwaukee PO Box 784

PO Box 784 Milwaukee, WI 53201-0784

E-mail: recruit@cs.uwm.edu (for inquiries

Evaluation of all candidates will begin on November 1, 2004 and will continue until the position is filled. Women and minority candidates are strongly encouraged to apply. Additional information about our Program may be obtained by visiting our website at http://www.cs.uwm.edu.

UWM is an equal opportunity institution committed to diversity.

University of Wisconsin-Milwaukee

Department of Electrical Engineering & Computer Science
Faculty Recruitment in Computer Science

The Computer Science Program in the Department of Electrical Engineering & Computer Science is continuing its development and growth. Our Program has established a strong good record in recruiting outstanding junior faculty and in providing them with a nurturing, as well as stimulating environment for their career development. Several of our faculty have been the recipients of the NSF EARLY CAREER Awards. The Computer Science faculty is engaged in research in many areas including Artificial Intelligence, Theory, Cryptography and Data Security, Distributed Systems, Networks, Programming Languages, Software Engineering, and Medical Informatics. We are also engaged in collaborative efforts with several academic units at our University as well as other institutions, including the Medical College of Wisconsin with whom we have developed an interdisciplinary Ph.D. program in Medical Informatics.

We invite applications for faculty positions from strong candidates in the following areas of Computer Science: Data and Computer Security. Recently our university received a major NSF collaborative grant in Cyber Security that involves several university of Wisconsin campuses. We are the lead institution in this project. All candidates should have a demonstrated promise for excellence in research and in teaching. Candidates for senior positions should have excellent research credentials.

Our University is located in a pleasant residential neighborhood of Milwaukee close to the shores of Lake Michigan. Our metropolitan location facilitates each interaction with many businesses and industries and affords numerous cultural and recreational activities. Applicants should send a hard copy of a vitae by regular mail. We also request that at least three references be asked to send letters by regular mail to:

Faculty Recruitment Coordinator for Computer Science Department of Electrical Engineering & Computer Science University of Wisconsin-Milwaukee PO Box 784 Milwaukee, WI 53201-0784 E-mail: recruit@cs.uwm.edu (for inquiries

Evaluation of all candidates will begin on November 1, 2004 and will continue until the position is filled. Women and minority candidates are strongly encouraged to apply. Additional information about our Program may be obtained by visiting our website at http://www.cs.uwm.edu.

UWM is an equal opportunity institution committed to diversity.

Washington State University, Vancouver

Computer Science Department Asst/Assoc Professor

Ph.D. in Computer Science or closely related field. Please click on the link to see the complete notice at:

http://www.vancouver.wsu.edu/institute/CS position.htm

Washington University in Saint Louis

Department of Computer Science and Engineering

Faculty Positions Available

Building upon the impressive recruiting successes of recent years (fifteen new tenure-track faculty), the Department continues to seek outstanding candidates likely to develop synergistic relationships with existing areas of research excellence. Only candidates having an exceptionally strong record of research accomplishments and a deep commitment to teaching will be considered. Candidates whose research focuses on computer security will receive preferential consideration.

The Department enjoys a great research reputation and impressive levels of research activity, e.g., annual research expenditures in the range of \$250,000 to \$450,000 per faculty member. Our doctoral graduates have been heading for successful careers in academia and industrial research centers. Noteworthy entrepreneurial endeavors attest to a highly respected technology transfer tradition and culture. Strict limits on undergraduate enrollments and the increasing popularity of Washington University allow us to offer small classes and close personal attention to a diverse student body of exceptional quality. A faculty known for its friendly, accepting and supportive nature provides a welcoming and mentoring environment for new arrivals. supportive administration reaches out to academic couples seeking to co-locate Finally, progressive fiscal policies reward research, teaching, and innovation and foster a readiness to invest in promising new

Applicants should hold a doctorate in Computer Science, Computer Engineering or a closely related field. Qualified applicants should submit a complete application (cover letter, curriculum vitae, research statement, teaching statement, and names of at least three references) electronically to recruiting@cse.wustl.edu. Other communications may be directed to:

Dr. Catalin Roman, Chairman Department of Computer Science and Engineering

Campus Box 1045 Washington University One Brookings Drive St. Louis, MO 63130-4899

Applications will be considered as they are received. Those arriving after February 1, 2005, may not be given full consideration.

Washington University is an equal opportunity/affirmative action employer.

Wayne State University

Department of Computer Science Faculty Position

The Department of Computer Science of Wayne State University invites applications for a tenure-track faculty position at the Assistant/Associate Professor level in the areas of Computer System Security and Medical Image Processing. Excellent candidates from other areas of Computer Science will also be considered.

Candidates should have a Ph.D. in computer science or related area. A successful candidate will have a strong interest in and commitment to research and teaching, a strong publication record in their area, and show a potential for obtaining external research funding. Senior applicants will have demonstrated a strong publication and funding record.

The Department of Computer Science offers B.S., M.S., and Ph.D. degrees. Federal agencies as well as industries support a variety of research programs within the Department. The department also maintains active collaborative relationships with the School of Medicine and other centers and departments within the university. Wayne State University, located in Detroit's Cultural Center, is an

urban research university serving over 33,000 students. Many outstanding residential communities and some of the nation's top 5% school districts are nearby. The University offers excellent benefits and a competitive compensation package.

All applicants must apply to the University's Online Hiring System at: https://jobs.wayne.edu.

Look under "Search Postings" then "Create Application."

Applicants should attach to their online application a letter of intent, a statement of research and teaching interests, a CV, and contact information for at least three references.

Review of applications will begin on January 10, 2005 and will continue until the position is filled.

Wayne State University is an equal opportunity/affirmative action employer.

Worcester Polytechnic Institute

Computer Science Department

Tenure-track Faculty position - (starting
August 2005)

Do you want the combination of a research university teaching load with a liberal arts college environment? Do you like engaging undergraduates together with graduates in long-term, open-ended projects? Would you enjoy doing interdisciplinary research, experiencing the interplay between technology and society, and helping students apply their technical skills in global settings?

If so, you should consider joining the faculty at WPI!

WPI is an elite national university with an enrollment of 3,700, including 1000 graduate students. It has a core focus on engineering, science and the management of technology, and grants degrees in more than 30 disciplines. WPI's acclaimed and long-standing project-based undergraduate curriculum is singled out by professional societies as a model program. That curriculum, combined with a significant graduate program, offers faculty a unique balance between research and teaching.

The Computer Science Department expects to recruit tenure-track faculty at the Assistant Professor level for the Fall of 2005. Our current search priorities are in Networking (including Mobile Systems) and Interactive Media (including Multimedia and Game Development). However, outstanding candidates at any rank and in any area will receive full consideration. Candidates should have a PhD in Computer Science, or a closely related field, and the potential for excellence in research and teaching.

The department grants BS, MS, and PhD degrees in Computer Science, and is among the largest at WPI (with more than 500 majors and roughly 100 full-time MS and PhD students). Faculty research is funded by federal agencies (such as NSF, NIH, NSA, ONR, and DARPA) and industrial collaborators.

The department currently has 18 tenure-track faculty. We expect to maintain the exceptionally close-knit, collegial atmosphere we currently enjoy. Please refer to our web site at www.cs.wpi.edu for complete information.

WPI is in Worcester, Massachusetts, the second largest city in Massachusetts and the third largest in New England. It is approximately one hour from both Boston and Providence; cultural and recreational resources abound in the region. The UMass Medical Center and large number of technology companies, colleges and universities in the immediate area make it ideal for dual career families.

To apply, submit a letter of application, which includes detailed Research and Teaching Statements, vitae, and the names, postal addresses and email addresses of at least three references to:

Recruiting Committee Computer Science Department WPI

100 Institute Road

Worcester, MA 01609-2280, USA Questions about the hiring process, as well as electronic applications should be addressed to: csrecruit@cs.wpi.edu

For full consideration, applications should be received by 01/14/2005.

To enrich education through diversity, WPI is an affirmative action, equal opportunity employer.

CRA-W Distributed Mentor Project 2005

Nomination Deadline February 15, 2005

For details see:

http://www.cra.org/Activities/craw/dmp/index.php