NSF Selects CRA to Create Computing Community Consortium:
Effort Will Envision Major Research Opportunities

By Andrew Bernat and Dan Reed

The National Science Foundation announced on September 18 an agreement with the Computing Research Association (CRA) to establish a consortium of computing experts that will provide scientific leadership and vision on issues related to computing research and future large-scale computing research projects.

Under the three-year, $6 million agreement, CRA will create the Computing Community Consortium (CCC) to identify major research opportunities and establish "grand challenges" for the field. The CCC will create venues for community participation for developing visions and creating new research activities.

One of the first tasks of the CCC will be to assume the role of community proxy organization for the NSF's Global Environment for Networking Innovations (GENI) Project, providing broad scientific oversight to its potential construction and operation. In addition, the CCC

will provide scientific oversight for future NSF large-scale computing research initiatives.

Why Do We Need a Computing Community Consortium?

What questions shape our intellectual future? What attracts the best and brightest minds of a new generation? For biologists, it is a deep understanding of life and its processes. For physicists, it is deducing the structure of the universe and a grand unified theory of the fundamental forces. These are profound questions, older than history, with some potential answers now within our grasp. Moreover, this knowledge has and is enabling diverse advances, from cancer treatment to engineering design.

As computing researchers, we work in that most malleable of media—information and its processes. Our ideas continue to enable and transform all of science, reshape the world's economy and change

our culture. What are the next big computing ideas, the ones that will define the future of computing, galvanize the very best students, and catalyze research investment and public support?

The purpose of the Computing Community Consortium (hereafter CCC) is to create compelling research visions and the mechanisms needed to realize these visions. These compelling visions can take many forms. History has amply demonstrated the importance of entrepreneurial, grassroots efforts as creative engines in computing research. It has also demonstrated the value of large teams, large facilities, and substantial funding. Many see an increasing need for shared research facilities and teams in our field for us to tackle certain "grand challenge" problems.

With this background:

The challenge for the Computing Community Consortium (CCC) is to catalyze the computing research community to debate longer range, more audacious research challenges; to build consensus around research visions; to

articulate those research visions; to evolve the most promising visions toward clearly defined initiatives; and to work with funding organizations to move the challenges and visions toward funding initiatives. The CCC will do this without harming the research environment that has created the computing world of today.

Who Will Be Involved?

By design and organization, the CCC will be broadly inclusive of the computing research community. We anticipate diverse participation from the community in a multiplicity of visioning activities. Any computing researcher who wishes to be involved will be encouraged to be involved.

Facilitating the CCC's activities will be a CCC Council (hereafter Council), a group with the stature, diversity, and longevity needed for the CCC to be effective. The Council's role is to stimulate and facilitate visioning activities. The Council is responsible not for *doing* the visioning, but for *putting processes*

Inside CRN

Research With Impact: The Computer Science Research Institute at Sandia National Laboratories

By David E. Womble

The Computer Science Research Institute (CSRI) at Sandia National Laboratories brings together researchers from universities, industry and the national laboratories to conduct leading-edge research in computer science, computational science and mathematics to provide new capabilities in modeling and simulation, and to apply this capability for our nation's security.

The CSRI is funded by DOE's Advanced Simulation and Computing (ASC) program and is a key part of this program's engagement with a broad research community.

Sandia and the CSRI have been leaders in computer science and computational science for many years. Since 1985, Sandia has pioneered efforts to develop scalable computing and apply this capability to problems in national security. In 1987, Sandia researchers won the first Gordon Bell Award as well as the Karp Challenge.

Sandia researchers have continued to win awards, receive patents and work with industry—notably Intel and Cray—to design, develop and deploy several of the most powerful systems in the world. The latest of these machines, "Red Storm," is now available commercially from Cray as the XT3. Sandia architecture and system software expertise are directly responsible for the success of these platforms.

Just as importantly, Sandia researchers use high-performance computing to solve problems in national security. Sandia codes and algorithms form the basis of simulations used to insure the safety and security of the nation's nuclear weapon stockpile. Sandia researchers have also solved problems in the areas of informatics, energy, infrastructure analysis, homeland security, biology, fusion, and nanotechnology. Sandia codes and libraries are widely used

by industry, academia and the national laboratories. These codes include Trilinos (solvers), DAKOTA (optimization and uncertainty quantification), Zoltan (load balancing), CUBIT (meshing) and ParaView (visualization).

The CSRI plays a critical role in this mission. CSRI researchers collaborate in areas such as computer architectures and networking, operating systems, applied mathematics, algorithms, visualization, and information science. The CSRI provides both a physical and technical focal point for identifying problems, conducting research and developing and strengthening interactions between the university and laboratory researchers.

Participants are also encouraged to develop long-term relationships with laboratory scientists and researchers. In addition to strong collaborative

Expanding the Pipeline
CRA-W/CDC Launch Discipline-Specific Mentoring Programs with Computer Architecture Summer Workshop

By Margaret Martonosi

On July 19-21, 2006, CRA-W and CDC jointly offered a summer school workshop on Computer Architecture at Princeton University in Princeton, NJ.

The workshop was supported by funding from the National Science Foundation's program on Broadening Participation in Computing (BPC), as well as generous donations from Intel Corp, IBM Research, and ACM SIGARCH (ACM's Special Interest Group on Computer Architecture). This funding supported the participation of more than 40 attendees, including undergraduates, master's students, Ph.D. students, research faculty, and lecturers—all interested in computer architecture. In addition, we were able to support the travel costs of the roughly 20 panelists—leading computer systems researchers from academia, industry, and government—who participated in the workshop discussions and presentations.

Organizing Committee

Professor Iris Bahar, Brown University, and I co-chaired the workshop. Other professors serving as members of the organizing committee included: Mary Jane Irwin, Pennsylvania State University; Russ Joseph, Northwestern University; Sally McKee, Cornell University; Li-Shiuan Peh, Princeton University; and Kelly Shaw, University of Richmond.

Goals and Agenda

While many of CRA-W's and CDC's mentoring programs span the entire computing field, the goal of this workshop was to bring together women and under-represented minorities within a single subfield—computer architecture—in order to give more discipline-specific guidance. In addition, it would encourage technical networking that will knit together a community whose members will see each other repeatedly at computer architecture conferences in the future. Opportunities would be created for attendees to forge ongoing technical connections. We wanted to give attendees a set of contacts both for quick emails of the "how do I get this software to compile?" form, as well as to spur deeper and more long-term research collaborations.

The program included a series of talks and panel sessions, comprising both technical details and career development discussions. Some of the technical sessions included: "Getting started in computer architecture research"; "What architects should know about circuits"; and "What architects should know about compilers and system software." Other sessions discussed career path options, communication skills, and strategies for proposing and funding research. A lively poster session gave all participants the chance to present and discuss their research, and the wrap-up session for the workshop featured leading researchers prognosticating on the future of the field.

The feedback from participants and panelists was quite positive and enthusiastic. For example, several graduate students mentioned that they appreciated the approachability of the panelists in this slightly less formal setting. At conferences, they felt they might not be able to speak as easily with leading researchers. They also appreciated the long-term career guidance. Even students early in their PhD program, for example, felt that the session on NSF proposals offered useful information on how research funding "works," and how best to present one's research ideas. Attendees also appreciated the diversity of backgrounds and experiences: young grad students were able to learn from more senior and seasoned PhD students, senior PhD students learned more about faculty positions and research funding, and people in lecturer and research scientist positions mentioned learning more about funding issues and different career path options.

The senior members of the field who attended the workshop as panelists were also enthusiastically positive. Several have said this was the most enjoyable technical conference they ever attended. Since many were themselves women or under-represented minorities, they appreciated the chance to interact technically with such a diverse group of computer architects. In addition, panelists appreciated having the time during the poster session and at meals and coffee breaks to hear about the current research and career plans of so many "up-and-comers" in our field. I have already heard of several nascent research collaborations that are emerging from workshop discussions.

Next Steps

Building on the success of this first workshop, we plan to take several "next steps" over the coming year. In summer 2007, we are planning a one-day follow-up workshop on computer architecture. One possible location would be at the Federated Computing Research Conferences (FCRC) in June. The International Symposium of Computer Architecture (ISCA) is one of the component conferences of FCRC. By co-locating a follow-up workshop with ISCA, we can help ensure that attendees can continue to build a network of peers and mentors in their field, and we can offer travel support so more people can attend the leading conference in our field. We plan to include a mix of both returning attendees (from this first workshop) and new attendees.

In addition to a follow-up workshop in Computer Architecture, CRA-W/CDC are also planning to hold other discipline-specific workshops in distinct computing subfields. For example, a workshop in the programming languages area is likely in 2007. The goal is to use this first computer architecture event as a pattern for planning future events in other disciplines, particularly those with especially poor diversity.

Summary

When researchers attend conferences like the Grace Hopper Conference or the Tapia Conference, they are almost always struck by the deep emotions of joining together with so many women and under-represented minorities in the field of computing. But often, when we return to technical conferences in our subfield, we return to a "real world" with very different demographics, one in which women and under-represented minorities feel isolated or marginalized. For many of us, there was incredible emotional impact just from being in a room of computer architects and seeing such vibrant diversity. It was truly a rewarding and unforgettable experience.

Margaret Martonosi is a Professor of Electrical Engineering and Associate Dean of Academic Affairs in the School of Engineering and Applied Science at Princeton University. ∎

Long-Time Staff Member Leaves CRA

Dana Neill, formerly CRA's Business Manager and more recently responsible for meeting planning and human resources, has accepted a position as Director of Member Services at the National Association of Wholesaler-Distributors (NAW) in Washington, DC. Dana recently acquired a Certified Meeting Professional (CMP) credential, and this newly created position at NAW opens up new career opportunities for her.

For the past seven years Dana has played a key role in CRA's financial affairs, human resources, and meeting arrangements for four of CRA's biennial conferences at Snowbird, Utah. CRA staff and friends will miss her, and wish her all the best in her new position. ∎

Musings from the Chair
A Clarion Call within the Cacophony

By Dan Reed, CRA Board Chair

Like many of you, I serve on a multiplicity of U.S. and international panels that offer advice and suggestions on science policy and computing. Indeed, there are times when it feels as if we are a proximate cause of deforestation, due to the number of voluminous reports we produce. The good ones are even read and have influence— sometimes!

Recently, during the question-and-answer period for one of these panels, a U.S. Office of Management and Budget (OMB) examiner noted that rarely do people come to Washington to plead, "I'm dumb, and I have too much federal money. Can you help me?" The comment generated a healthy laugh and knowing nods, but the OMB examiner was making a serious point.

There are far more smart people with good ideas beseeching government, whether local, state or federal, for help than there are

available resources. Thus has it ever been, and evermore shall it be. What, then, allows certain groups to be heard, to advance their cause, and to secure support while others struggle in vain?

There are many cynical answers to this rhetorical question, and some may even be correct. However, I believe the answer largely lies in the power and coherence of the message and the unanimity with which the constituent community delivers it. Congressional staffers have repeatedly said that any scientific community that fails to speak consistently with a single voice and a compelling message of national importance is unlikely to realize its full agenda.

Even when aided by sympathetic proponents, there are so many competing good ideas that only those with a clear, powerful message and priorities garner attention and support. This is especially true in an era of rising budget pressures and competition from well-organized special interest groups.

What does this mean for us, the computing research community? As the physicist Ernest Rutherford

once remarked, "We have no money. Therefore, we must think." Well, we do have money, just not as much as we wish we did! And, we are thinking—in between committee meetings and report writing—but we can do more. That's where the nascent Computing Community Consortium (CCC) comes in.

The National Science Foundation has awarded $6M over three years to CRA to launch and operate the CCC, which is chartered with creating compelling, audacious research visions and the mechanisms needed to realize these visions, regardless of their scope and scale. Some will be smaller, entrepreneurial efforts; others may require large teams and international collaborations.

As a broad community activity with engaged participation across all of CRA's membership, the CCC can help us shape the future of computing by defining the research questions and shaping the agendas that make us proud to be computing researchers— the ones that will shape our intellectual future, attract the best and brightest minds of a new generation, and offer compelling stories for a wide

range of funded research. The lead article in this issue of CRN outlines these objectives in greater detail, along with a web site at www.cra.org/ccc.

In the spirit of Rutherford, I encourage you to think audaciously about the future, about what could be, about how we can make an even bigger societal difference. What are the deep questions, the messages that galvanize response and enthusiasm, both from our community and from the larger population? This is the clarion call, the clear voice that can rise above the cacophony of competing agendas to say, "Join us, be a part of something truly great because we are inventing the future—one idea at a time."

Dan Reed, *CRA's Board Chair, is the Chancellor's Eminent Professor and Vice-Chancellor for Information Technology at the University of North Carolina at Chapel Hill. He also directs the interdisciplinary Renaissance Computing Institute (RENCI). Contact him at reed [at] renci.org.* ∎

Congress Delays Appropriations, Creating Uncertainty for Science Increases
Competitiveness Authorizations Also Stalled; Defense Bill Provides Increases for DARPA IT R&D

By Peter Harsha

Congress will reconvene in mid-November in a post-election session to finish work on a slate of appropriations bills—including bills that would fully fund the basic research elements of President Bush's "American Competitiveness Initiative"—that they failed to finish by the traditional end of the legislative session in early October.

Less clear is whether any of the authorization bills drafted to boost U.S. competitiveness will receive floor time before the 109th Congress adjourns for good. Congress did complete work on the mammoth FY 2007 Defense Appropriations bill before recessing in late September. Included in the bill were healthy increases to defense research and development, and some reductions to requested budgets for defense IT research.

Still on the plate for legislators in the "lame duck" congressional session are final approval of the FY 2007 Commerce, Science, Justice, State Appropriations and the FY 2007 Energy and Water Appropriations, which contain significant increases to the research budgets of the National Science Foundation, National Institute of Standards and Technology, and the Department of Energy Office of Science—all agencies with research areas that are the focus of the ACI.

The bills are part of a suite of 12 must-pass annual appropriations bills that fund the operations of government. House and Senate appropriators this year failed to pass all 13 bills before the end of the 2006 fiscal year on September 30, 2006. In fact, only the Defense Appropriations bill received final approval from both chambers before Congress recessed in the first week of October, leaving 11 bills still unresolved when Congress returns in mid-November. Congress recesses in late September or early October in even years so that Members of Congress facing reelection can return to their home districts for last-minute campaigning.

The increases in funding for NSF, NIST, and DOE Office of Science granted by congressional appropriators, but not yet approved by both chambers, are responsive to the President's request last February for a boost in the federal investment in the fundamental "physical sciences" (broadly defined as including physics, chemistry, computing, mathematics, and engineering). Though the final numbers have yet to be decided, both House and Senate appropriations committees included in their respective bills increases that are close to the President's requested budget: an 8 percent increase for NSF in FY 2007, 18 percent increase for NIST, and a 14 percent increase for DOE's

Office of Science. Included in those increases are healthy increases to computing research accounts. NSF's Computer and Information Science and Engineering directorate (CISE) would grow 6.1 percent in FY 2007. DOE's Advanced Scientific Computing Research account would grow $84 million, or 36 percent, above the FY 2006 level.

It is not clear how the Congressional leadership will decide to finish the outstanding appropriations bills during the lame-duck session. There are three basic approaches they could choose. They could elect to work each appropriations bill separately—an approach that preserves "normal order" and gives the appropriations committees the most control over the final shape of each bill. However, given the time constraints—Members of Congress are typically very averse to staying in lame-duck session for very long—it is unlikely the leadership will allow each bill to come up for separate consideration.

The leadership could elect to bundle all the outstanding appropriations bills into one "omnibus" bill. All 11 outstanding bills would then face a single up or down vote for passage. This approach has been used in 3 out of the past 4 years. The approach puts a large amount of power in the hands of the leadership who get to determine what provisions

from all 11 appropriations bills—and any other provision that might benefit from its inclusion in a "must-pass" bill—appear in the final omnibus.

The third option for the leadership is to pass a stopgap spending measure, called a "continuing resolution," that simply funds government agencies and services at the same rate they had been funded in FY 2006. This is a favorite option of opponents of increased government spending because it short-circuits the creation of any new government programs or spending approved by the appropriations committee and essentially starts the annual appropriations process over from scratch. The leadership could also pass a "modified" continuing

Moving Forward Strategically

By Peter A. Freeman
Assistant Director of NSF for CISE

I want to alert you to a major educational effort we have just announced and update you on continuing progress on the GENI Project.

The pervasive impact of computing technology in our lives and throughout the global economy is indisputable, and it is clear that the U.S. workforce—most especially computing professionals of all types and at all levels—must be prepared to play a leading role in the technology-based economy of the 21st century. At the same time, enrollments are down significantly, full representation of the U.S. population is not reflected in our matriculated students, and our major computing industries are increasingly concerned about the quality of the computing education that we are providing.

This demands significant changes in our approach to computing education in order to be more responsive to both rapid changes in the technology base and to the ever-growing impact of computing in almost all academic disciplines, as well as in the general workforce. Even wholesale replacement of curricula will not really do the job. While some scattered efforts are emerging to address this situation—usually on a local basis and without much support—we believe that a variety of approaches must be explored, evaluated, and disseminated in the next few years. Further, we believe strongly that the ranks of computing education innovators and leaders must be expanded, strengthened, and given due recognition.

We announced in September a new CISE-wide program—CISE Pathways to Revitalized Undergraduate Computing Education, or CPATH in short—aimed at transforming and revitalizing undergraduate computing education on a national scale. We hope to engage the community in alliances and activities that will shape a positive future for undergraduate computing education. In FY 2007, CPATH will support community building, leadership development, the evaluation and extension of promising models, and institutional transformation projects. For more information, read the Call to Action on the CISE website and the program solicitation at: www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06608. We are planning a multi-year effort, which will be dynamically shaped in response to initial ideas and the developing national environment.

Our goals are ambitious. This program is intended to challenge those who are in the best position to bring about real change. CPATH is structured to stimulate broad conversations about the future of computing education, recognize and develop leaders, support the evaluation of the effectiveness of innovative approaches, and result in the propagation of the best models and practices. CPATH is focused on both the education of computing professionals and on the preparation of a broader professional workforce fully capable of utilizing computing technology in a wide range of application domains.

Whether or not you intend to submit a proposal, I urge you to read the solicitation, talk and work with your colleagues to address these goals, and support those who can submit competitive proposals.

Let me turn now to another strategically important activity in CISE—the Global Environment for Networking Innovations, or GENI. I assume you are at least aware of the GENI initiative, developed to support the research necessary to the development of the Future Internet. The initiative includes a major experimental facility to support a broad range of research. If you are unfamiliar with GENI, please refer to any of my several previous CRN columns and to www.nsf.gov/cise/geni/.

The GENI Planning Group, comprising almost 50 people in our research community, is continuing to work strenuously to refine the conceptual design of the GENI Facility in support of the evolving GENI Science Plan. Current information is posted at www.geni.net. At the same time, we have expanded the CISE staff, engaging several highly experienced specialists that will allow us to provide appropriate assistance to the community as this project moves forward. In addition, I and other senior staff have been deepening our interactions with industry and with the international community. On all of these fronts (and others) we continue to receive strong community encouragement.

A key part of moving forward on the construction of a project of the size and complexity of the GENI Facility (cost is currently estimated at several hundred million dollars) is the establishment of a professional project management office (outside of NSF). CISE released a solicitation (www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06601) in September to establish the GENI Project Office (GPO) to serve this function. As the solicitation makes clear, the organization that will be competitively chosen later this year to serve as the GPO is not expected to do all the work in constructing the facility. Rather, under proper, community-driven guidance, it will provide the management expertise that is essential to the success of a project of this magnitude.

The third part of the GENI picture is to insure that all GENI activities are motivated by the scientific opportunities identified by our research and education community. This task will fall to the newly formed (www.cra.org/ccc/) Computing Community Consortium (CCC) and GENI Science Council (GSC). Specifically, the GSC is expected to "Lead the development of the GENI Science Plan and accept input from the broad research community." Under the rubric of the CCC, the GSC is expected to keep the community fully informed on what is happening in this area.

The Computing Community Consortium is chartered with a much broader objective than just leading the scientific development of the GENI Project. Let me quote from the solicitation that led to the specific proposal that we have now funded:

The Directorate for Computer and Information Science and Engineering (CISE) is calling for the computing research community to unite in the establishment of a Computing Community Consortium (CCC). The CCC will ensure broad community engagement in the identification of compelling research agendas and in the subsequent identification and refinement of related shared use infrastructure requirements.

I have written and spoken about this concept in many venues, and the above excerpt states our objectives clearly. Let me simply note three essential points:

1. There has never been a better time for our field to move to a higher level of aspiration and vision, thus joining older disciplines;
2. Developing ideas for and under-taking larger projects does **not** mean that we have to deemphasize the single investigator for two simple reasons: It is well understood that it is individuals who initially have new ideas, and it is generally only big-vision ideas/projects that capture the attention (and dollars!) of decision-makers; and
3. Broad *cooperation in the community* is essential to gain big funding and, ultimately, to insure the scientific success of grand-vision projects.

We believe that the CCC can do this, and we will be working closely with them to help achieve these objectives for the benefit of our entire field. I urge you to participate.

In my September column I indicated that we would have a report in November on funding rates in FY06, but I failed to account for the printing and fiscal year closeout deadlines. So that report will not be available before January. I would note that there is now a major, internal NSF study on funding rates that will be reported to the National Science Board later this year.

Peter Freeman *(pfreeman [at] nsf.gov) is the Assistant Director of NSF for CISE.* ∎

U.S. Computer Science Delegation Visits China

By Marc Snir

Summary

In the spring of 2006, an NSF-sponsored delegation of CS scientists (mostly School Deans and Department Chairs) visited various CS research centers and departments in China and met with peers. The purpose of the visit was to improve our knowledge of CS research in China and to establish a dialogue with our peers.

The trip included visits to: *Beijing*—IBM China Research Lab, Microsoft Research Asia, Institute for Computing Technology (ICT, an institute of the Chinese Academy of Sciences), Peking University, and Tsinghua University; *Nanjing*—Southeast University and Nanjing University; *Xi'an*—Northwestern Polytechnic University and Xi'an Jiaotong University; *Shanghai*—Shanghai Jiaotong University; and *Suzhou*—Suzhou University. In addition, a one-day U.S.-China Computer Science Leadership Summit, held at Beihang University in Beijing, provided an opportunity to discuss issues of common interest.

For more details about the trip, including a list of delegation members, see: http://dimacs.rutgers.edu/Workshops/China/. In the near future, DIMACS will issue a report on the facts, impressions, and recommendations gathered by the delegation. This article summarizes the impressions of one trip participant; the opinions expressed here are his own.

Background

China is a huge country whose economy is progressing by leaps and bounds. The high savings rate in China supports large investments that quickly modernize China's infrastructure. In addition, the huge Chinese market attracts large foreign investments. As standards of living improve, the demand for higher education increases. China now has more than 15 million students and more than a million graduate students in the higher education system; it has the second highest graduate student population in the world, second only to the United States. Although new, modern campuses are growing quickly everywhere, the university system still has problems coping with the large demand. The competition for entering the most prestigious campuses is fierce.

As standards of living continue

Good Service: A Surprising Secret to Academic Success

By David Patterson

Conventional wisdom is that service runs a distant third to research and teaching in academia. It is certainly sound advice for larval professors. If it applies to senior faculty as well, then only idealists would volunteer to serve, for example, on a National Research Council study panel, on the CRA Board, on a professional society leadership council, or in a government funding agency.

Hence, when I congratulated Janie Irwin for winning the CRA Distinguished Service Award last spring, I was applauding her unselfish spirit. I was surprised to learn it was her fourth award that year, as CRA's DSA was also my fourth award in 2006.[1] It struck me as odd that in our 30-year careers we would win eight awards simultaneously. Although we both have good reputations in research and teaching, our service records are likely the most distinguished (so to speak) from many faculty.

Could conventional wisdom be wrong? Could good service actually help a career and the lack of good service impair an otherwise successful career?

I decided to investigate if service is correlated to career success. Of course, success has many definitions in academia: contributions to humankind's knowledge, influence on other researchers, impact on commercial products, success of former students, salary level, and so on.

One way to measure career success is by awards received. As an independent assessment of contributions, they act as the Consumers Reports of academia. Indeed, universities celebrate them to demonstrate the quality of their faculty, and many have a list of faculty awards just below their masthead.

Election to the National Academy of Engineering is one such prestigious award that universities brag about.[2] According to NAE, "Election to membership is one of the highest professional honors accorded an engineer." The award is given strictly for one's impact on engineering research or products; service is not mentioned in the qualifications for election to NAE. There are about 200 members of the Computer Science and Engineering section of NAE, and about 75 of them are active academics. With about 5,000 CS faculty in the United States and another 1,000 in Canada,[3]

roughly 1 percent of faculty in North America are members of NAE. Even if we limited the population to the top 36 U.S. departments, only about 4 percent are NAE members.

To test for good service, I used the Distinguished Service Awards from ACM and CRA. ACM looks for activities that "emphasize contributions to the computing community at large" and CRA recognizes service that has had "major impact on computing research." These general service awards were closer to what I was looking for than a "lifetime service award" from a single organization.

The table below lists recent winners of the Distinguished Service Awards from ACM and CRA who are members of NAE. It also highlights two Turing Award winners on the list.

ACM Distinguished Service Award + National Academy of Engineering

2003	Ruzena Bajcsy, University of California, Berkeley
2005	Mary Jane Irwin, Penn State University

CRA Distinguished Service Award + National Academy of Engineering

1990	Robert Kahn*, Corporation for National Research Initiatives
1992	Joseph Traub, Columbia University
1994	William A. Wulf, University of Virginia
1995	Randy Katz, University of California at Berkeley
1997	Anita Jones, University of Virginia
1999	Bill Joy, Sun Microsystems,
1999	Ken Kennedy, Rice University
2000	Juris Hartmanis*, Cornell University
2002	Andries van Dam, Brown University
2003	Ruzena Bajcsy, University of California, Berkeley
2004	David Clark, MIT
2005	Edward Lazowska, University of Washington
2006	Mary Jane Irwin, Penn State University
2006	David Patterson, University of California, Berkeley

* ACM Turing Award Winner

Rather than 1 percent or 4 percent, since 2000, 75 percent of academic

winners of these two service awards are members of NAE! The list of recent ACM Turing Award winners includes many people who do tons of service, including two winners of CRA's DSA above.

How can good service, which according to conventional wisdom is (if anything) negatively correlated, instead be so positively correlated?

When faced with this data, one colleague proposes that people with distinguished research records serve because they are comfortable with their research contributions. He supports his observation that while DSA awards are given close to the service point, NAE generally recognizes contributions that are a decade or more in the past. Another colleague suggests that some people are good at everything they do, so of course good service is correlated to awards where service is not a criterion. While the second theory is flattering, as I reflect upon my experience as a member of several award committees and the NAE member selection committee, I have a third theory.

To explain my theory, let's examine the award selection process. First, there are nearly always more well-qualified candidates than you can honor with awards (indeed, several of us have been working to increase the number of NAE slots for CS&E). Second, awards like NAE are not limited to a single sub-discipline, so selection committees are necessarily broad. As a member of the committee, you carefully read the nomination and letters of reference, and listen to the discussions of the strengths of the candidates. Every awards committee I have been on ultimately selects the winners using some form of ballot. Hence, committee members must vote on candidates without any direct knowledge of their technical expertise.

My theory is that, assuming a candidate matches the award criteria, the addition of good service may give the candidate an advantage in a multidisciplinary election. Serving directly with people in other subfields allows you to form an opinion of their intelligence, knowledge, dependability, effectiveness, judgment, fairness, leadership, creativity, and so on. Even if you haven't served with candidates directly, a candidate's strong service record may have a significant positive

impact and may shape your views. Assuming that the rest of the case is strong, such views may influence your vote and tip the balance.

If my theory is correct, then it's not simply the number of committees one serves on, just as research awards are not given for the number of papers written. In both cases, you are judged on the quality and impact of your contributions, not the quantity.

Although I have been using awards as a measure of success, positive opinions formed because of an individual's good service record lead to job opportunities as well as awards. I have seen many effective committee colleagues move on to greener pastures. (While Janie and I have stayed put, our administrations do try to keep us happy.)

To non-larval professors, I pass on my recently discovered, surprising secret for academic success. The reason for performing significant good service is not just altruism; it is enlightened self-interest as well, for it can give you a competitive advantage in garnering recognition of a successful academic career.

End Notes:
1. In addition to the CRA DSA, Mary Jane Irwin was named a University Professor at Penn State, received the Howard B. Palmer Faculty Mentoring Award, and the ACM DSA. I received the UPE Abacus Award in addition to the CRA DSA, and I was elected to the Academy of Arts and Sciences and to the National Academies of Science.
2. While NAE is a U.S. institution, it does elect Canadians as foreign associates. The Canadian Academy of Engineering is the logical equivalent to NAE in Canada, but I couldn't find a list of CS members of CAE.
3. See the Taulbee Survey Report 2004-05 at: http://www.cra.org/CRN/articles/may06/tables.17to23.html.

Dave Patterson (pattrsn@eecs.berkeley.edu), Professor of Computer Science at UC Berkeley, was a long-time member of the CRA board, serving two terms as its chair. He recently completed a two-year term as the President of ACM. ∎

BLS Projects Strong Growth in IT Professions

By Jay Vegso

The Bureau of Labor Statistics (BLS) estimates that the professional-level IT workforce will grow at more than twice the rate of the overall workforce between 2004 and 2014, and account for 1 in 19 new jobs. In addition, many of these jobs should pay well.

Every two years, BLS releases workforce projections covering a 10-year period. The definition for the 'professional IT workforce' adopted here is that used by the Department of Commerce's Office of Technology Policy. This adds two occupations to

the 10 listed under the "Computer specialists" category (15-0000 through 15-1099) in the BLS tables: Computer and information system managers (11-3021) and Computer hardware engineers (17-2061).

Although each BLS employment projection report covers a slightly different period, it is interesting to see how the forecasts have changed over time. The 2004-2014 projections for the IT workforce are slightly lower, both in terms of numbers and percent growth, than those made in the report for 2002-2012. In the

2002-2012 report, BLS estimated that 1.15 million new jobs would be created—a 35 percent growth rate. Total job openings (new jobs plus openings created to replace workers who leave their jobs) were estimated at 1.6 million. In comparison, the report for 2004-2014 forecasts a lower growth rate in new jobs (30.5 percent), fewer new jobs (1.04 million, or 10 percent lower than for 2002-2012), and fewer total openings (1.49 million, or 7 percent lower than its previous report).

The reduced growth projections made for IT in the 2004-2014 report

come on top of the significantly lower expectations BLS gave in its report for 2002-2012. In that report, BLS cut back its projections significantly compared to those predicted in the report for 2000-2010. The estimated number of new jobs was lowered 47 percent from what had been predicted for 2000-2010 (2.16 million versus 1.15 million). As a result, the growth rate fell from 65.8 percent to 35.2 percent. The estimated total openings also were

lowered, from 2.49 million to 1.6 million. (See the May 2004 *CRN* article by John Sargent: http://www.cra.org/CRN/articles/may04/sargent.html).

Even when these declines are factored in, the BLS estimates significant growth for well-paying IT jobs between 2004 and 2014.

In 2004, there were 3.4 million IT professionals out of a total workforce of 145.6 million. The professional IT workforce is projected to add slightly more than a million new jobs between 2004 and 2014, an increase of about 30 percent. In comparison, the total workforce is expected to add 18.9 million jobs.

Six of the 30 occupations that are projected to grow the fastest (i.e., percent gain) between 2004 and 2014 are in the IT profession. Among the 30 fastest-growing occupations, 17 have median salary earnings of $43,605 or above, including all six IT occupations.

Two of the six IT occupations listed as the fastest growing also rank among the 30 that are projected to have the largest numeric growth. Only seven of these 30 have median salary earnings of $43,605 or more, including both IT occupations.

Notes:

The 2004-2014 projections appear in five articles in the November 2005 issue of the *Monthly Labor Review*, published by the Bureau of Labor Statistics, U.S. Department of Labor. The *Review* is available online at: www.bls.gov/opub/mlr/welcome.htm ■

Employment by occupation, 2004 and projected 2014
[Numbers in thousands]

	Employment				Change		Total job openings due to growth and net replace-ments 2004-14
	Number		Percent Distribution		Number	Percent	
	2004	2014	2004	2014			
Total, all occupations	145,612	164,540	100	100	18,928	13	54,680
Computer and information systems managers	280	353	0.2	0.2	73	25.9	124
Computer specialists	3,046	4,003	2.1	2.4	957	31.4	1,350
Computer and information scientists, research	22	28	0	0	6	25.6	8
Computer programmers	455	464	0.3	0.3	9	2	117
Computer software engineers	800	1,169	0.5	0.7	369	46.1	448
Computer software engineers, applications	460	682	0.3	0.4	222	48.4	268
Computer software engineers systems software	340	486	0.2	0.3	146	43	180
Computer support specialists	518	638	0.4	0.4	119	23	183
Computer systems analysts	487	640	0.3	0.4	153	31.4	208
Database administrators	104	144	0.1	0.1	40	38.2	51
Network and computer systems administrators	278	385	0.2	0.2	107	38.4	138
Network systems and data communications analysts	231	357	0.2	0.2	126	54.6	153
Computer specialists, all other	149	177	0.1	0.1	28	19	45
Computer hardware engineers	77	84	0.1	0.1	8	10.1	20
Total, all professional-level IT occupations	3,403	4,440			1,037	30.5	1,494

resolution that contains exceptions for favored programs. Those programs wouldn't be restricted to FY 2006 levels but would receive whatever the bill's authors intend for them.

For the science advocacy community, either of the first two options is preferable to the continuing resolution model. Both "normal order" and "omnibus" approaches would preserve the increases in funding for fundamental research the community has worked hard to achieve in the FY 2007 appropriations bills. Securing an exception in a continuing resolution could be difficult, given the number of other congressional priorities that would also be affected by that approach. Without an exception, federal science agencies would be forced to make do with FY 2006 funding levels, and no new programs would be permitted to start.

It is likely that the approach the congressional leadership ultimately decides upon will not be known until after the November 7th elections. A change in party control after the election to one or both of the chambers will significantly impact the leadership's calculus about the best way to approach the outstanding appropriations bills in ways that are difficult to predict as this goes to press.

Also difficult to predict is whether Congress will decide to move forward with any of the competitiveness bills that have been proposed this session. Several bills were introduced in

Congress this year that attempt to "authorize" specific provisions of ACI, or the various recommendations of the National Academies' influential *Rising Above the Gathering Storm* report or the Council on Competitiveness' *Innovate America* report. None of the bills currently introduced—there are 2 House bills and 3 Senate bills[1]—has received the approval of its respective chamber.

The biggest hurdle for passage of any of these authorizations appears to be the White House's continuing insistence that the programs contained in the ACI do not require additional authorizations (and so the Administration is reluctant to allow Congress to put its stamp on programs in authorizations), and the House leadership's continuing reluctance to pass "high-dollar" authorizations at a time when it is trying to cut and demonstrate "fiscal restraint." This despite the fact that authorizations do not actually mandate any increased spending, only "authorize" appropriations committees to spend the money should they determine that the money is available.

With the limited time available on the congressional calendar—literally just the days the members are willing to stay in lame-duck session—it is highly unlikely any of the authorization bills will receive the required consideration in both chambers necessary for enactment. While the science community would likely appreciate the important symbolism of seeing any of these authorization bills approved overwhelmingly by Congress, the lack

of passage is not seen as a big loss.

For some—including from the perspective of the computing research community—there appears to be some benefit in not having these particular bills enacted. One key element of increasing the Nation's capacity to innovate is ensuring that the nation has a diverse, well-educated workforce. Increasing the participation of underrepresented groups in math and science, particularly in computer science, is a key factor. Though the various authorization bills have a number of provisions the community finds particularly desirable, none is particularly strong in promoting the participation of women or minorities in math and science. Having to start the process of working through these bills with the next Congress beginning in January actually presents the community with an opportunity to continue to make the case for increasing support for programs that aim to create a more diverse workforce, with the hope of seeing that reflected in whatever bill finally moves toward passage.

The one aspect of the annual appropriations process whose outcome is already known is the FY 2007 Defense Appropriations bill. Overall, defense science and technology will receive a small increase in FY 2007, growing $87 million to $13.3 billion, an increase of 0.7 percent. Within that account, basic research will grow a healthy 5.6 percent, or $82 million, to $1.6 billion. Defense applied research will grow $114 million, or 2.2 percent, to $5.3 billion. Defense advanced technology development will receive

a 1.7 percent cut, declining by $109 million to $6.5 billion.

DARPA will see an increase of $200 million in FY 2007, up 7 percent to $3.1 billion. DARPA's "Information and Communication Technology" account will increase $39 million to $235 million, an increase of 20 percent, but $8 million less than the President's budget request. Also receiving less than the President's requested level is DARPA's "Cognitive Computing Systems" program, which will receive a $17 million increase to $181 million in FY 2007, an increase of 10 percent. The President had requested that account to grow by 36 percent in FY 2007, a level the House agreed with. As we noted in the September 2006 issue of *CRN* (Vol. 18, No. 4), Senate appropriators disagreed for reasons that are still unclear, and slashed the requested level by $71 million. Pressure from the computing community helped mitigate the Senate's cut by $30 million in the final compromise version of the Defense bill.

For the latest details on the FY 2007 appropriations and authorizations "end game," check the Computing Research Policy Blog: http://www.cra.org/blog.

End Note:

[1] For a table listing the outstanding innovation/competitiveness bills, what they include and their status, see: http://www.cra.org/govaffairs/blog/archives/000531.html ■

to increase in China, its economy is moving away from cheap manufacturing and into advanced technology and services. The government is attempting to accelerate this shift as it recognizes the limitations of cheap manufacturing as a source of wealth for China: an economic model based on a cheap workforce cannot reduce income inequalities and lift China's countryside out of poverty; service jobs can be created with a smaller investment per job than manufacturing jobs; and high-tech manufacturing and services can reduce the strong dependency of the increase in China's GDP on the increase in its energy consumption and pollution generation. China is keen to develop home-grown technologies in order to compete in "high-tech" with little dependence on foreign knowledge; it wants to educate a workforce that will support a sophisticated modern economy. Government investments in Computer Science and Technology (CST) research and education reflect these priorities; sophisticated IT is seen as essential to advanced manufacturing and services.

The Chinese Academic System

The current academic system in China is of recent, post-Cultural Revolution, origin: academic degrees (Bachelor's, Master's, and Ph.D.'s) were officially established in 1981. Chinese graduate students started studying abroad, and research exchanges with foreign countries were re-established at about the same time.

The higher education system is largely funded by the state, with top universities funded mainly by the central government and second-tier universities having more local government funding. The funding reflects national and local priorities. For example, the government recently funded the creation of software engineering schools (at the Bachelor's and Master's level) in order to educate the workforce of software engineers and programmers, which is needed to support China's push into software services. The government funds projects at several universities and research centers that develop commercial microprocessors for desktop systems, microcontrollers, or DSP chips for TV sets. These projects are clearly aimed at providing home-brewed technologies for China's push into consumer electronics. ICT is also developing video encoding algorithms to replace current standards and avoid the payment of royalties to foreign companies.

China's services increasingly depend on private funding, and universities have not escaped this trend: an increasing fraction of university income comes from student fees and industrial ventures.

Admission into universities is by national entrance exams. These exams are taken at the same time all over China, and success in the exam largely dictates a student's future. Students are working very hard to prepare and parents are investing large sums to provide good tutoring for the exams. A complex system of quotas provides

different priorities to students both within and outside the university's catchment area and for certain minorities. Admission will also depend on the subject of study chosen by the student. As a result, a student may choose an area of study to get into a top university, rather than studying in a preferred area and be assigned to a lesser university. Some universities are charging significant fees for students they accept above their quotas. Increasingly top universities are also establishing private or quasi-private schools, often in collaboration with foreign universities, leveraging their reputation and charging higher tuition in popular study areas like business (CS studies have not yet been affected by this trend).

Science parks are attached to many top universities. Technology developed in academia is used to start private companies located at these campuses. The relationship between such companies and academia can be very tight: the company may be partially owned by the university and by faculty at the university; research projects at the university are closely aligned with the company's product line; and faculty and students work for the company. Since government funding of research is explicitly aimed at creating a local high-tech industry, and state and local governments often invest in economic ventures, the commingling of private enterprise and public research seems to be better accepted in China than in the United States.

Chinese faculty hold three ranks: lecturer, associate professor, and full professor. Only a subset of the full professors can supervise Ph.D. students. Younger faculty in the top universities are likely to have credentials similar to those faculty at U.S. universities; however, not all faculty hold doctorates. This is especially true of older faculty, whose careers were impeded by the Cultural Revolution, or faculty at less prestigious universities. The fact that advising is restricted to a small group of full professors encourages a hierarchical system where younger faculty and students work in large research groups that are headed by full professors who can advise. A senior professor may advise a dozen or more students with the help of the junior faculty in the group. The group leader also bears major responsibility for obtaining funding for the group—it seems that research grants are normally held by senior faculty.

The number of colleges and universities with degree programs in Computer Science and Technology (CST) has grown to more than 70; more than half of these are less than 10 years old. However, there are only 15 universities and one research institute that have been authorized by the Ministry of Education to offer Ph.D. degrees in CST. In addition, there are another 28 universities that can offer Ph.D.s in sub-disciplines of CST, and another 132 universities that offer Master's degrees. Industrial research centers, such as Microsoft Research Asia (MSRA), also participate in higher education. MSRA is a "postdoctoral station"—that is, an institution that offers postdoctoral positions (considered a necessary step in the education of a Chinese academic). In addition, MSRA has several joint

Ph.D. programs with universities.

The demand for CS graduates with doctoral degrees seems strong, and is boosted by the very large number of industrial research centers established by international companies in China. We were told of a drop in starting salaries for programmers, but no drop in enrollments at top universities.

CS research in China is broadly similar to research in the United States; however, there seems to be less emphasis on theory and foundations and more emphasis on system implementation.

Research and education funding in China is significantly lower than in the United States: China spends a lower fraction of its GDP on education than the United States (<4% vs. 5.9%). The budgets of research funding agencies are smaller: for example, the 2005 budget of the National Natural Science Foundation of China (NSFC) was 3.5 billion RMB, or about $430M. However, central government funding is also focused on a smaller number of top universities; these universities often have an up-to-date equipment infrastructure. For example, we visited several groups that work on (standard cell) microprocessor design; each had expensive testing equipment and up-to-date CAD tools.

A significant fraction of funding comes from projects that in the United States would be considered development rather than research: university research groups, including faculty and students, will work on software infrastructure projects for the government. This has the obvious disadvantage of reducing the amount of time young faculty and graduate students can spend on publishable research. On the other hand, students receive practical training that may be missing in the United States, and faculty may access data from deployed infrastructure or from realistic software development projects that is harder to obtain in this country.

Our Chinese peers are very keen to raise the quality of research in

their departments and to encourage publications. Universities attempt to do so by imposing procedures that evaluate and promote faculty according to their number of publications in international journals that are indexed by SCI or EI. (This is a problem for a discipline such as CS, where conference publications are more important than journal articles.) Also, Ph.D. and Master's theses are now reviewed anonymously unless the content appeared in an international journal. The government has provided quality improvement funds to top universities that are used to hold international conferences, to support Chinese faculty in attending conferences abroad, and to attract world-renowned, foreign-trained scientists to China. While there have been a few such high profile hires (e.g., Andrew Chi-chi Yao at Tsinghua University), the total number is small.

Conclusions

China's rapid evolution ensures that any report from this country will soon be obsolete; it is clear that China is gearing up to become a powerhouse in science and technology, and the U.S. research community should closely observe its rapid evolution.

Many opportunities exist for collaboration between the United States and China in CS: the Chinese universities we visited are interested in joint educational programs, academic exchanges, and joint research projects. Both NSF (who opened an office in Beijing during our visit) and NSFC are keen to encourage such collaborations. Language is not a major obstacle for the younger generation; the differences between the Chinese and American models, while creating some obstacles, provide unique opportunities because of their complementary strengths.

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into place that stimulate and facilitate visioning by the computing research community. These processes will include conferences, workshops, task forces, white papers, and a variety of other mechanisms, all of which will be widely advertised and open to the broadest possible spectrum of the computing research community.

Guided by the Council, the CCC will foster evolution of the most promising visions toward major funding initiatives. Some funding initiatives will require significant instrumentation; others will not. The Council will work closely with appropriate members of NSF and other funding agencies to advance the interests of the community.

How Will the CCC Operate?

The visioning process begins with a community activity to identify fundamental questions in computing. These questions are not program or facility specific, but may ultimately encompass multiple programs or facilities. The CCC will communicate the output of this activity to the national community. This list of fundamental questions will provide the framework and rationale for large initiatives.

In support of the development of a list of fundamental questions, the Council will charter visioning activities, which will identify potential major opportunities, set priorities or establish grand scientific or engineering challenges for the field. These visioning activities will be based on a topical interest area either proposed (formally or informally) by members of the computing research community or formulated by Council members. Such proposals may be community generated or may result from workshops and study groups organized by the Council.

As visioning activities gather momentum, the Council will establish *Visioning Task Forces*, whose members will be recruited from the proposers, based on interest and expertise, with oversight by the Council. These task forces will conduct workshops and meetings, ideally in conjunction with related conferences. Some task force activities may be conducted in foreign venues to ensure international participation.

Task force members will generate a public report that describes the prospects for the proposed activity and estimates the resources required. We expect these reports, either individually or in collected editions published by the CRA, to constitute authoritative statements of the scope and benefits for major computing research initiatives. The reports will also form a basis for consensus building, establishing

an agenda for future initiatives and community thinking around audacious research goals.

One possible outcome of Visioning Task Forces will be the identification of ideas for major instrumentation or research initiatives that enjoy widespread community support and that address deep challenges and problems in computing. The Council, in such cases, will place the initiative in the context of the computing community's key research questions, and it will seek agreement from appropriate funding agencies that the idea is worthy of further exploration. Based on such agreement, the Council will work with the Task Force to form an *Initial Planning Group*.

The charter of the Initial Planning Group will be to formulate a plan that outlines major strategic thrusts, identifies possible sources and types of funding, and identifies the portion of the scientific community that should participate. The CCC will assist the Initial Planning Group in presenting their findings to appropriate funding agencies and help them establish committed prospects for funding.

Although many of these thrusts will primarily require interest and initiation through new coordinated funding programs, others will require the development of large-scale instrumentation. The latter are more suitable for programs such as the NSF Major Research Equipment and Facilities Construction (MREFC) program. For future research initiatives requiring the construction of large-scale shared resources through the MREFC process, the CCC, through the Initial Planning Group, will play a key role in the preliminary stages.

Upon successful completion of this MREFC conceptual design phase, the CCC will work with NSF to establish a *Planning Organization* to continue the preliminary design phase. As this process proceeds, the NSF will become more directly involved in oversight,

though the CCC will continue to represent the community in evaluating whether the instrument being planned and built by the Project Office is meeting the research needs it was created to serve.

Tailored, small groups constituted by CCC will seek to reduce the time needed not only to formulate a consensus around a community research vision, but also to aid the funding agencies in exploring alternative initiative formulations that reduce the time between vision setting and program initiation. By identifying and sustaining a consensus suite of the computing research community's fundamental research questions, the CCC will provide a ready source of motivation for innovative research programs and a broadly based rationale for their funding.

The figure below shows both the intended organization and the operation of the CCC.

How Will Research Thrusts Be Advanced?

Computing has a very diverse range of research thrusts, which the CCC will reflect in the consensus suite of fundamental research questions. At any time, many research objectives are being actively pursued. One CCC objective is to catalyze the formulation of new research thrusts—more rapidly than they have formed in the past. Some of these thrusts will grow and prosper; others will not gain a community consensus or will not appeal to funding sources and will disappear.

Because we see value in multiplicity, the CCC routinely will pursue multiple thrusts simultaneously. The strength of community interest will communicate the priority of a candidate thrust to the funding agencies. In addition to serving in this matchmaking role, the CCC will serve in a high-level oversight role ensuring that the

scientific mission of the program is serving the broad computing community.

### What Will the Computing Community Consortium Accomplish?

The opportunity for the CCC is dramatic—we are at a time when the computing research community is ready to assume more responsibility for its own success through the creation of funding programs and instrumentation to attract and empower the next generation of researchers. Moreover, it is clear that the impact of computing on the nation's economy and our citizens' lives will continue to grow dramatically. Together we can:

1. Bring the computing research community together to discuss, prioritize and envision our future research needs and thrusts.
2. Communicate these challenges, needs and thrusts to the broader national community.
3. Create within the computing research community more audacious thinking.
4. See the ideas developed in (1) and (3) turn into funded research programs and/or instruments.
5. Increase the excitement within computing research, and use that excitement to attract students of both genders and all ethnic groups into computing research careers.

Acknowledgments

For more information, see: http://www.cra.org/ccc/ ∎
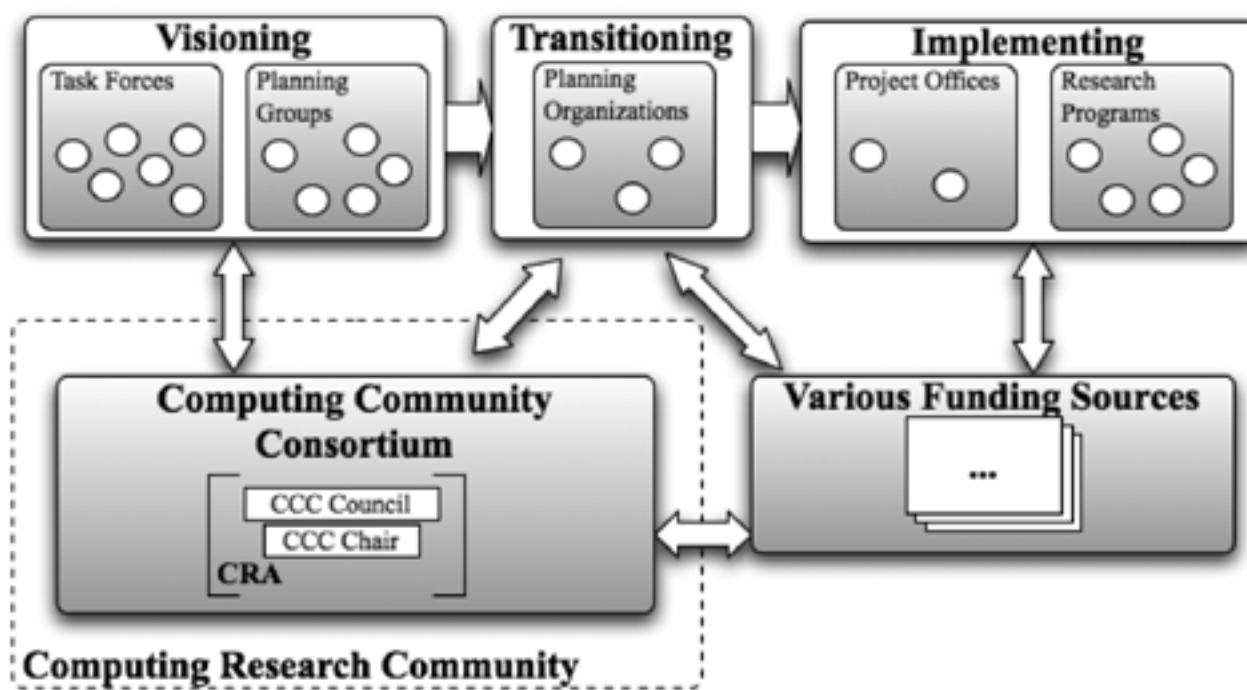
CRA-W Anita Borg Early Career Award

Nomination Deadline
February 15, 2007
Details: http://www.cra.org/Activities/craw/borg

CRA-W Distributed Mentor Program

Undergraduate Summer Research Internships
Application Deadline for Summer 2007
February 15, 2007
Details: http://www.cra.org/Activities/craw/dmp/

research programs, the CSRI sponsors:
- summer faculty and summer intern programs with up to 60 participants each year;
- faculty sabbaticals;
- four to eight workshops each year targeting areas with especially strong opportunities for impact;
- graduate student programs and research fellowships;
- a strong visitor program with both short-term and extended visits; and
- a technical seminar series.

In addition to the strong research component in CSRI activities, the CSRI encourages participating students to choose careers in computer science, computational science and mathematics that directly support the challenges of national security.

Research and Technical Focus Areas

The CSRI conducts research in computer science, computational science and mathematics that impacts large-scale modeling and simulation. One area of particular interest is developing hardware, software and algorithms that scale both as the size and complexity of the problems increase and as the number of processors increase to tens or hundreds of thousands.

The technical focus of the CSRI can be divided into two areas, algorithms and enabling technology along with advanced architectures and system software. The near-term focus in the advanced architectures and system software area is the design of 20 PFlop systems that are scalable, reliable and usable by scientists and engineers. Moore's Law is still in effect in the semiconductor industry, and success in this area will require advances in processor architectures and design, integrated and balanced interconnects, fault tolerance, scalable I/O and file systems, scalable operating systems, and improved programming environments.

Longer term computer research at the CSRI looks beyond the realm of Moore's Law. There is a specific focus on the use of nanotechnologies to the computing industry, including novel memory technologies, reversible logic and quantum computing. CSRI researchers work closely with Sandia physicists and materials scientists to take these new technologies beyond speculation and into reality.

The area of algorithms and enabling technologies includes research in

mathematics and computer science and deals with the question of how to use high-end computing to provide a modeling and simulation capability for scientists and engineers. Linear and nonlinear solvers form the computational kernel of many, if not most, simulations, and CSRI researchers have made tremendous contributions in this area. Many of these advances are incorporated in the well-known Trilinos framework.

CSRI researchers address the fundamental questions of how modeling and simulation is used through their work in optimization and uncertainty quantification. Researchers in this area also address the related areas of validation and verification and the linkage between simulation and experiment that will be an essential part of any future scientific or engineering endeavor.

Enabling technologies play a critical role in the use of high-performance modeling and simulation platforms, and CSRI researchers have developed some of the best tools available. These include the CUBIT meshing toolkit (with associated mesh optimization and geometry editing toolkits) and the ParaView visualization package. ParaView, in particular, addresses the scalability of the user environment by allowing the same visualization tools to be used both on the desktop and in high-end visualization laboratories.

Finally, information-based computing is increasingly important in many national-security applications. To address this national security need, the CSRI has continued to build a research focus in graph-based and discrete algorithms. This area has been particularly interesting because it has introduced new areas of research at the interface of algorithms, architectures and visualization as scientists begin to incorporate an "information-based" approach to their work, in addition to the more traditional "geometry-based" approach.

In addition to the foundational areas described above, the CSRI emphasizes collaborations in one or two focus areas each year. These areas are determined through a combination of the needs of national security and the interest of CSRI collaborators. In 2006, there was a special focus on simulation in nanotechnology. Researchers considered both the simulation of nano-devices and the use of nano-devices in computing. The interface between the micro and nano scales was of special interest.

In 2007, the CSRI will emphasize two areas. The first is verification and validation, particularly for simulations involving multiple scales. The second area is software environments that will be critical as petaflop computing comes online.

Facilities

The Computer Science Research Institute has just moved into new facilities specifically designed and built for collaboration. Located in Albuquerque, NM, it is easily accessible to visitors. The building comprises 34,500 square feet and includes space for 130 research staff and 50 collaborators. It also includes a conference room measuring 2,000 square feet with seating for up to 80, a computer lab and four additional collaborative work areas and conference rooms. The CSRI also has space at its Livermore, California location.

CSRI researchers have access to extensive computing facilities. These facilities include the Red Storm supercomputer (over 13,000 processors, 125 TFlops), the Institutional Computing Cluster (over 4,000 processors), Thunderbird (over 4,000 processors), and over 10 clusters of various sizes up to approximately 500 processors specifically dedicated to software and algorithm development.

About Sandia National Laboratories

Since 1949, Sandia National Laboratories has developed science-based technologies that support our national security. Today, nearly 300 million Americans depend, even if unknowingly, on Sandia's technology solutions to solve national and global threats to peace and freedom. Sandia relies on strong fundamental programs in science, technology, and engineering to underpin and build critical R&D capabilities that support our national security mission areas: nuclear weapons, energy and infrastructure assurance, nonproliferation, defense systems and assessments and homeland security. Sandia employs more than 8,000 staff members; of these, over 1,500 have earned doctorates and over 2,500 have earned masters degrees in physical sciences and engineering disciplines.

Sandia is a government-owned, contractor-operated facility. Sandia Corporation, a Lockheed Martin company, manages Sandia for the U.S. Department of Energy's National Nuclear Security Administration.

CRA Service Awards 2007

Distinguished Service Award

A. Nico Habermann Award

Nominations Due:

February 2, 2007

Details: http://www.cra.org

CRA Welcomes New Academic Members

Georgia Institute of Technology - CSE

Hofstra University - CS

Texas State University - CS

University of Minnesota, Duluth - CS

The new CSRI building in Albuquerque, NM facilitates collaborative research.

Transitions, Appointments, and Awards

CRA board member **Annie Antón,** Associate Professor of Computer Science, North Carolina State University, has been appointed a member of the DHS Data Privacy and Integrity Advisory Committee. The committee advises the Secretary of the Department of Homeland Security and the DHS Chief Privacy Officer on issues relevant to DHS that affect individual privacy, data integrity and data interoperability and other privacy-related issues.

Charles M. Vest, President Emeritus of the Massachusetts Institute of Technology, has been unanimously nominated to become the next President of the NAE. He would succeed Wm. A. Wulf who has served two terms as President. If elected, Vest would begin a six-year term effective July 1, 2007.

Congratulations to **Luis von Ahn**, Assistant Professor of Computer Science at Carnegie Mellon University, who was recently named a recipient of the prestigious John D. and Catherine T. MacArthur Foundation Fellows award. The awards are based on creativity, originality, and potential; awardees receive $500,000 in "no strings attached" support over the next five years.

Professional Opportunities

Auburn University
Department of Computer Science and Software Engineering
Assistant, Associate, and Full Professor

The Department of Computer Science and Software Engineering (CSSE) invites applications for one or more tenure-track faculty positions at the Assistant, Associate, or Full Professor level to begin Fall 2007. Salary will be commensurate with the candidate's qualifications. Women and minorities are encouraged to apply.

Responsibilities include research, graduate student supervision, graduate and undergraduate teaching, and service. For positions at senior levels, a record of success in securing external funding for research is expected, and potential for successfully obtaining external research funding will be considered for entry level faculty positions.

Applicants should have a Ph.D. in computer science, software engineering, or a closely related field; however, applicants who are ABD may apply if they reasonably expect to complete the terminal degree prior to January 2008. We encourage candidates from all areas of computer science and software engineering to apply. The following are desired research areas: artificial +intelligence, simulation, computer networks and wireless engineering, information assurance and security, database systems, theory, programming languages, and software engineering. *The candidate selected for this position must be able to meet the eligibility requirements for work in the United States and be able to communicate effectively in English.*

The CSSE Department currently has 17 full-time faculty members and supports strong graduate (M.S., M.Sw.E., Ph.D.) and undergraduate programs in computer science, software engineering, and wireless engineering. CSSE enrollment for Fall 2006 is approximately 350 undergraduate and 130 graduate students. Faculty research areas include software engineering, computer and communication networks, human-computer interaction, pervasive computing, artificial intelligence, database systems, information assurance, simulation, and wireless engineering. During Academic Year 2007-8, CSSE expects to move into the new, $55M Shelby Center for Engineering Technology. Additional information about the Department and faculty research interests can be found at the Department's home page (http://www.eng.auburn.edu/csse).

Auburn University was chartered in 1856 and was designated a land grant institution in 1872. Auburn is the largest university in the State of Alabama, with a student enrollment of over 23,500 and 1,125 faculty. Auburn is located 100 miles southwest of Atlanta and 50 miles northeast of Montgomery, the State Capitol. Auburn offers nearly 150 baccalaureate degree programs in 64 academic departments. The Graduate School provides master's level programs in 130 areas and doctoral programs in 96 fields. The College of Engineering has an enrollment of 2,900 undergraduates and 650 graduate students in eight departments. The picturesque main campus covers 1,875 acres, and includes the entire southwest quadrant of the city of Auburn. The Auburn-Opelika community has a population of about 100,000, an excellent public school system, and has been nationally ranked as one of the "best small towns in America".

Applicants should submit a current curriculum vitae, research vision, teaching philosophy, and the names and addresses of three references to:

Kai H. Chang, Alumni Professor and Chair
Computer Science and Software
Engineering
107 Dunstan Hall
Auburn University, AL 36849-5347
kchang@eng.auburn.edu (with copy to sheriev@eng.auburn.edu)
334-844-6300 (Voice)
334-844-6329 (Fax)
http://www.eng.auburn.edu/csse/

The applicant review process will begin in January 2007 and continue until successful candidates have been identified.

Auburn University is an Affirmative Action/Equal Opportunity Employer.

Biotechnology High Performance Computing Software Applications Institute (BHSAI)
US Army Medical Research & Materiel Command (USAMRMC)
Postdoctoral Fellow (Bioinformatics)

Location: Fort Detrick, MD

Description: The institute (BHSAI) is actively involved in projects which involve the construction and analysis of large-scale biological protein-protein interaction networks. We are incorporating protein function into these analyses and also comparing networks of related organisms for evolutionary similarities and differences. The research requires a range of knowledge and skills in the broad area of computational biology.

Qualifications: The candidate should have the following qualifications:
- Ph.D. in computational biology
- Exceptional candidates from the specific fields of computer science and biology will be considered if they show evidence of competence in both - Proficiency in scientific programming (e.g., C, C++, Fortran) and scripting (e.g., PERL, Java, Python)
- Familiarity with databases and experience in designing codes for their manipulation
- Strong graduate performance and publication record
- Excellent communication skills, both verbal and written
- The ability to work independently and persevere through challenges

Contact: Jaques Reifman, Ph.D.
Email address: jreifman@bioanalysis.org
Telephone: 301-619-7915
Fax: 301-619-1983

British Columbia Institute of Technology
Applied Research And Development
Group For Advanced Information Technology (Gait) Director

The BCIT Group for Advanced Information Technology (GAIT) is engaged in industry sponsored projects and research activities that apply new and advanced computer-based technologies and concepts to complex problems. Its key areas of expertise include Advanced Software Development, Instructional Multimedia, Health IT, and Internet Engineering. GAIT's mandate is to solve R&D problems for the IT industry that lead to positive commercial outcomes and to engage in applied research with BCIT faculty and students throughout the Institute. GAIT consists of a core staff of qualified researchers, plus it draws on additional expertise from the larger BCIT faculty.

GAIT is in the process of renewing its R&D vision and is seeking a new Director to lead this group as a major contributor to BCIT's polytechnic vision in the area of industry driven applied research and advanced studies in IT.

For full details on this position visit: www.bcit.ca/jobs.

Brown University
Department of Computer Science
Faculty Position

The Department of Computer Science at Brown University invites applications for two faculty positions starting no later than September 1, 2007. Positions are open to all ranks with priority given to junior applicants. Preference will be given to those candidates who best meet the teaching and research needs of the department, complement our current expertise, and fit well within our collegial culture. We are particularly interested in candidates working in experimental computer science (including distributed systems, databases, mobile computing, networks, operating systems, programming languages, security and software engineering), computer graphics, and machine learning.

Applications should be submitted online through the Computer Science Department's web page: http://www.cs.brown.edu. Full consideration will be given to all applications received by December 1, 2006. The application site will remain open until the position is filled.

Candidates for an assistant professor position must have completed all requirements for the doctoral degree by September 1, 2007. Initial appointments as assistant professor will be for three years and will be renewable.

Brown University is located in Providence, RI, on the shores of Narragansett Bay and 50 minutes from Boston. Providence is among the Northeast's most livable cities and is home to diverse intellectual, artistic and business communities.

Inquiries may be addressed to: faculty_search_2006@cs.brown.edu.

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

Bucknell University
Department of Computer Science
Assistant Professor

Applicants are invited to apply for a tenure-track entry-level assistant professor position in computer science beginning mid-August 2007. Candidates must have completed their Ph.D. in computer science or a closely related field by August 15th, 2007. A commitment to excellence in teaching and research is required. Preferred areas include computer architecture, programming languages, computer graphics, artificial intelligence, and databases.

Bucknell is a highly selective private undergraduate institution. The B.S. programs are ABET and CAC accredited. The computing environment is Linux/Unix based. More information about the department can be found at http://www.bucknell.edu/ComputerScience/

Applications will be considered as received and recruiting will continue until the position is filled. Candidates are asked to submit a cover letter, CV, graduate transcript, a statement of teaching philosophy and research interests, and the contact information for three references. To apply please start at:
http://jobs.bucknell.edu/ and search for the computer science position.

Please direct any questions to Professor Xiannong Meng of the Computer Science Department at xmeng@bucknell.edu.

Bucknell encourages applications from women and members of minority groups.
(EE0/AA)

California Polytechnic State University, San Luis Obispo
Computer Science Department
Tenure-Track Professor

Full-time academic year tenure-track faculty positions available in the *Computer Science* Department at Cal Poly, San Luis Obispo, California, beginning September 10, 2007 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 science; and service to the department, the university, and the community. Applicants from all mainstream areas of computer science are encouraged to apply. We are particularly interested in candidates in the areas of theory, databases, AI, and HCI. A doctorate in Computer Science 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. 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 a required online faculty application and apply to Requisition #101043. Review of applications will begin December 1, 2006; 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:

Computer Science Recruitment Committee
Computer Science Department
Cal Poly
San Luis Obispo, CA 93407-0354
Questions can be emailed to: csc-recruit@csc.calpoly.edu. Please include requisition #101043 in all correspondence. For further information about the department and its programs, see www.csc.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.

California Polytechnic State University, San Luis Obispo
Computer Science Department
Tenure-Track Professor

Full-time academic year tenure-track faculty positions in the *Software Engineering* Program of the Computer Science Department at Cal Poly, San Luis Obispo, California beginning September 10, 2007 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 software engineering; and service to the department, the university, and the community. Applicants from all mainstream areas of software engineering are encouraged to apply. A doctorate in Software Engineering, Computer Science, 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; a broad-based knowledge of software engineering, and appropriate industrial experience. 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 a BS in Software Engineering, BS and MS degrees in Computer Science, 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 a required online faculty application and apply to requisition #101044.

Review of applications will begin December 1, 2006; 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:

Software Engineering Recruitment
Committee
Computer Science Department
Cal Poly
San Luis Obispo, CA 93407
Questions can be emailed to: se-recruit@csc.calpoly.edu. Please include requisition #101044 in all correspondence. For further information about the department and its programs, see www.csc.calpoly.edu. Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively

Professional Opportunities

encourages applications and nominations of all qualified individuals. EEO.

Colby College
Computer Science
Full-time Tenure-Track Assistant Professor Position

Full-time tenure-track position, assistant professor, starting September 2007. Review of applications will begin January 15, 2007. For more information, see: http://www.cs.colby.edu/jobs/

The College of William and Mary
Computer Science Department
Faculty Positions

Applications are invited for two tenure-track faculty positions in Computer Science for Fall 2007 at all academic ranks. Applicants must hold a Ph.D. in computer science or a related field. Appointment as an assistant professor requires that the candidate holds a Ph.D. at the time of appointment, a strong research record, and interest in teaching. Appointment at a senior level requires a documented record of sustained excellence in research and teaching. We are interested in individuals with research expertise in all areas of computer science.

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 strengthen its Computer Science research program. The department currently consists of fourteen faculty members who support B.S., M.S., and Ph.D. programs. More information about the department and university can be obtained at http://www.cs.wm.edu.

Applicants should submit a current resume, research and teaching statements, the names of at least three references, and supporting documents they consider most relevant. We prefer that the application materials be submitted as PDF attachments in email to:
     06search@CS.WM.EDU.
If necessary, hard copy may be submitted to:
     Faculty Search Committee
     Department of Computer Science
     The College of William & Mary
     P.O. Box 8795
     Williamsburg, VA 23187-8795
     Review of applications will begin Jan 1, 2007 and continue until both positions are filled.
     The College is an EEO/AA employer.

Cornell University
School of Electrical and Computer Engineering
Faculty Positions

The Cornell School of Electrical and Computer Engineering is seeking applications from outstanding candidates for faculty positions at all ranks in the areas of circuits, computer engineering, and communications and networking (although our search is not restricted to these areas). We particularly welcome applicants who can contribute to solving the major issues that society will face in the next 20 years. These include energy supply and demand, affordable health care, the human/machine interface and ubiquitous connectivity, and the management and security of information.

Applicants must hold a PhD degree, have demonstrated excellence in research and the ability to develop an independent research program, and have a strong interest in teaching at both the undergraduate and graduate levels. Applications should be submitted via the School's on-line application system at: http://fast.ece.cornell.edu.

Applications should include a letter of application with the professional resume, statements of research and teaching goals, and the names and contact information of at least four references; up to three representative publications may also be submitted.

The School of ECE and the College of Engineering at Cornell embrace diversity and seek candidates who will create a climate that attracts students of all races, nationalities and genders. We strongly encourage women and underrepresented minorities to apply.

Applications received by January 15, 2007 will be assured full consideration.

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

D. E. Shaw & Co., L.P
Software Developer

The D. E. Shaw group, a specialized investment and technology development firm with approximately US $23 billion in aggregate capital, is looking for top-notch, innovative software developers to help it expand its tech venture and proprietary trading activities. The firm was founded in 1988 by David E. Shaw, who received his Ph.D. in computer science from Stanford and served on the CS faculty at Columbia before organizing the D. E. Shaw group.

Activities range from computer-based quantitative investment management to the development and financing of technology-oriented business ventures, but are tied together by a common focus on the economic implications of technological innovation. We offer a casual work environment populated by some of the brightest graduates from the strongest computer science programs in the world. In many respects, the firm combines the best traits of academia and the corporate world, offering a focused but informal company culture which is reflected in our casual dress, relatively flat management structure, and flexible vacation policy, as well as in the high degree to which new employees work closely with senior staff on key initiatives. We strongly emphasize personal ownership of projects, and new hires are given substantial responsibility from their first day on the job. If you're interested in applying your talents to challenging problems of software architecture and engineering in an intellectually stimulating environment, then we'd love to see your resume.

To apply, e-mail your resume to:
     CRA-SNowak@career.deshaw.com
     Members of the D. E. Shaw group are equal-opportunity employers.

Drexel University
College of Information Science and Technology
Tenure-Track Faculty Positions

Drexel University's College of Information Science & Technology (IST) invites applications for several tenure-track positions in Library and Information Science, Information Systems, and Software Engineering at the assistant, associate, or full professor level. We welcome applications with a wide variety of teaching and research interests; we are particularly interested in applicants in the following areas:
-Human-computer interaction.
-School and media librarianship.
-Information security.
-Information representation and retrieval (with a particular interest in digitized non-text resources, TREC-related studies, and visual information retrieval).
-Competitive intelligence/knowledge management.
-Healthcare informatics and health literacy.
-Software Engineering including requirements engineering, software design and modeling, software metrics, process improvement, software quality, and project management.
     The successful candidate will have:
-A completed doctorate in library and information science, information systems, software engineering or a cognate field
-Excellent verbal and written communication skills
-Evidence of excellence in teaching and research
-Interest in a highly collaborative faculty environment
     Candidates for senior positions should have an established research record and success in obtaining external research funding. Joint appointments with other Drexel academic units are also a possibility.
     The IST view of information is broad, multidisciplinary, and practical. IST continues to evolve as an innovative leader in educating information professionals in the twenty-first century, combining high quality teaching and research in a broad, multidisciplinary, and collaborative environment. We offer three BS degrees, three Masters degrees, and the PhD. The MS (LIS) degree is highly ranked, both overall and for specializations in information systems and digital librarianship within the MS(LIS) degree; faculty and student interests span a broad spectrum of library and information science areas. IST

systems-related curricula (MSIS, MSSE) are particularly strong in databases, data mining/information visualization, and human-computer interaction. Full-time PhD students are supported either through faculty research grants from the National Science Foundation, the Institute for Library and Museum Services, and other funding agencies or while performing other research or teaching related activities in the College.. All programs emphasize applied research, with a tradition of both quantitative and qualitative research that encourages interdisciplinary activity. We consider experience in industry a plus. Drexel is a privately endowed technology university founded in 1891. With approximately 16,000 students, it has one of the largest undergraduate cooperative education programs in the nation, with formal relationships in place with over 1500 local, national, and multi-national companies. Drexel is located on Philadelphia Avenue of Technology in University City and at the hub of the academic, cultural, and historical resources of the nation's fourth largest metropolitan region. Philadelphia is also the midpoint of a mid-Atlantic technology corridor that stretches from New York City (100 miles north) to Washington, DC (135 miles south).

Please submit a letter of application, curriculum vitae, and names and contact information of at least three references to:
     Chair, IST Search Committee
     College of Information Science & Technology
     Drexel University
     3141 Chestnut Street
     Philadelphia, PA 19104
     E-mail: faculty-search@cis.drexel.edu
     Review of applications will begin immediately and will continue until the positions are filled. Drexel is an Equal Opportunity/Affirmative Action employer. Women and minorities are encouraged to apply.
     Dr. Katherine McCain, Associate Dean, and members of the Search Committee will be available at the iSchool, ASIST and ALISE meetings to discuss these open faculty positions.

Duke University
Department of Computer Science
Faculty Positions

We invite applications and nominations for three open-rank faculty positions in the Department of Computer Science at Duke University, to start August 2007. The department is committed to increasing the diversity of its faculty. Although we are interested in strong candidates in all active research areas of computer science, the department's priorities are in the following areas: Data analysis, including machine learning, medical imaging, etc. Systems and architecture, including networks, databases, security, etc.

A successful candidate must have a solid disciplinary foundation and demonstrate promise of outstanding scholarship in every respect, including research and teaching. Please refer to www.cs.duke.edu for information about the department.

Applications should be submitted online at: www.cs.duke.edu/facsearch.

They 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 three to five 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 to five potential references. To guarantee full consideration, applications and letters of reference should be received by January 8, 2007.

Duke University is an affirmative action, equal opportunity employer.

Florida Atlantic University
Department of Computer Science and Engineering
Faculty Recruitment Information

The Department of Computer Science and Engineering seeks applications for a tenure-track faculty position at the Assistant Professor level on FAU's Port St. Lucie campus. The position requires a doctorate in computer science, computer engineering or a closely related field. Applicants must show evidence of demonstrated teaching ability and research potential. The appointments will begin from January 2007. Review of applications will begin from October 1, 2006, and will continue until the positions

are filled. Salary, fringe benefits and teaching load are competitive.

Florida Atlantic University, a member of Florida's State University System, is a multi-campus institution with its main campus located in Boca Raton, on the Atlantic coast, midway between West Palm Beach and Fort Lauderdale. The University has more than 26,000 students and offers a variety of degree programs at all levels.

The department currently has 30 regular faculty, with other visiting and research faculty normally in residence. It offers bachelor's, master's and doctoral programs in computer science and in computer engineering. The department also offers an undergraduate computer science program at FAU's Davie campus (25 miles south of Boca Raton) and Port St. Lucie campus (80 miles north of Boca Raton). More than 750 undergraduate, 250 master's, and 40 doctoral students are enrolled in the department.

The department has several well-equipped laboratories. It interacts closely with high-tech companies located in the area including Motorola, IBM, Siemens, Citrix and others, which have helped provide state-of-the-art facilities. FAU has an active research program with both federal and industrial sponsors. More information about the department can be accessed online at http://www.cse.fau.edu.

Applicants should send a hardcopy resume plus the name, phone number and letter of recommendation from at least three professional references, along with a cover letter specifying teaching and research interests to:
     Chair
     Department of Computer Science and Engineering
     Florida Atlantic University
     777 Glades Road
     Boca Raton, Florida 33431
     Florida Atlantic University is an equal opportunity/access/affirmative action institution.

Florida Institute of Technology
Software Engineering
Faculty Search

Florida Institute of Technology invites applications for faculty positions at all levels related to software engineering in the Department of Computer Sciences for the 2007-2008 academic year. Applicants with expertise that would reinforce the Department's reputation in areas such as testing, maintenance & evolution, metrics, and requirements are strongly encouraged to apply. Applicants must have a Ph.D. in Computer Science or in a closely related field. Junior candidates must show outstanding research and teaching potential. Senior candidates must have an exceptional research and teaching record. Salary is competitive and commensurate with appointment rank and qualifications.

The Department currently has 16 faculty members. New faculty joining in 2007 will be expected to assist in improving undergraduate and graduate education, developing quality research programs, attracting new funding, and strengthening collaborations with industry, government, and other academic institutions.

There are approximately 175 undergraduate students, 125 Master's students, and 25 Ph.D. students in the Computer Sciences programs. The Department is housed in the Olin Engineering Complex, with modern laboratories and multimedia classrooms. The Department has significant research funding from multiple government agencies and corporations. For more information about the Department, please visit www.cs.fit.edu.

Florida Tech is a selective, research-oriented, private university that attracts high-quality students. The University is located in Melbourne on Florida's Space Coast, one of the nation's most prosperous and growing high-tech areas that offers an exceptional quality of life. The campus occupies 130 tropical acres, including a picturesque 30-acre botanical garden. The campus is 5 minutes from the Indian River estuary, 10 minutes from the Atlantic Ocean, and 50 minutes from Orlando and the Kennedy Space Center. Applicants should send a letter of intent, curriculum vitae, research and teaching statements, and full contact information for at least three references, by email to:
     faculty-search@cs.fit.edu
or by regular mail to:
     Faculty Search Committee
     Department of Computer Sciences
                                        (continued)

Professional Opportunities

Florida Institute of Technology
150 W. University Blvd.
Melbourne, FL 32901-6975

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

Florida Tech is an Equal Opportunity Employer.

Gettysburg College
Computer Science Department
Tenure-Track Assistant Professor

Gettysburg College invites applications for a tenure-track Assistant Professor position in Computer Science beginning August 2007. A Ph.D. in Computer Science or a closely related field, promise of excellence in teaching, and a commitment to continued scholarship are essential. Applicants are expected to have a strong interest in undergraduate teaching and a desire to involve undergraduate students in their research programs.

Gettysburg College is a highly selective liberal arts college located within 90 minutes of the Baltimore/Washington metropolitan area. Established in 1832, the College has a rich history and is situated on a 220-acre campus with an enrollment of over 2,500 students. Gettysburg College celebrates diversity and invites applications from members of any group that has been historically underrepresented in the American academy. The College assures equal employment opportunity and prohibits discrimination on the basis of race, color, national origin, gender, religion, sexual orientation, age, and disability.

The Department of Computer Science currently has three tenure-track faculty members in addition to this vacant position. The classroom/laboratory we exclusively use and maintain will undergo a $100K+ computer upgrade in the summer of 2007. The College is prepared to assist the successful candidate in establishing a research program through paid pre-tenure leave and start up funds.

Send a letter of application, curriculum vitae, statement of teaching interests and scholarship goals within a liberal-arts environment, and three letters of recommendation to:

Associate Professor Todd W. Neller, Chair
Department of Computer Science
Gettysburg College
Gettysburg, PA 17325

At least one letter must address teaching effectiveness.

Review of applications will begin immediately and will continue until the search is complete.

Harvard University
Division of Engineering and Applied Sciences and Center for Brain Science
Two Faculty Members

Harvard's Division of Engineering and Applied Sciences and Center for Brain Science are seeking two faculty members with interests at the intersection of engineering and neuroscience. One will develop theoretical or computational approaches to the understanding of brain function. The other will develop novel imaging techniques to visualize neurons or neural activity.

Successful candidates will hold Assistant, Associate, or Full Professorships in the Division of Engineering and Applied Sciences and will also be members of the Center for Brain Science. The Division has a vibrant and growing group of researchers with interests in computational biology, bioengineering, and imaging (deas.harvard.edu). The Center for Brain Science is an interdepartmental center that aims to: (a) map neural circuits that underlie experimentally accessible behaviors in diverse species, (b) elucidate the biological bases of individual differences in behavior, and (c) develop the tools (mechanical, molecular, computational, and theoretical) required to tackle these problems (cbs.fas.harvard.edu). The Center fosters interactions across disciplinary boundaries: faculty from several academic departments in the life, physical, and behavioral sciences will be housed in common research space and connections will reach out across the University. Links to other Centers at Harvard, including the Center for Nanoscale Systems, the Broad Institute, and the FAS Center for Systems Biology provide resources, facilities, and opportunities for collaborative research and technology development.

Applications are due by December 31, 2006. Applications from, or nominations of,

women and minority candidates are encouraged. Harvard is an affirmative action/equal opportunity employer. Please send a cover letter, curriculum vitae, and a 2 to 4 page research plan, and arrange for submission of 3 letters of recommendation.

Application materials can be submitted online by filling out this form at:
http://cbs.fas.harvard.edu/jobs_app.php
or by sending mail to:
Joshua R. Sanes
Center for Brain Science Search Committee
Harvard University
7 Divinity Ave.
Cambridge, MA 02138

Illinois Institute of Technology
Department of Computer Science
Chair

Applications are invited for the position of Chair of the Department of Computer Science, beginning Fall 2007. The Chair's primary mission is to lead the department to national prominence, while providing strategic vision and decisive leadership in research and education, as well as fostering mutually productive interactions with government and industry. More information on CS at IIT may be found at www.cs.iit.edu.

Qualifications for the Chair position include a PhD, an international reputation in Computer Science, excellent communication and administrative skills, and a desire to lead a growing and vibrant department to become a major center for CS research.

Applications, nominations and enquiries should be sent (preferably electronically) to:
Professor Fred J. Hickernell, Chair
CS Search Committee
Bldg. E1, Room 208
10 W. 32nd St.
Illinois Institute of Technology
Chicago, IL 60616
Email: cschairsearch@math.iit.edu

An application should include a cover letter, curriculum vitae, and a statement of the candidate's research, teaching and leadership philosophies. Also, the candidate should arrange for at least three confidential reference letters to be sent to the same address. Applications will be reviewed continuously until the position is filled.

IIT is an equal opportunity, affirmative action employer.

Indiana University
School of Informatics
Dean

Indiana University Bloomington is seeking applications and nominations for an eminent scholar and innovative leader to serve as Dean of its School of Informatics. Chartered in 1999 as Indiana University's newest school, it has a mission to develop skilled professionals with state-of-the-art information technology and science skills, to lead the nation in interdisciplinary scholarly research, and to be a key partner in economic development for the State of Indiana. Through this charter, IU's School of Informatics has one of the most comprehensive research and educational agendas with specialties ranging from Social Informatics to Life Sciences Informatics to theoretical and applied Computer Science.

The School of Informatics is a vibrant multi-campus, university-wide school with its own building on the Bloomington campus and a new state-of-the-art facility on the Indianapolis campus. The school offers Informatics degrees on three campuses with approval to expand to all seven IU campuses. It has grown to over 100 faculty members with 1,500 students, and it recently became the first in the nation to offer a Doctorate in Informatics. The School of Informatics is a vibrant part of an internationally renowned AAU institution with many leading academic programs including a distinguished School of Medicine.

The Dean reports to the Provost of IU Bloomington and is the Chief Operating and Academic Officer overseeing a budget of approximately $20M. The Dean provides leadership to advance the research profile of the school, establishes partnerships with private and public organizations to secure funds in support of School initiatives, and cultivates relationships and support with IU alumni.

Preferred candidates will generally have a record of successful administrative experience, an earned doctorate in a related field, and a demonstrated career of scholarly excellence. The Dean will hold a tenured faculty position

at the rank of Full Professor in the School of Informatics. Accordingly, candidates should have achieved national or international prominence in their research and scholarly contributions.

Indiana University has retained Greenwood & Associates, Inc. to assist with this search. Nominations may be directed to either Greenwood or the search committee chair. Nominations and applications will be reviewed continuously beginning 1 September 2006 and will be accepted until the position is filled. For best consideration, applications should be received by 30 October 2006 and Microsoft Word is the preferred format for submission. Applications should include a letter of interest, curriculum vitae, and a list of four or five references. Materials should be sent to:
Dr. Bradley C. Wheeler
Chair, Search Committee for the Dean of the School of Informatics
Franklin Hall 116
601 East Kirkwood Avenue
Bloomington, IN 47405
Email: bwheeler@indiana.edu
Inquiries or nominations can also be made to:
Dr. Jan Greenwood or Dr. Betty Turner Asher
Greenwood & Associates, Inc.
42 Business Center Dr., Suite 307
Miramar Beach, FL 32550
Phone: 850-269-7450, Fax: 850-650-2272
jangreenwood@greenwoodsearch.com
bettyasher@greenwoodsearch.com
Indiana University is an Equal Opportunity, Affirmative Action Institution
http://www.informaticsdeansearch.indiana.edu

Indiana University – Bloomington Campus
Pervasive Technology Labs
Community Grids Lab
Postdoctoral Researcher – RSP – (Position #00001122)

The Community Grids Laboratory at Indiana University invites qualified applications for postdoctoral research positions in the fields of parallel and high performance computing, distributed information retrieval, and audio/video collaborative systems.

Applicants should possess a Ph. D. in Computer/Computational Science or a related field with an appropriate research background. Applicants for the parallel computing postdoctoral position are expected to be able to conduct innovative research in many of the following areas; Parallelism for multi-core chips including multi-threaded systems; Machine learning using techniques such as Hidden Markov Methods; Event driven simulation frameworks such as the US Department of Defense's HLA; and Multi-threaded tree searches and related algorithms developed for computer chess and other related applications. Applicants to the distributed information retrieval postdoctoral position should be able to demonstrate the ability to conduct innovative research in many of the following areas; Web Service and Grid architectures; Web search/scavenging algorithms, text processing, and metadata extraction; Machine learning using techniques such as Hidden Markov Methods; Semantic Web languages, logic, standards, and tools; and Web 2.0 and on-line communities. Applicants for this position are expected to conduct innovative research in the following areas: multiple protocol systems supporting H.323, SIP, Access Grid and other collaboration protocols, software multicast, issues in reliability, robustness, and security in collaborative systems. The applicant will be involved with our ongoing GlobalMMCS- www.globalmmcs.org.

Please send CV material, including education background, publications, links to software products and projects, and the contact information for three professional references to:
PTL Jobs
Community Grids Laboratory
501 North Morton Street, Suite 224
Bloomington, IN 47404
Or send electronic form to:
ptljobs@indiana.edu.
Info - http://grids.ucs.indiana.edu/ptliupages
Indiana University is an Affirmative Action/Equal Opportunity Employer.

Kansas State University
College of Engineering
Dean

Kansas State University invites applications and nominations to fill the position of Dean of the College of Engineering. The Dean, who has an endowed chair, is responsible for providing academic, research, outreach, and fiscal leadership to the College and reports directly to the Provost.

The College of Engineering has outstanding facilities, excellent faculty, dedicated students, highly supportive alumni, and nationally recognized research centers. K-State is seeking a person who understands the impact of engineering and computing on society, sees the dramatic challenges coming in these technology-based areas, and has the 21st Century leadership and innovative thinking skills to empower the faculty, staff, students, and alumni to meet these challenges.

The successful candidate will be expected to lead K-State's College of Engineering to become one of the top engineering programs in the country.

For a complete position description and information about the College visit:
www.engg.ksu.edu/dean.

Louisiana State University
Department of Computer Science
Assistant/Associate Professor (Tenure-Track/One or more positions)

The Department of Computer Science at Louisiana State University (http://www.csc.lsu.edu/) seeks candidates for multiple tenure-track positions beginning August 2007. We invite applications from outstanding candidates at all ranks with preference given to candidates at the Assistant Professor level. Successful candidates will be expected to establish a significant and highly visible research program and teach core courses at the undergraduate and graduate levels. We invite applications from candidates in all areas of Computer Science, especially those with research experience in the core areas of Theory, Applied Theory, Computer Architecture, Software Engineering, Programming Languages and Compilers.

The department provides excellent research opportunities for incoming faculty with the potential to join several existing funded research programs in sensor networks, embedded systems, cybersecurity, visualization, databases and distributed and high-performance computing. There are also excellent opportunities for interdisciplinary collaboration with other departments along with major efforts such as the Louisiana Optical Network Initiative (LONI/http://www.loni.org). LONI, funded by a $50M commitment from the state provides a 40 Gbps connection between new large scale computing resources deployed at Louisiana Research institutes. LSU also has established a Center for Computing Technology to support high performance computing research and is connected to the National Lambda Rail, providing national and international high-speed connectivity.

Required Qualifications: Ph.D. in Computer Science or in a closely related field; demonstrated strength in scholarly research.

An offer of employment is contingent on a satisfactory pre-employment background check. Applications will be accepted through January 12, 2006, or until candidates are selected. Salary and rank will be commensurate with qualifications and experience. Louisiana State University is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.

For further information, send mail to: search@csc.lsu.edu.

Applicants should submit a letter of intent describing teaching and research interests along with the curriculum vitae (including e-mail address) and the names and addresses of three references to:
Chair, Faculty Search Committee
Department of Computer Science
Louisiana State University
Ref Log #0766
Baton Rouge, LA 70803
E-mail: search@csc.lsu.edu.
LSU is an Equal Opportunity/Equal Access Employer.

Professional Opportunities

Massachusetts Institute of Technology
Broad Institute
Computational Biologist

The Broad Institute is seeking an individual to develop algorithms to reconstruct an organism's genome from millions or billions of tiny sequence bits. These data are becoming available now as a result of fundamental innovations in sequencing technology.

Biology background not required. We seek candidates having exceptionally deep computational understanding and abilities, who enjoy solving nearly impossible problems.

Position involves a mixture of algorithm design and implementation, rapid prototyping on data sets, analysis of data sets, interaction with laboratory personnel, and writing for internal use and publication.

We offer an intense, exciting research environment. Will work as part of a four-person team in a cutting-edge organization with over 100 world-class computational scientists, tackling a wide range of critical issues in genomics and biomedicine.

Requirements: advanced degree in math or computer science or comparable research experience. Experience/expertise in C++ required, as are excellent oral and written communication skills. Must be capable of self-directed research within broader goals set by the group.

Candidates meeting these requirements are strongly encouraged to apply, regardless of experience level or prior exposure to the field.

Interested candidates may apply on-line at http://web.mit.edu/jobs. Please reference job number mit-00003423.

MIT is an equal opportunity/affirmative action employer. Applications from women and underrepresented minority candidates are encouraged.

Miami University
Computer Science and Systems Analysis Department
Assistant/Associate Professor

The Department of Computer Science and Systems Analysis (CSA) seeks innovative and energetic educators and scholars. Responsibilities are to teach undergraduate and graduate courses, perform service, and initiate and maintain an active scholarship program. A doctorate in computer science or related field is required. ABDs will be considered, but the doctorate must be completed by the time of the appointment in August 2007. Appointment to the rank of associate professor requires an established record of research/scholarship. All specialties within the field of computer science or systems analysis will be considered.

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.* (see csa.muohio.edu and www.muohio.edu)

Please send cover letter, curriculum vitae, visa status (if applicable), a philosophy of teaching, and a statement of research to:

    CSA Search Committee
    Computer Science & Systems Analysis Department
    Miami University
    Oxford, OH 45056

Three letters of reference should also be sent to the above address.

    Phone: 513-529-9269
    Fax: 513-529-1524
    Email: CSsearch@MUOhio.edu.

Electronic submissions are encouraged. Miami University is an EOE/AA employer. Campus Crime and Safety Report – www.muohio.edu/righttoknow. Hard copy upon request.

North Dakota State University
Department of Computer Science and Operations Research
Head

North Dakota State University invites nominations and applications for the position of Head of the Computer Science and Operations Research Department. The department seeks a visionary and innovative leader who possesses strong administrative skills and a commitment to strengthening our education, research, and outreach programs.

Minimum Qualifications: U.S academic administrative experience; competitive external grant experience; high-quality refereed research publications; qualifies for appointment as Full Professor with tenure; active internationally-competitive research program in any area of Computer Science or Software Engineering.

Preferred Qualifications: Significant fulltime professional experience as a faculty member at a Ph.D.- granting university; current nationally-competitive research funding; research areas that mesh with those of current faculty; collaborative research experience; curriculum development experience.

The Department has 15 faculty in diverse areas, approximately 155 graduate (PhD and MS) students and 230 BS/BA students. The NDSU administration is committed to taking the institution to the Carnegie research extensive class. Department-wide external Research funding for the past four years exceed $4 million. Fargo is a clean, growing metropolitan area of 230,000 that consistently ranks high in national quality-of-life surveys. We have low levels of crime and pollution, excellent schools, short commutes and proximity to the Minnesota lake country. The community has a symphony, an opera, a domed stadium, a community theater, three colleges/universities and many other opportunities for recreation and entertainment.

Review of applications begins January 10, 2007. Applications will be accepted until position is filled. Applicants should send curriculum vitae and three letters of reference to:

    Dr. Vasant Ubhaya, Chair
    Head Search Committee
    North Dakota State University
    Department of Computer Science and Operations Research
    IACC Building, Room 258
    Fargo, ND 58105

North Dakota State University is an Equal Opportunity employer.

Detailed job description and application information is posted at:

    http://www.ndsu.edu/ndsu/jobs/non_broadbanded/positions.

Northwestern University
Department of Electrical Engineering and Computer Science
Faculty Opening

The Department of Electrical Engineering and Computer Science invites applications for the position of Assistant Chair. The Assistant Chair's responsibilities include undergraduate administration, coordinating educational initiatives, industrial outreach and teaching introductory courses. The appointment will be in the non-tenure line. All candidates must have a doctoral degree in Electrical and Computer Engineering, Computer Science, or a closely related discipline, excellent communication skills and administrative experience.

Applicants should submit curriculum vitae, and a list of four references to:

    asstchair@eecs.northwestern.edu.

Further information about the hiring department and the University is available at http://www.eecs.northwestern.edu and http://www.northwestern.edu.

Northwestern University is an Affirmative Action, Equal Opportunity Employer. Women and minorities are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

Oberlin College
Computer Science Program
Faculty Position

The Computer Science Program at Oberlin College invites applications for full-time, tenure-track faculty for a term of four years, beginning first semester 2007-08. Incumbent will teach courses in the general area of computer science.

Requirements: Ph.D. in Computer Science (in hand or by first semester 2007-08), demonstrated interest and potential excellence in undergraduate teaching.

Send letter of application, c.v., graduate academic transcripts, and at least three letters of reference by 11/5/06 to:

    Richard Salter
    Computer Science Program
    223 King Building
    Oberlin College
    Oberlin, OH, 44074

Late applications may be accepted until filled.

AA/EOE

Ohio State University
Department of Computer Science and Engineering
Tenure-Track Positions

The Department of Computer Science and Engineering (CSE), The Ohio State University, invites applications for multiple tenure-track positions at all ranks. The positions are open to all areas of computer science and engineering, including but not limited to computer architecture, database management and networking.

Women, minorities, or individuals with disabilities are especially encouraged to apply.

Applicants should hold or be completing a Ph.D. in CSE or a closely related field, and have a commitment to and demonstrated record of excellence in research and teaching.

The department maintains and encourages multi-disciplinary research and education activities within and outside The Ohio State University.

To apply, it is preferable that a curriculum vitae (including names and addresses of at least three references) and a statement of research and teaching interests be submitted by e-mail to:

    fsearch+apps[AT]cse.ohio-state.edu

If necessary the above may be mailed to:

    Prof. David Lee, Chair
    Faculty Search Committee
    Department of Computer Science and Engineering
    The Ohio State University
    2015 Neil Avenue, DL681
    Columbus, OH 43210-1277

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

The Ohio State University is an Equal Opportunity/Affirmative Action Employer.

Ohio University
School of Electrical Engineering and Computer Science
Tenure-Track Faculty Position

Applications are invited for a tenure-track position in computer science. Candidates should have a doctorate in computer science or a related discipline. Candidates for assistant professor positions are expected to have strong research potential as well as an interest in teaching at both the undergraduate and graduate levels. For those embarking on their professional careers, departmental support will include initial reduced teaching loads, competitive salary and generous start-up funds. Candidates for associate and full professor positions must possess an exceptional record of high-quality research, teaching, and scholarship. Candidates from all research areas are welcomed, but we are particularly interested in bioinformatics, networking, and security. Preference will be given to candidates who are interested in collaborating with faculty in existing focus areas.

The School of Electrical Engineering and Computer Science is in the Russ College of Engineering and Technology. The School of EECS offers bachelor's, master's, and doctoral degrees. At present there are 350 undergraduate majors, 70 master's degree students and 50 PhD students in the School of EECS. We employ 31 full-time faculty and 20 part-time faculty. Sponsored research expenditures in the School of EECS exceed $9M per year, and numerous research collaboration opportunities exist within the Center for Intelligent, Distributed and Dependable Systems and within the Avionics Engineering Center.

Ohio University is a public, comprehensive university that conducts high quality research across many disciplines, and emphasizes an excellent, learner-centered educational experience by providing undergraduate, graduate, and professional programs to approximately 20,000 students in a residential setting. The Ohio University area features a national forest, state parks and recreation opportunities such as hiking, bicycling, camping, and canoeing. The university is experiencing revitalization and growth through its VisionOhio initiative, which includes a major investment in research programs. Furthermore, Ohio will invest $500M in bioscience research over the next five years through its Third Frontier program.

Ohio University is an equal opportunity and affirmative action employer.

Application materials, including a CV and the contact information for three references, should be submitted online at:
    www.ohiouniversityjobs.com.

Oklahoma State University
Computer Science Department
Professor and Head

The Oklahoma State University (OSU) Computer Science Department invites applications and nominations of qualified candidates for the position of Department Head. The Computer Science Department is in the College of Arts and Sciences and the Department Head reports directly to the Dean of Arts and Sciences. The term of initial appointment will begin July 2007, or as negotiated.

The OSU Computer Science Department is a growing department that is committed strongly to the goal of excellence in research, teaching, and outreach. It offers a full range of undergraduate and graduate courses leading to the B.S., M.S., and Ph.D. degrees in Computer Science. These degrees are offered by the department both at the OSU campus in Stillwater and at the OSU campus in Tulsa. The department also offers courses to students at remote sites using interactive video and the World Wide Web. Oklahoma State University is a comprehensive land-grant university. The main campus in Stillwater has an enrollment of approximately 23,000 students, with an additional 2,600 students enrolled at the Tulsa campus. There are currently about 170 undergraduate students and 115 graduate students enrolled in the department. The department has a goal of accreditation of its B.S. program within the next few years.

The Department Head will be expected to provide visionary leadership and advocacy for the department's undergraduate and graduate programs and for its research and scholarship. It is anticipated that the Department Head will oversee a substantial increase in funding and faculty positions. Responsibilities of the Head include, but are not limited to: hiring, supervising, supporting, and evaluating faculty and staff, managing the budget, and representing the department's interests to the Dean, the higher administration, and the public.

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

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

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

Oklahoma State University encourages applications from qualified women, minorities, and persons with disabilities. To nominate someone, please contact the search committee chair via e-mail or phone. To apply, please send a curriculum vitae and the names of three references to:

    Chair
    Computer Science Head Search Committee
    Computer Science Department
    219 MSCS
    Oklahoma State University
    Stillwater, OK 74078-1053
    Telephone: 405-744-5668
    Fax: 405-744-9097
    E-mail: head-search@cs.okstate.edu
    URL: http://www.cs.okstate.edu/head-search.html

Professional Opportunities

The Dean of Arts and Sciences, Dr. Peter Sherwood, also welcomes direct inquiries to him at (405) 744-5663 or peter.sherwood@okstate.edu.

For full consideration all applications plus supporting material must be received by November 1, 2006, however, applications will be accepted until the position has been filled.

Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.

Old Dominion University
Department of Computer Science
Chair

Applications are invited for the position of Chair of the Department of Computer Science at Old Dominion University. The successful candidate for this position should have qualifications commensurate with appointment at the rank of full professor, with strong academic credentials. A Ph.D. in Computer Science or a related field is required.

We are seeking an active researcher who has a national and international reputation, a history of external funding, and an interest in developing interdisciplinary research partnerships. The candidate should also be committed to increasing undergraduate and graduate academic quality. Previous service as Department Chair or in academic administration is not required, but evidence of strong leadership skills is expected, as is an ability to work with a diverse faculty.

The Department of Computer Science is one of seven departments making up the College of Sciences and offers bachelors through doctoral degrees. The Department has 16 graduate faculty, 5 instructors, 250 undergraduate majors, 130 MS students, and 25 PhD students. The faculty perform research in many areas, including networking, visualization, sensor networks, digital libraries, computational science, and bioinformatics.

Old Dominion University is a state-assisted, doctoral degree-granting institution that enrolls over 21,000 students, including over 6,000 graduate students. The University's strategic plan calls for a commitment to be among the nation's top 100 public research universities. Opportunities for research interactions include strong relationships with Eastern Virginia Medical School, Thomas Jefferson Lab National Accelerator Facility, NASA Langley, and Virginia Modeling Analysis and Simulation Center. The University is located in Norfolk, one of seven cities making up the Hampton Roads region of Virginia, a major seaport and recreation area with a population in excess of 1.4 million people.

Application/Nominations: Send letters of nomination or application materials, including a resume and the names, addresses, and telephone numbers of five references to:
ChairSearch@notes.cs.odu.edu.

Review of applications will begin November 1, 2006 and continue until the position is filled.

Old Dominion University is an affirmative action, equal opportunity institution and requires compliance with the Immigration Reform and Control Act of 1986.

Pomona College
Department of Computer Science
Assistant Professor

Assistant Professor of Computer Science with specialty in Artificial Intelligence to begin July, 2007. Teaching load equivalent to four courses a year. 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, graduate transcript, three or more letters of reference (one evaluating teaching), teaching statement, and description of research accomplishments and plans to:
search@cs.pomona.edu

or to:
Search Committee
Department of Computer Science
Pomona College
610 North College Avenue
Claremont, California 91711-6348
Further information: www.cs.pomona.edu/search07.html. Applications received by January 6, 2007, will receive full consideration.

Pomona College is committed to increasing excellence through diversity and welcomes applications from women and members of underrepresented groups.

Princeton University
Council on Science and Technology
Postdoctoral Teaching Fellowships

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 member. Applications are currently being accepted for fall 2007. The application deadline is December 1, 2006. Interviews of the top candidates will be conducted at Princeton during the week of January 15, 2007. Eligibility requirements, applications and other information can be found on the Council's Website:
http://www.princeton.edu/~stcweb.

Princeton University is an equal opportunity/affirmative action employer. For more general information about applying to Princeton, please link to:
http://web.princeton.edu/sites/dof/ApplicantsInfo.htm
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
Department of Computer Science
Tenure-Track Positions

The Department of Computer Science at Purdue University invites applications for core and multi-disciplinary tenure-track positions beginning August 2007. Applications from outstanding candidates in all areas of computer science will be considered. While we anticipate hiring at the Assistant Professor level, senior positions, especially in the area of experimental systems, will be considered for highly qualified applicants. Of particular interest for the multi-disciplinary positions are candidates with a research record in high performance computing, scientific visualization, and bioinformatics. Applicants whose research is of a multi-disciplinary nature will be considered within a College of Science-wide hiring effort. The department also seeks to fill a joint position with the Regenstrief Center for Healthcare Engineering; a successful applicant would have a computer science research record with evidence of contribution to healthcare.

The Department of Computer Science offers a stimulating and nurturing academic environment. Forty-two faculty members direct research programs in analysis of algorithms, bioinformatics, databases, distributed and parallel computing, graphics and visualization, information security, machine learning, networking, programming languages and compilers, scientific computing, and software engineering. The department has implemented a strategic plan for future growth supported by the higher administration and recently moved into a new building. Further information about the department and more detailed descriptions of the open positions are available at http://www.cs.purdue.edu. Information about the multi-disciplinary hiring effort can be found at http://www.science.purdue.edu/COALESCE/. Information about the Regenstrief Center is available at http://discoverypark.purdue.edu/wps/portal/rche.

All applicants should hold a PhD in Computer Science, or a closely related discipline, be committed to excellence in teaching, and have demonstrated potential for excellence in research. Salary and benefits are highly competitive. Applicants are strongly encouraged to apply electronically by sending their 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 Chair
Department of Computer Science
305 N. University Street
Purdue University
West Lafayette, IN 47907
Applicants matching one search may be considered in other relevant searches when appropriate. Review of applications will begin on October 1, 2006, and will continue until the positions are filled.

Purdue University is an Equal Opportunity/Equal Access/Affirmative Action employer and is committed to building a diverse faculty.

Simon Fraser University
School of Computing Science
Assistant Professor

The School of Computing Science at Simon Fraser University in Burnaby, in the Greater Vancouver area, invites applications for a tenure-track position in the area of Bioinformatics at the Assistant Professor level. A Ph.D. in Computing Science or equivalent is required, with a strong commitment to excellence in research and teaching.

Simon Fraser University is one of the top-ranked universities in Canada. The School of Computing Science currently has approximately 200 Ph.D. and M.Sc. students, 800 undergraduate majors, and 58 faculty members, across two campuses. The main Simon Fraser University campus is situated on Burnaby Mountain in Greater Vancouver, while the newer Surrey campus is situated 25 minutes away in an award-winning architectural complex south of the Fraser River. Vancouver thrives as a scenic waterfront city located just minutes away from the mountains and a wide range of outdoor activities. Vancouver's cultural and intellectual pursuits, leisure opportunities, favourable climate, and clean and safe environment are consistently cited as quality of life factors that make it one of the most desirable places in the world to live and work.

All qualified candidates are encouraged to apply; however Canadian citizens and permanent residents will be given priority. Simon Fraser University is committed to employment equity and encourages applications from all qualified women and men, including visible minorities, aboriginal people and persons with disabilities. Under the authority of the *University Act* personal information that is required by the University for academic appointment competitions will be collected. For further details see: www.sfu.ca/vpacademic/Faculty_Openings/Collection_Notice.html.

Applications will be accepted until the positions are filled; however to be assured consideration by the search committee, applications must be received by January 15, 2007. All positions are subject to budgetary approval. For additional information see www.cs.sfu.ca.

To apply, send curriculum vitae, evidence of research productivity, and the names, addresses and phone numbers of three referees to:
Faculty Search (Burnaby campus)
School of Computing Science
8888 University Drive
Simon Fraser University
Burnaby, British Columbia
Canada, V5A 1S6
Email: Burnaby-faculty-search@cs.sfu.ca

Simon Fraser University
School of Computing Science
Assistant Professors

The School of Computing Science at Simon Fraser University invites applications for two tenure-track positions at the Assistant Professor level for its Surrey campus in the Greater Vancouver area. Outstanding candidates at more senior levels may also be considered. A Ph.D. in Computing Science or equivalent is required, with a strong commitment to excellence in research and teaching. Candidates at the more senior levels should have a strong record of publication, research funding, and student supervision and instruction. Preference will be given to candidates in the areas of Software Engineering and software aspects of Distributed Embedded Systems. However, the overall innovation and promise of the candidate's work will be considered as important as any specific area.

Simon Fraser University is one of the top-ranked universities in Canada. The School of Computing Science currently has approximately 200 Ph.D. and M.Sc. students, 800 undergraduate majors, and 58 faculty members, across two campuses. The new Surrey campus of SFU is located in an award-winning architectural complex in the centre of Surrey, while the main campus is 25 minutes away situated on Burnaby Mountain. Vancouver thrives as a scenic waterfront city located just minutes away from the mountains and a wide range of outdoor activities. Vancouver's cultural and intellectual pursuits, leisure opportunities, favourable climate, and clean and safe environment are consistently cited as quality of life factors that make it one of the most desirable places in the world to live and work.

All qualified candidates are encouraged to apply; however Canadian citizens and permanent residents will be given priority. Simon Fraser University is committed to employment equity and encourages applications from all qualified women and men, including visible minorities, aboriginal people and persons with disabilities. Under the authority of the *University Act* personal information that is required by the University for academic appointment competitions will be collected. For further details see: www.sfu.ca/vpacademic/Faculty_Openings/Collection_Notice.html.

Applications will be accepted until the positions are filled; however to be assured consideration by the search committee, applications must be received by January 15, 2007. All positions are subject to budgetary approval. For additional information see www.cs.sfu.ca

To apply, send curriculum vitae, evidence of research productivity, and the names, addresses and phone numbers of three referees to:
Faculty Search (Surrey campus)
School of Computing Science
8888 University Drive
Simon Fraser University
Burnaby, British Columbia
Canada, V5A 1S6
Email: Surrey-faculty-search@cs.sfu.ca

Skidmore College
Mathematics and Computer Science Department
Tenure-Track Assistant or Associate Professor

The Department of Mathematics and Computer Science at Skidmore College invites applications for a tenure-track position in Computer Science beginning September 2007. Qualifications include a Ph.D. in Computer Science or a closely related field (A.B.D. candidates may be considered with initial appointment at the level of instructor). The appointment will be at the rank of Assistant or Associate Professor.

A commitment to quality instruction of undergraduates (normally four courses per year, both elementary and advanced) and continuing scholarly activity is essential. The department has expertise in the theory of computation, algorithms, and artificial intelligence and is looking for someone who can expand our research experiences for students and our course offerings in an applied area of computer science. Startup funds and pre-tenure sabbaticals are available. For detailed information, see http://www.skidmore.edu/academics/mcs/mcs-home/index.htm.

Candidates for the position should submit a letter of application, CV, a statement describing your interest in teaching in an undergraduate, liberal arts environment, and a summary of your research goals and interests. Three letters of recommendation should be sent separately, including one letter that evaluates teaching qualifications. Electronic submittals of application material and letters are preferred and should be sent to:
anita@skidmore.edu.

Review of applications will begin January 2007 and continue until the position is filled. Applications from members of underrepresented groups are especially encouraged.

Smith College
Computer Science Department
Assistant Professor in Computing and the Arts

Smith College invites applications for a tenure-track Assistant Professor position in Computer Science, specializing in computing and the arts. Candidates will be expected to teach a range of courses in computer science, as well as courses conjoining computing technology with one or more of the arts (visual arts, music, dance, theater and performance, etc.) Cross-disciplinary collaboration with a wide range of disciplines and departments throughout the College will be a significant aspect of the position. Smith College, an undergraduate women's college consistently ranked as one of the nation's top liberal arts colleges, expects an exceptional record of research, scholarship and/or creative activity. Applicants must demonstrate a strong interest in teaching; prior experience is preferred. Candidates are required to have significant expertise in and demonstrated knowledge of computer science disciplines and of the visual

Professional Opportunities

and/or performing arts. A terminal degree in computer science or the arts is required (Ph.D., MFA, etc.).

Candidates should send a curriculum vitae, samples of creative and/or professional work (DVD, CD, electronic media, Web URLs, scholarly papers, etc.), a list of three references, and a personal career statement covering both teaching philosophy and ongoing professional scholarship and/or creative directions, to:

Joseph O'Rourke, Chair
Department of Computer Science
Smith College
Northampton, MA 01063
Phone: 413 585-3673
Email: orourke@cs.smith.edu

Review of applications will begin December 31, 2006, and continue until the position is filled.

Smith College is an equal opportunity employer encouraging excellence through diversity.

St. Mary's College of Maryland
Department of Mathematics and Computer Science
Assistant Professor

Two tenure-track positions in Computer Science at St. Mary's College of Maryland - a Public Liberal Arts College - starting Fall 2007. Industrial experience and a demonstrated ability to attract and retain students from underrepresented groups are desired.

Further details at: http://www.smcm.edu/nsm/mathcs/cs07.html.

AA/EOE.

Texas State University -San Marcos
Department of Computer Science
Tenure-Track Positions

Applications are invited for three tenure-track positions. Two positions are at the rank of Assistant Professor and one position is at the rank of Associate Professor. Consult the department recruiting page at:

http://www.cs.txstate.edu/recruitment/ for job duties, required and preferred qualifications, application procedures, and information about the university and the department.

Texas State University-San Marcos is an equal opportunity educational institution and as such does not discriminate on grounds of race, color, sex, national origin, age, sexual orientation or status as a disabled or Vietnam era veteran. Texas State is committed to increasing the diversity of its faculty and senior administrative positions. Texas State University-San Marcos is a member of the Texas State University System.

The Pennsylvania State University
The Applied Research Laboratory (ARL)
Postdoctoral Scholar

The Applied Research Laboratory (ARL) at The Pennsylvania State University, University Park, PA, has a Postdoctoral Scholar position available in the Information Science & Technology Division.

The selected researcher will conduct research in the area of system modeling, model validation, discrete event control and inference & decision making in the presence of uncertainties and/or partial observability. Intelligence data analysis involves gathering and analyzing multi-faceted data that is collected via multiple and independent systems that leads to a system-of-systems (SoS) model. Such a SoS must be designed, analyzed and controlled keeping in mind the not only the uncertainty in the raw intelligence data but also with uncertain decision and beliefs generated by intermediate systems. Since real life intelligence gathering operations are complex, risky and expensive, simulation and modeling provides a cost effective alternative to plan and analyze such operation. Decision-making in intelligence operations has to deal with situations in which agents and/or sensors invariably have to reckon with incomplete and uncertain knowledge of the truth and unanticipated irregularities in the operating environments. Consequently, intelligence operation models must account for uncertainty. The preferred candidate should have knowledge in one or more of the following areas: inference and decision processes, discrete event control, formal languages, statistical information processing, combinatorial search, uncertain information processing. U.S. Citizenship required. *This Is A Fixed-Term I*

Appointment Funded For One Year From Date Of Hire With Excellent Possibility Of Refunding.

The Pennsylvania State University/Applied Research Laboratory offers an exceptional benefits package, including a tuition discount. Interested applicants should submit a cover letter and resume describing qualifications to:

Applied Research Laboratory
Office of Human Resources
Dept. A-23280
P. O. Box 30
State College, PA 16804
or to:
arl-jobs@psu.edu.

Applications will be accepted until position is filled. For further information about the Applied Research Laboratory or current position vacancies, direct inquiries to: arl-jobs@psu.edu or visit our web site at www.arl.psu.edu.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

The University of Mississippi
Department of Computer and Information Science
Assistant Professor

The Department of Computer and Information Science at the University of Mississippi invites applications for a tenure-track position at the Assistant Professor level.

A successful candidate must hold a PhD or equivalent in computer science or a closely related field by August 17, 2007. The candidate must have the ability to teach both graduate and undergraduate students, conduct research in major areas of computer and information science, and supervise MS and PhD students. The candidate should be able to teach parallel and distributed computing, operating systems, and networks at the graduate level.

The BSCS program has been accredited since 1990. The University of Mississippi is located in the historic town of Oxford in the wooded hills of north Mississippi, an hour's drive from Memphis. Oxford has a wonderful small-town atmosphere with excellent schools.

Review of applications will begin immediately and will continue until the position is filled or an adequate application pool is reached. The applicant must provide evidence of research potential, effective communication skills, and a broad background in computing.

Applicants must apply online at http://jobs.olemiss.edu. Please supply a cover letter, vitae, research and teaching statements, and a list of four references (including name, address, telephone, and email).

The applicant should have letters of recommendation sent to:
references@cs.olemiss.edu
or:

Faculty Search Committee
Computer and Information Science
201 Weir Hall
University, MS 38677

The University of Mississippi is an EEO/AA/Title IX/Section 504/ADA/ADEA employer.

The University of North Carolina at Greensboro
Department of Computer Science
Professor/Department Head

The University of North Carolina at Greensboro and the College of Arts and Sciences invite applications and nominations for the position of Department Head for the newly created Department of Computer Science (formerly a division within the Department of Mathematical Sciences). Applicants for this leadership position should hold a doctorate in computer science or a closely related area and have a strong record of theoretical or applied research and a commitment to exemplary teaching at both the graduate and undergraduate levels. Previous administrative experience will be an advantage but is not required. The successful candidate will be appointed to the rank of Professor with tenure effective August 1st, 2007.

The Department of Computer Science is one of 21 departments in the College of Arts and Sciences at UNC Greensboro. The excellent core faculty consists of 5 tenured/tenure-track members plus additional lecturers and part-time faculty. The department currently offers the B.S. and M.S. degrees in computer science. There are approximately 210 students currently enrolled in the various programs. The B.S. in Computer Science is accredited by the

Computing Sciences Accreditation Board. For additional details, including brief accounts of faculty research interests, visit the Department's web page at http://www.uncg.edu/cmp.

UNC Greensboro, one of 16 campuses in the University of North Carolina system, is a doctorate-granting university with approximately 16,000 students in the College and six professional schools. Greensboro is a medium-sized city of about 220,000 in the Piedmont Triad region of North Carolina near the Research Triangle Park and other major universities, a location providing easy access to recreational opportunities at the beach and the mountains. The local metropolitan area (which includes the cities of High Point and Winston-Salem) has a population of almost 1 million and offers an excellent quality of life. (For more information on the city and the region, visit http://www.thedepot.com/)

Review of applications will begin on November 15 and will continue until the position is filled. Nominations and informal inquiries are encouraged; e-mail should be directed to RLMILLER@UNCG.EDU. Inquiries and applications will be treated confidentially on request.

Applicants should submit a letter explaining their interest in the position, a separate statement that describes their approach to the responsibilities of a Department Head, a research statement, a vitae, and names and addresses of four references to:

Robert L. Miller, Chair
Computer Science Headship Committee
Office of the Dean
105 Foust Building
UNC Greensboro, NC 27402
EEO/AA

The University of Texas at Dallas
Eric Jonsson School of Engineering and Computer Science Bioinformatics and Computational Biology
Faculty Position

The Department of Computer Science of The University of Texas at Dallas invites applications for a tenure-track faculty position in Bioinformatics and Computational Biology and related areas at the full professor level, starting Spring, Summer or Fall 2007. Candidates must have a Ph.D. degree in Computer Science, Software Engineering, Computer Engineering or Bioinformatics-related fields. Candidates should have a strong record of research, teaching, and external funding. This position may involve a joint appointment with one of the departments in the School of Natural Sciences and Mathematics or with the newly formed Department of Bioengineering, and preference will be given to candidates who can collaborate with researchers at the U. T. Southwestern Medical Center at Dallas. A significant start-up package has been budgeted for this position.

The Department offers Ph.D. degrees in Computer Science and 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; and B.S. degrees in Computer Science and 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 45 tenure-track faculty and 9 senior lecturers. 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 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 five 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 telecommunications' companies have major research and development facilities in the area. 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 within five years. Based in large part on a five-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 (including Bioengineering) by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs (see http://www.cs.utdallas.edu/about/welcome.html).

For more information, contact Dr. D. T. Huynh, Department Head, at 972-883-2169 or send email 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 #786
The University of Texas at Dallas
P. O. Box 830688, M/S AD 42
Richardson, TX 75083-0688

Indication of sex and ethnicity for affirmative action statistical purposes is requested as part of the application but not required.

UTD is an AA/EO Employer and strongly encourages applications from candidates who would enhance the diversity of the university's faculty.

The University of Texas at Dallas
Eric Jonsson School of Engineering and Computer Science
Endowed Chair in Software Engineering

The Department of Computer Science of The University of Texas at Dallas invites applications from outstanding applicants for a distinguished chaired position in Software Engineering and related areas, starting Spring, Summer or Fall 2007. Candidates must have a Ph.D. degree in Computer Science, Software Engineering, Computer Engineering or equivalent. The successful candidate must have a distinguished research and publication record, and demonstrated leadership ability in developing and expanding funded research programs. 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 and 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 45 tenure-track faculty and 9 senior lecturers. 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 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 five 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 within the next five years. Based in large part on a five-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 http://www.cs.utdallas.edu/about/welcome.html).

For more information, contact Dr. D. T. Huynh, Department Head, at 972-883-2169, or send email to cs-search@utdallas.edu, or view the Internet Web page at http://www.utdallas.

Professional Opportunities

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 #784
The University of Texas at Dallas
P. O. Box 830688, M/S AD 42
Richardson, TX 75083-0688
Indication of sex and ethnicity for affirmative action statistical purposes is requested as part of the application but not required.

UTD is an AA/EO Employer and strongly encourages applications from candidates who would enhance the diversity of the university's faculty.

The University of Texas at Dallas
Eric Jonsson School of Engineering and Computer Science
Faculty Position in Intelligent Systems

The Department of Computer Science of The University of Texas at Dallas invites applications for a tenure-track faculty position in the area of Intelligent Systems at the full professor level, starting Spring, Summer or Fall 2007. Candidates must have a Ph.D. degree in Computer Science, Software Engineering or Computer Engineering. Candidate should have a strong record of 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 and 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; and B.S. degrees in Computer Science and 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 45 tenure-track faculty and 9 senior lecturers. 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 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 five 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 the area. 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 within the next five years. Based in large part on a five-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 (including Bioengineering) by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs (see http://www.cs.utdallas.edu/about/welcome.html).

For more information, contact Dr. D. T. Huynh, Department Head, at 972-883-2169 or send email 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 #785
The University of Texas at Dallas
P. O. Box 830688, M/S AD 42
Richardson, TX 75083-0688
Indication of sex and ethnicity for affirmative action statistical purposes is requested as part of the application but not required.

UTD is an AA/EO Employer and strongly encourages applications from candidates who

would enhance the diversity of the university's faculty.

The University of Texas at Dallas
Eric Jonsson School of Engineering and Computer Science
Senior 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 the level of associate or full professor, starting Spring, Summer or Fall 2007. 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 as well as 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 and 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 45 tenure-track faculty and 9 senior lecturers. 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 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 five 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 within the next five years. Based in large part on a five-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 http://www.cs.utdallas.edu/about/welcome.html).

For more information, contact Dr. D. T. Huynh, Department Head, at 972-883-2169 or send email 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 #783
The University of Texas at Dallas
P. O. Box 830688, M/S AD 42
Richardson, TX 75083-0688
Indication of sex and ethnicity for affirmative action statistical purposes is requested as part of the application but not required.

UTD is an AA/EO Employer and strongly encourages applications from candidates who would enhance the diversity of the university's faculty.

Union College
Department of Computer Science
Assistant Professor

We invite applications for a tenure-track assistant professor position to start Sept. 2007. A Ph.D. in CS or a closely related field is required. Preferred areas are systems, bioinformatics, scientific computing, parallel computing, and graphics. The department offers a B.S. in computer science and collaborates in a B.S. in computer engineering.

We have a digital art program with Visual Arts and are developing programs in cognitive science and scientific computing. Union is a highly selective liberal arts and engineering college in New York State's Capital Region, three hours from NYC and Boston. It emphasizes collaboration between faculty and students and promotes interdisciplinary work. For further information see http://cs.union.edu.

Submit an application letter, CV, statements of teaching and research goals, and have three reference letters sent separately. Send applications and recommendations to:

Search Committee
Department of CS
Union College
Schenectady, NY 12308
Emailed recommendations (only) may be sent to cs-refletters@union.edu.
Review will start January 15, 2007.
Union College is an equal opportunity employer and strongly committed to student and workforce diversity.

University at Buffalo, The State University of New York
Computer Science and Engineering Department
Faculty Positions

The CSE department solicits applications at the assistant professor level (two positions). We are interested in excellent candidates in systems and applied areas, with a focus on pervasive information and computing environments.

Celebrating its 40th anniversary this year, the CSE Department has several award winning faculty and fellows of major professional societies, and is closely affiliated with successful centers devoted to biometrics and sensors, cognitive science, document analysis and recognition, high performance computing, and computer security.

Candidates are expected to have a Ph.D. in Computer Science/Engineering or related field by August 2007, with a very good publication record and potential for developing a strong funded research program.

All applications should be submitted by December 31, 2006 electronically via: recruit.cse.buffalo.edu.

A cover letter, curriculum vitae, and names and email addresses of at least three references are required.

Email address for correspondence: cse-search@cse.buffalo.edu.

The University at Buffalo is an Equal Opportunity Employer/Recruiter.

University of Bridgeport
Dept. of Electrical Engineering
Assistant Professor

The Electrical Engineering Dept. at the University of Bridgeport will hire a tenure-track assistant professor by December 2006. Recent Ph.D.s in EE or Computer Engineering or related fields are encouraged to apply.

Send resumes to:
Lawrence V. Hmurcik, EE Chair
Tech 137 University Ave.
University of Bridgeport
Bridgeport, CT 06604
hmurcik@bridgeport.edu

University of California, Berkeley
Electrical Engineering and Computer Sciences
Tenure-Track Positions

University of California, Berkeley invites applications for several approved tenure-track in at the junior level, beginning Fall 2007, subject to budgetary approval. We also consider possible joint appointments with other Berkeley departments. Preference will be given to candidates at the junior level. Applicants should have (or be about to receive) a Ph.D. in Computer Science, Electrical Engineering, Computer Engineering, or a related field, evidence of ability to establish and pursue a program of high quality research, and a strong commitment to graduate/undergraduate teaching. Prioritizing candidates' overall originality and promise over sub-area of specialization, we seek applicants interested in creating innovative and far-reaching solutions to important problems in electrical engineering and computer science. We also welcome applicants working in interdisciplinary areas such as computational biology, nanoelectronics, or the uses of computing in the interests of society.

Applications should include a resume, statements of research and teaching interests, selected publications, and the names of three

references who will send recommendations (see also below). Review begins December 15, 2006; candidates are urged to apply by that date. The application period closes February 15, 2007; applications received after that date will not be considered. Computer Science applicants, mail applications to:

CS Search Committee
c/o Debra Zaller
381 Soda Hall
UC Berkeley, CA 94720-1776
To apply to Electrical Engineering, go to URL: http://www.eecs.berkeley.edu/EE-Faculty-Jobs/.

Applicants working at the intersection of electrical engineering and computer science may apply to either address. All such applications receive Department-wide review.

Reference letters are due by January 10, 2007, and are NOT requested directly by the department. Recommenders writing letters for Computer Science applicants should mail them directly to the address above, or email to cs-references@eecs.berkeley.edu (for reference letters only).

Recommenders providing letters of reference for EE applicants, go to the URL listed above. Recommenders may view the UC Berkeley Statement of Confidentiality at http://apo.chance.berkeley.edu/evalltr.html . University of California is an Equal opportunity, Affirmative Action Employer.

University of California, Davis
Department of Statistics
Tenure-Track Position

One position, either tenure-track Assistant Professor or tenured Associate Professor, beginning July 1, 2007. Requires Ph.D. in Statistics or related field. Research areas: statistical signal processing; time series; statistical algorithms and computing.

By 12/1/06, email vitae and research interests to:

search@wald.ucdavis.edu
Send at least three letters of reference, reprints/preprints, and transcripts (if Ph.D. after 2004) to:

Search Committee
Statistics Department
University of California
Davis, CA 95616
Affirmative action/equal opportunity employer.

University of California, Riverside
Marlan and Rosemary Bourns College of Engineering
Faculty Positions

The University of California, Riverside invites applications for one or more tenure-track and tenured faculty positions in the Department of Computer Science and Engineering for the 2007-2008 academic year. Applicants must have a Ph.D. in Computer Science or in a closely related field. Applications are welcome in all areas of Computer Science and Engineering. Senior candidates must have an exceptional research and teaching record. Junior candidates must show outstanding research and teaching potential. Salary will be commensurate with appointment rank and qualifications.

UC Riverside is among the fastest-growing members of the ten-campus University of California system, widely regarded as the most distinguished system of public higher education in the United States. The CSE Department recently moved to a new state-of-the-art building that also houses the EE Department. The CSE Department offers B.S., M.S., and Ph.D. degrees. More information is available at http://www.cs.ucr.edu

The search committee will begin reviewing applications on January 1, 2007, and will continue to receive applications until the positions are filled. To apply, please register at:

http://www.engr.ucr.edu/facultysearch/
and submit the requested PDF files.

For inquiries and questions, please contact us at search@cs.ucr.edu.

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

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

The Computer Science Department at the University of California, Santa Barbara invites applications for a tenure-track assistant professor

Professional Opportunities

position effective July 2007. The successful candidate may also qualify for an appointment to a newly established Endowed Chair position. The Endowed Chair's goal is to nurture a junior scholar to become a next generation leader in Computer Science. The Endowment will provide the appointee with annual funds to accomplish this goal through teaching, public service, and research.

The Department of Computer Science is part of the College of Engineering, which encompasses over 140 faculty in various engineering disciplines. UCSB is a major research institution, elected member of the Association of American Universities, as well as an integral part of the ten-campus University of California system. Research areas in the Department include databases, parallel and distributed systems, programming languages, networking, computer and network security, theory of computation, algorithms, computer vision, human-computer interaction, bioinformatics, and computational science and engineering. The Department and the College feature a highly collaborative and stimulating working environment. Graduate degrees are offered at the M.S. and Ph.D. levels. Additional information about the Computer Science Department may be found at http://www.cs.ucsb.edu.

Applicants should hold a doctoral degree in Computer Science or a related field. Primary consideration will be given to candidates who apply by January 12, 2007; however, the position will remain open until filled. To apply, send a resume, research and teaching statements, and the names and addresses of four referees to our recruitment web page at:

http://www.cs.ucsb.edu/recruit.

The Computer Science Department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching, and service.

We are an EO/AA employer.

University of California, Santa Cruz
Computer Engineering Department
Assistant Professor

The Department of Computer Engineering at the University of California, Santa Cruz invites applications for faculty positions. Position #488: A tenure-track (Assistant Professor) faculty position. We seek outstanding applicants in all areas of Computer Engineering, and particularly welcome those with research interests in Assistive Technology including sensory augmentation, human-machine interface, wearable computers, prosthetic devices, and technology for the elderly and the disabled. The campus is especially interested in candidates who can contribute to the diversity and excellence of the academic community through their research, teaching, and service. UCSC is the University of California campus nearest to Silicon Valley and has close research ties with the local industry.

Please submit a curriculum vitae, a statement of research and teaching plans, URLs of selected reprints, and names of three people who are willing to write letters of recommendation by Jan. 5, 2007. We strongly encourage electronic submission of your materials. Directions: http://www.soe.ucsc.edu/jobs/faculty/apply. Alternatively, application materials may be mailed to:

Computer Engineering Search Committee
Baskin School of Engineering
University of California
1156 High Street MS: SOE3
Santa Cruz, California 95064

Clearly indicate position: #488 (Assistant Professor, Assistive Technology).

Information on the positions: cerecruit@soe.ucsc.edu. Information about Baskin School of Engineering at UCSC: http://www.soe.ucsc.edu/.

UCSC is an EEO/AA/IRCA Employer.

University of Central Florida
School of Electrical Engineering & Computer Science
Faculty Positions

UCF School of Electrical Engineering and Computer Science is looking for exceptional faculty. We expect to fill several faculty lines in the next few years and invite applications for tenured and tenure-track faculty positions at all levels for appointment in 2007. EECS is specifically interested in candidates with research in the four target areas below, yet

applications from outstanding candidates in any area are welcome.

Bioinformatics & Computational Biology: All areas of computational life sciences including genomics, comparative genomics, proteomics, transcriptomics, structural bioinformatics, phylogenetics, system biology, probabilistic and Bayesian models, molecular simulation, medical imaging, data mining/searching of biological databases.

Energy: Renewable energy research and technology, including photovoltaic applications, distributed electrical power generation, integrated power networks, renewable power system control, computational methods for energy systems, and applications of power electronics in energy conversion systems.

Entertainment Engineering: Computer animation and graphics, experiential systems, mixed and virtual reality, interactive simulation, human-computer interaction, collaborative agents, mobile and pervasive computing, visualization and physical modeling.

Software Engineering: Software processes and workflows, secure and reliable software architectures, software tools and development environments, program comprehension and visualization, software economics and metrics, engineering embedded and real-time software, and mobile, ubiquitous and pervasive computing.

EECS offers a competitive salary and start-up package, and UCF provides generous benefits. New faculty members have graduate student support and significantly reduced teaching loads. Special senior-level positions are available to exceptionally qualified individuals.

Applicants should have a Ph.D. in a related area to EECS disciplines by the start of the appointment 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 his/her field at the national/international level. Those applying for Assistant Professorships should have a record of high-quality publications and be recognized for their potential.

EECS at UCF is the oldest Ph.D. granting CS program in the state of Florida and has a rapidly growing educational and research program with nearly $7 million in research contracts and over 500 graduate students and 2,000 undergraduates. UCF is strongly committed to continuing the buildup of strength in EECS, including a move in late 2006 to the new, state-of-the-art Harris Corp. Engineering Center.

Research sponsors include NSF, NASA, DOT, ARO, ONR, PEOSTRI, RDECOM and other agencies of the DOD. Industry sponsors include Adaptec, ATI, Boeing, Canon, Electronic Arts, Harris, Honeywell, IBM, Imagesoft, Intel, Lockheed Martin, Lucent, Oracle and Sun Microsystems as well as local high-tech start-ups.

UCF has over 46,000 students and is among the nation's top-10 largest universities. Located in Orlando, EECS and UCF are at the center of the I-4 High Tech Corridor with a thriving industrial base in telecommunications, computer systems, semiconductors, defense, space, lasers, simulation, software and the world-renowned entertainment/theme park industry. Exceptional weather, easy access to the seashore, one of the largest convention centers in the nation and an international airport that is among the world's best are just a few features that make the UCF/Orlando area ideal.

To submit an application, please go to: http://www.eecs.ucf.edu/facsearch/online_app.html.

UCF is an Equal Opportunity/Affirmative Action employer. Women and minorities are particularly encouraged to apply.

University of Delaware
Department of Computer and Information Sciences
Assistant Professor

Applications are invited for a tenure track Assistant Professor position to begin Fall 2007. Of primary interest is candidates whose research is in systems (e.g., high performance computing, runtime systems, operating systems, distributed systems, and compilers). Outstanding candidates whose research is in information retrieval may also apply, although our first priority will be systems faculty. Applicants should hold a Ph.D. or its equivalent, and should be committed to excellence in both research and teaching. The normal teaching load is three courses per year.

The Department has 19 tenure-track and 3 research faculty members, with a substantial portion of our 120 graduate students pursuing the Ph.D. We have significant external funding, including NSF Career and DOE Young Investigator Awards, and a grant in Communications and Networks that is part of the Army Research Lab's Collaborative Technology Alliance. A major UDel biotechnology initiative (http://www.dbi.udel.edu) offers opportunities for collaborative research in bioinformatics. The University of Delaware is centrally located between Philadelphia and Baltimore, with major government and industrial labs nearby. Considerable information about the Department is available at http://www.cis.udel.edu.

Applications are accepted electronically or by regular mail (please do not send both). *[See http://www.cis.udel.edu for details on how to submit electronically and address of regular mail submission.]*

In addition, candidates should have three confidential letters of reference sent directly to either (but not both) the mailing address or csfacsch@cis.udel.edu. The committee will begin reviewing applications on January 20, 2007 and will give preference to applications submitted by that date. The curriculum vitae and letters of reference will be shared with departmental faculty.

The University of Delaware is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.

University of Illinois at Chicago
Joint Position in Computer Science and Learning Sciences at UIC
Tenure-Track Professor (Open Rank)

The University of Illinois at Chicago invites applicants for an open rank, joint faculty position in Computer Science and the Learning Sciences beginning August 16, 2007.

The position is one of four specifically designated for a university-wide interdisciplinary initiative in the Learning Sciences (http://litd.psch.uic.edu/learningsciences); approximately two dozen faculty members from across the campus are actively participating in the initiative. The Department of Computer Science (http://www.cs.uic.edu), situated in the College of Engineering, has 31 faculty members, including a human-computer interaction group strongly integrated with the learning sciences initiative.

We seek applicants with a record of research and publication focusing at the nexus of Computer Science and the Learning Sciences. Candidates must hold a doctorate in Computer Science, Learning Sciences, or closely related fields, and should have a demonstrated record of research focusing on the design and evaluation of technologies to support learners that impacts both fields. Position responsibilities include carrying out a program of research and scholarship at the national level and teaching graduate courses in the Learning Sciences Program and the Department of Computer Science. UIC is an Affirmative Action/Equal Opportunity Employer seeking applicants who are from diverse backgrounds and/or have disability status.

Applicants for the position must submit a vitae and statement of research and teaching interests, and have three letters of recommendation forwarded to:

Tom Moher in care of LS/CS Search Committee
LITD
M/C 285
University of Illinois at Chicago
1007 West Harrison Street
Chicago, IL 60607

In addition, we would appreciate receiving electronic copies of all application materials (PDF preferred) at LSsearch@uic.edu. Review of applications will begin on November 1, 2006 and continue until the position is successfully filled.

University of Louisiana at Lafayette
The Center for Advanced Computer Studies
Faculty Positions Graduate Fellowships

Candidates with a strong research record and an earned doctorate in computer science or computer engineering are invited to apply for a tenure-track assistant professor faculty position starting fall of 2007. Target areas include Grid

Computing, Large Scale Data & Knowledge Engineering, and Distributed Software Systems. Consideration will also be given to outstanding candidates in other areas. Candidates must have demonstrated potential to achieve national visibility through accomplishments in research contract and grant funding, publications, teaching and supervising graduate students.

Faculty teach mostly at the graduate and senior undergraduate levels and offer a continuing research seminar. State and university funds are available to support research initiation efforts. Salaries are competitive along with excellent support directed towards the attainment of our faculty's professional goals. The Center's colloquium series brings many world known professionals to our campus each year.

The Center is primarily a graduate research unit of 17 tenure-track and 7 research faculty, with programs leading to MS/PhD degrees in computer science and computer engineering. Approximately 260 graduate students are enrolled in these programs, including approximately 90 PhD students. The Center has been ranked 46th in a recent NSF survey based on research and development expenditures, and ranked 35th among the top 100 graduate programs in North America by the *Communications of the ACM*, based on research publications. The Center has state-of-the-art research and instructional computing facilities, consisting of several networks of SUN workstations and other high performance computing platforms. In addition, the Center has dedicated research laboratories in Intelligent Systems, Computer Architecture and Networking, Cryptography, FPGA and Reconfigurable Computing, Internet Computing, Virtual Reality, Entertainment Computing, Software Research, VLSI and SoC, Wireless Technologies, and Distributed Embedded Computing Systems. Related university programs include the CSAB (ABET) accredited undergraduate program in Computer Science, and the ABET accredited undergraduate program in Electrical and Computer Engineering. Additional information about the Center may be obtained at http://www.cacs.louisiana.edu/.

A number of PhD fellowships, valued at up to $24,000 per year including tuition and most fees, are available. They provide support for up to four years of study towards the PhD in computer science or computer engineering. Eligible candidates must be U.S. citizens or must have earned an MS degree from a U.S. university. Recipients also receive preference for low-cost campus housing. Applications may be obtained and submitted at http://gradschool.louisiana.edu.

The University of Louisiana at Lafayette is a *Carnegie Research University with high research activity*, with an enrollment of over 17,000 students. Additional information may be obtained at http://www.louisiana.edu/. The University is located in Lafayette, the hub of Acadiana, which is characterized by its Cajun music and food and *joie de vivre* atmosphere. The city, with its population of over 120,000, provides many recreational and cultural opportunities. Lafayette is located approximately 120 miles west of New Orleans.

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

Dr. Magdy A. Bayoumi, Director
The Center for Advanced Computer Studies
University of Louisiana at Lafayette
Lafayette, LA 70504-4330
Tel: 337-482-6147 ~ Fax: 337-482-5791

The University is an Affirmative Action/Equal Opportunity Employer.

University of Maryland
Computer Science Department
Jack and Rita G. Minker Professorship

The Computer Science Department in conjunction with the Institute for Advanced Computer Studies is seeking candidates for the newly endowed Jack and Rita G. Minker Professorship in Computer Science. The Professorship will be a tenured, Full Professor position in the Department of Computer Science with a permanent, partial appointment in the Institute for Advanced

Professional Opportunities

Computer Studies. While candidates in all areas of computer science will be considered, preference will be given to candidates in Artificial Intelligence. The professorship honors the pioneering contributions of Rita Minker to the early development of computer science, and Jack Minker for his research in AI and his work in support of human rights for scientists. Applications from women and minority candidates are especially welcome.

Rita G. Minker (April 28, 1927-October 11, 1988), was a mathematician and an early computer programmer who worked on several early digital computers, including the Bell Relay Machine at Bell Laboratories and the RCA BIZMAC computer, where she was RCA's second computer programmer and first woman programmer. She left the computer profession to raise her children and returned to work in 1968 in the newly formed Division of Computer Research and Technology (DCRT) at the National Institutes of Health (NIH). She headed the Training unit in DCRT from 1968-1975, where she taught medical researchers statistical methods and programming. In 1975 she joined the Statistical Software Section, of the DCRT where she was in charge of consulting on and maintaining SPSS, a major statistical package. She died of breast cancer at the age of 61 on October 11, 1988.

Professor Emeritus Jack Minker is a leading authority in artificial intelligence (AI), deductive databases, logic programming and nonmonotonic reasoning. He is also an internationally recognized leader of human rights for scientists. He started his academic career in 1967 at the University of Maryland, Department of Computer Science. He was the department's first Chair (1974-1979). Between 1980-1982, he was Chair, Advisory Committee on Computing to the National Science Foundation. He is considered a founder of deductive databases and the founder of disjunctive databases. He is author of over 150 refereed publications. He was the Founding Editor-in-Chief of the Theory and Practice of Logic Programing, and is now Founding Editor-in-Chief, Emeritus. Among his awards are: Fellow of AAAI, AAAS, ACM and IEEE; the 1985 ACM Outstanding Contribution Award for work on human rights; recipient of the University of Maryland Presidential Medal in 1996; and 2005 recipient of the Allen Newell Award from the ACM/AAAI.

Candidates for the Minker Professorship should submit a vitae and reference list to:
Chair
Minker Professor Search Committee
Computer Science Department
A.V. Williams Bldg.
University of Maryland
College Park, MD 20742

The University of Maryland is an EEO/Affirmative Action Employer.

University of Massachusetts at Amherst
Department of Computer Science
Faculty Positions

The University of Massachusetts, Amherst invites applications for tenure-track faculty positions at the assistant professor level. Applicants must have a Ph.D. in Computer Science or related area and should show 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. *The department is committed to the development of a diverse faculty and student body, and is very supportive of junior faculty, providing both formal and informal mentoring. We have a strong record of NSF CAREER awards and other early research funding.* Applicants in all areas of Computer Science will be considered. One to three positions are expected.

The Department of Computer Science has 43 tenure and research track faculty and 180 Ph.D. students with broad interdisciplinary research interests. The department offers first-class research facilities. Please see http://www.cs.umass.edu for more information. To apply, please send a cover letter referencing search R25020 (tenure-track position) with your vitae, a research statement, a teaching statement and at least three letters of recommendation. We also invite applications for Research Faculty (search R25019) Research Scientist (R25018), Postdoctoral Research Associate (R25018), and

Research Fellow (R25018) positions in all areas of Computer Science. Applicants should have a Ph.D. in Computer Science or related area (or an M.S. plus equivalent experience), and should show evidence of exceptional research promise. These positions are grant-funded; appointments will be contingent upon continued funding.

To apply, please send a cover letter with your vitae, a research statement and at least three letters of recommendation. Electronic submission of application materials is 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.
Hard copies of the application materials may be sent to:
Search {fill in number from above}
c/o Chair of Faculty Recruiting
Department of Computer Science
University of Massachusetts
Amherst, MA 01003

We will begin to review applications on November 1, 2006 and will continue until available positions are filled. Salary and rank commensurate with education and experience; comprehensive benefits package. Positions to be filled dependent upon funding. 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.

University of Minnesota - Twin Cities
Department of Computer Science and Engineering
Tenure-Track Positions

The Department of Computer Science and Engineering at the University of Minnesota-Twin Cities invites applications for two open tenure-track faculty positions primarily in core areas of computer science and engineering at the Assistant Professor level, though outstanding candidates for more senior positions will be considered. The emphasis is on applications within Health/Life Sciences and Embedded Systems. The position "Computing in Health/Life Sciences" includes a wide range of areas such as medical informatics, bioinformatics, algorithms, user interfaces, and hardware architectures. The objective is to expand the group of faculty in the area while many more bridges to the College of Biological Sciences and the Medical School are built. The position in "Embedded Systems" builds on the strong presence of medical devices' companies in the area. Software engineering, program verification, real-time systems, fault-tolerance, operating systems, and performance evaluation are all intertwined in order to supply the level of performance required by embedded systems. The Twin Cities is an ideal location for this line of research and this position can be the cornerstone for further exciting developments.

Outstanding candidates in all other areas of computer science will also be considered. Requirements include a Ph.D. in computer science, computer engineering, electrical engineering, bioinformatics, or a closely related discipline, a commitment to quality teaching, and the ability to carry out outstanding, high-impact research which will involve collaboration with various other groups across the University. Senior candidates must possess a distinguished record of research, teaching, and service/leadership. A generous financial and infrastructure package will be provided.

The Department of Computer Science and Engineering has an outstanding group of over forty faculty members who have access to excellent computing and research facilities, both within the Department and at various research centers on campus, including the Army High Performance Computing Research Center, the Minnesota Supercomputing Institute, and the Institute for Mathematics and its Applications. The Department also plays a prominent role in the Digital Technology Center. Information about bioinformatics efforts at the University of Minnesota can be found at http://www.binf.umn.edu/links/index.php. External research funding in the department has grown significantly over the past several years and annual research expenditures are around $6.7 Million. Additional information about the Department and the various centers is available

at its World Wide Web home page (http://www.cs.umn.edu).

Applicants for this position must go to:
https://employment.umn.edu
to provide basic personal information and then should submit a curriculum vitae, research and teaching statements, and the names of at least three references through the http://www.cs.umn.edu/about/employment/faculty.php link. Submissions should be in the form of a single PDF document. For full consideration, applications should be received by January 8, 2007. However, the search will remain open until the positions are filled.

The University of Minnesota is an equal opportunity educator and employer.

University of Missouri-Rolla
Department of Computer Science
Daniel St. Clair Endowed Chair

The Department of Computer Science at the University of Missouri-Rolla (UMR) invites nominations and applications for the Daniel St. Clair Endowed Chair in Computer Science which will be supported by the $2.2 Million Endowment.

The successful candidate must have an outstanding international reputation for excellence in scholarly research and will assume a leadership role in the department to strengthen and expand the department's research and teaching missions. We seek an individual who will attract and inspire superior graduate students, maintain and promote support for a vigorous research program, develop new initiatives, serve as a standard for excellence in scholarly activity and excellence in teaching, be a mentor for current and future faculty, and collaborate with faculty and students both in Computer Science and in other departments and research centers at UMR. Candidates must have a Ph.D. or equivalent with preference given to those in Computer Science and have the qualifications and standing to be appointed as a tenured full professor. The candidate should have a strong record of research and teaching at a university or equivalent, but candidates from industry with a strong research record coupled with academic experience are encouraged to apply. The successful candidate must have strong interpersonal skills and exhibit strong leadership skills as well as a commitment to promoting the department.

The department has three areas of excellence: (1) software engineering, (2) all aspects of critical infrastructure protection with emphasis on distributed and embedded systems, networking, and computer security, and (3) bioinformatics. Departmental activities and research are detailed further on our web site, www.cs.umr.edu. The department has 16 full-time faculty and some joint appointments, and grants the BS, MS and Ph.D. degrees. Many of our faculty participate in interdisciplinary research with several campus research centers and departments. The University of Missouri-Rolla is the primary science and engineering campus of the University of Missouri system. It is situated in the beautiful Ozark woodlands with abundant opportunities for outdoor activities. The urban environment of St. Louis is 90 minutes away via interstate highway.

Application reviews will begin September 15, 2006 and will continue until the position is filled. Applicants must send 1) a vitae, 2) statements of leadership philosophy and research and teaching interests, 3) evidence of teaching, research, and communications skills and 4) the names of five references who will be contacted if the candidate is selected for interview to:
Human Resources (hrsinfo@umr.edu)
Reference Number: 00034301
University of Missouri-Rolla
113 University Center
Rolla, MO 65409

University of Missouri-Rolla
Computer Science Department
Faculty Position

The Department of Computer Science at the University of Missouri-Rolla is seeking qualified applicants for a tenure-track faculty position preferably at the level of Assistant Professor beginning August 2007. All areas of Computer Science will be considered. The department has a special interest in Data Mining/Bioinformatics, all aspects of Critical Infrastructure Protection with emphasis on distributed and embedded systems, networking, and computer security, and

Software Engineering. Applicants must have a demonstrated record of research publication, funding potential, and evidence of quality teaching commensurate with the position they seek. The successful candidate will be expected to contribute to the Departmental research effort in one or more of the areas outlined above and have commitment to quality teaching both at the undergraduate and graduate levels. Applicants must have had some level of prior involvement in research activities such as publications, grant writing participation, supervising students, and must hold an earned Ph.D. in Computer Science or a related field by the appointment start date.

The Department has 16.5 full-time faculty positions with some joint appointments in Computer Engineering, and grants the BS, MS and Ph.D. degrees. The Department has a cohesive faculty with rapidly growing levels of funded research. Opportunities for interdisciplinary research abound and such activities are strongly encouraged with several campus research centers and departments. The University of Missouri-Rolla is the primary science and engineering campus of the University of Missouri system. It is situated in the beautiful non-urban environment of the Ozarks. St. Louis is 1 1/2 hours away via interstate highway. Salary is competitive with Big-10/Big-12 universities, and the salary range is open.

The committee will begin reviewing applications on December 15, 2006. Applications will be accepted until the position is filled. Applicants should send 1) a vitae, 2) a statement of research and teaching interests, 3) evidence of teaching, research, and communication skills, and 4) three letters of reference to:
Human Resource Services
Reference Number: 32217
University of Missouri-Rolla
1202 North Bishop
1870 Miner Circle
Rolla, MO 65409-1050

UMR is an AA/EEO employer. Females, minorities, dual career couples, and persons with disabilities are encouraged to apply.

University of Nebraska-Lincoln
Computer Science and Engineering
Assistant Professor

We invite applications for a tenure-track faculty position at the rank of Assistant Professor. We are looking for a faculty member who can establish a strong research and teaching program, and can add to our existing strengths in the target area of computer systems. Sub-areas of interest include, but are not limited to: computer architecture, storage and I/O systems, VLSI and embedded systems, networking, and distributed systems. Candidates will hold a PhD in Computer Science, Computer Engineering or closely related discipline.

Applicants will find many opportunities for research collaborations both within and outside the Computer Science and Engineering department. To apply, go to:
http://employment.unl.edu
Complete the Faculty/Administrative application 060793 and attach required documents. The cover letter should include names of at least three references and statements of teaching and research. Review of applications will begin December 1, 2006, and will continue until the position has been filled. The official advertisement can be viewed at http://cse.unl.edu/search.

The University of Nebraska is committed to a pluralistic campus community through affirmative action and equal opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact Professor Sharad Seth at 402-472-5003 for assistance.

University of New Orleans
Computer Science Department
Tenure-Track Assistant Professor Positions

The Department of Computer Science invites applications for junior faculty positions (effective January 2007). The department has a particular interest in specialists in bioinformatics and computer security. Detailed information on these positions are available at:
http://www.cs.uno.edu/News/faculty_position.html

Professional Opportunities

University of North Carolina at Chapel Hill
Department of Computer Science and Biomedical Research Imaging Center
Tenure-Track Position

Applications are invited for a tenure-track faculty member at the level of Assistant Professor or Associate Professor without tenure appointment in the Department of Computer Science and the UNC Biomedical Research Imaging Center to begin on or after July 1, 2007.

Applicants are expected to have a doctorate in computer science, computer engineering, biomedical engineering, or medical physics, and a research emphasis in image analysis. Further information and details on the application procedure for this search is available at:

http://www.cs.unc.edu.

Minorities and women are encouraged to apply.

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

University of North Carolina at Chapel Hill
Department of Computer Science
Tenure-Track Position

Applications are invited for a tenure-track faculty member at the level of Assistant Professor without tenure appointment in the Department of Computer Science to begin on or after July 1, 2007. We particularly invite applications from candidates with expertise in robotics, computer vision, mobile computing, data mining and machine learning, bioinformatics, computer security, and high-performance computing. Outstanding candidates who would strengthen or complement other existing research groups in the department will be welcomed.

Applicants are expected to have a doctorate in computer science or computer engineering, or must present an equivalent level of professional accomplishment. Further information and details on the application procedure for this search is available at:

http://www.cs.unc.edu

or by e-mail to:

faculty-recruiting06@cs.unc.edu.

Minorities and women are encouraged to apply.

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

University of Notre Dame
Computer Science & Engineering
Assistant Professor

The Department of Computer Science and Engineering at the University of Notre Dame invites applications for a position at the rank of Assistant Professor. A priority area for this search will be data mining and machine learning, with potential for interaction with the bioinformatics and systems areas. Other areas of specialization will be considered.

Our faculty are engaged in cutting-edge and highly visible research in a variety of areas. The combination of small class sizes and a "PhD-only" graduate program allows us to emphasize true excellence in both research and teaching.

Notre Dame is ranked among the top 20 national universities in recent USNWR surveys. Notre Dame's heritage and values are unique among national universities, resulting in a distinctive character of campus life. The South Bend area has a vibrant and diverse economy with affordable housing and excellent school systems, and is within easy driving distance of Chicago.

This position is open until filled. Screening of applications will begin immediately. Applicants should send a CV, statement of teaching and research interests, and contact information for three professional references to:

facultysearch@cse.nd.edu.

Submissions in PDF format are preferred.

University of Pennsylvania
Department of Computer and Information Science
Faculty Positions

The University of Pennsylvania invites applicants for tenure-track appointments in both experimental and computer science to start July 1, 2007. Tenured appointments will also be considered. Faculty duties include teaching undergraduate and graduate students and conducting high-quality research.

Successful applicants will find Penn to be a stimulating environment conducive to professional growth. Over the last few years, we have successfully recruited faculty in artificial intelligence, computer architecture,

databases, machine learning, machine vision, programming languages, and security. We are now especially interested in candidates in graphics/animation and systems.

The University of Pennsylvania is an Ivy League University located near the center of Philadelphia, the 5th largest city in the US. Within walking distance of each other are its Schools of Arts and Sciences, Engineering, Medicine, 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 technology-driven industries such as pharmaceuticals, finance, 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/departmental/facultyRecruiting.shtml

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

Chair, Faculty Search Committee
Department of Computer and Information Science
School of Engineering and Applied Science
University of Pennsylvania
Philadelphia, PA 19104-6389

Applications should be received by January 15, 2007 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 region.

University of Pittsburgh
Department of Computer Science
Tenure-Track Position

The Department of Computer Science at the University of Pittsburgh is seeking applications for two full-time tenure-track positions to begin in the Fall Term 2007, pending budgetary approval. One of the positions is at the Assistant Professor level and the other is at an open rank. While we are seeking outstanding candidates in all areas of Computer Science, we specifically encourage applications from candidates whose research will enhance interdisciplinary collaborations between the Computer Science department and other units in the university. For more information about the positions or the department please refer to:

http://www.cs.pitt.edu/recruiting.

The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer. Women and members of minority groups under-represented in academia are especially encouraged to apply.

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, to teach both graduate and undergraduate courses, and to supervise graduate students.

The department is ranked among the top ten computer science departments in the country. It has 45 tenured and 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, Freescale Semiconductor, Advanced Micro Devices, National Instruments, AT&T, CSC, Intel, Samsung. For more information please see the department web page: http://www.cs.utexas.edu/.

The department prefers to receive applications online, beginning November 1, 2006. 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

Inquiries about your application may be directed to faculty-search@cs.utexas.edu.

For full consideration, please apply by January 15, 2007. Women and minority candidates are especially encouraged to apply.

The University of Texas is an Equal Opportunity Employer.

University of Virginia
Department of Computer Science
Faculty position

The Department of Computer Science at the University of Virginia invites applications for a general teaching faculty position. Appointments at the junior level are available, but exceptional candidates at senior levels may be considered. This renewable, non-tenured position is intended for committed individuals whose academic careers are centered on the development and delivery of excellent undergraduate Computer Science education for ALL students. The successful candidate would join an established team of teaching faculty members.

Our department is a vibrant and collegial community with a diverse population with more than 300 undergraduate students, 100 PhD students, and 30 faculty members. The department offers baccalaureate, masters, and doctoral degrees in Computer Science and Computer Engineering. The University of Virginia ranks consistently as one of the top two public universities in the United States, and the University has selected information technology as one of three University-wide focus areas.

Candidates must have an earned doctorate in an appropriate discipline and have a genuine desire to contribute to the Department's educational mission. Applicants are encouraged to visit the departmental website for more information at: http://www.cs.virginia.edu.

Applicants should submit a letter of application, teaching statement, research or service statement, curriculum vitae, and contact information for at least three references. Additional materials, such as documentation showing evidence of teaching quality and innovation, are encouraged. Application materials should be submitted electronically in PDF form by email to:

teaching@cs.virginia.edu.

We will begin to consider applications in December 2006 and will continue to accept applications until the position is filled.

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

University of Virginia
Department of Computer Science
Faculty Positions

The University of Virginia, Department of Computer Science has openings for tenure-track faculty positions at all levels and in all areas of computer science. Outstanding candidates in any area will be considered. We are particularly interested in candidates working in theory and those who are developing the theoretical foundations of data analysis, machine learning, and networking. We give higher priority to a candidate's originality and promise than to the candidate's specific research area.

Our department is a collegial and vibrant community with a diverse population with more than 300 undergraduate students, 100 PhD students, and 28 faculty members. The department offers baccalaureate, masters, and doctoral degrees in Computer Science and Computer Engineering. The University of

Virginia ranks consistently as one of the top two public universities in the United States, and the University has selected information technology as one of three University-wide focus areas.

Candidates must have earned a doctorate in an appropriate discipline and demonstrate a commitment to excellence in research, education, and service. Applicants should submit a letter of application, research statement, teaching statement, curriculum vitae, URLs of up to three selected papers, and contact information for at least three references. Application materials should be submitted electronically in PDF form by email to:

positions@cs.virginia.edu.

We will begin to consider applications in December 2006 and will continue to accept applications until the positions are filled.

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

University of Virginia
The Department of Statistics
Two Tenure-Track Assistant Professorships (Fall 2007)

The research area is flexible, but we particularly seek applications from individuals with research interests that intersect computational statistics. We also desire applications from individuals whose area of expertise complement existing departmental strengths, and who have an ability and interest in interacting with researchers in other university departments.

Deadline for application is January 15, 2007. Please send a cover letter describing teaching and research interests, photocopies of graduate transcripts, and CV to:

Faculty Search Committee
Department of Statistics, UVa
Box 400135
Charlottesville, Virginia 22904-4135

Applicants should arrange to have three letters of recommendation sent directly to the above address.

UVa is an EO/AA employer.

University of Waterloo
Department of Electrical and Computer Engineering
Faculty Positions

The Department of Electrical and Computer Engineering invites applications for faculty positions in most areas of computer engineering, software engineering, and nanotechnology engineering, and in VLSI/circuits, information security, photonics, MEMS, signal/image processing, and quantum computing. The University has been named the "Best Overall" university by reputation in Canada.

For more information and online application, please visit:

https://eceadmin.uwaterloo.ca/DACA.

University of Wyoming
Department of Computer Science
Tenure-Track Positions

The University of Wyoming is a research university located in the high plains of the Rocky Mountains. The Computer Science Department of the College of Engineering invites you to apply for a tenure-track faculty position to start at the end of August, 2007.

Candidates must have a Ph.D. in Computer Science or a closely related field. Responsibilities of the position include research, teaching, advising, and service to the University. Preference will be given to candidates with research and teaching interest in a computer systems area – databases, operating systems, compilers, or software engineering. Outstanding applicants with other research and teaching interests are encouraged to apply. Applicants at all levels will be considered. Candidates at the associate or full professor levels must have a distinguished record of scholarship and demonstrated record of leadership in the discipline.

The department offers B.S., M.S., and Ph.D. degrees in Computer Science.

The university is located in Laramie, Wyoming (pop. 28,000), 130 miles northwest of Denver. Laramie is a friendly town offering a reasonable cost of living; we have clean air, 300 days of sunshine, no traffic jams, and easy access to wilderness activities in the Rocky Mountains with the 12,000 ft. Snowy Range just 35 miles west of town.

Application materials will include a curriculum vitae, a statement of teaching interests, a statement of research interests, and at least three letters of reference. Application instructions are available on our web site at:

http://www.cs.uwyo.edu.

Professional Opportunities

All applications on file by January 8, 2007, will receive full consideration and the search will continue until the position is filled.

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

Virginia State University
Mathematics & Computer Science Department
Assistant/Associate Professor of Computer Science (Tenure-Track)

Virginia State University (VSU) is seeking applicants for the position of Assistant/Associate Professor of Computer Science (CS) in the Department of Mathematics and Computer Science.

Required Education – earned Doctorate Position Nos.: FO592 / FO582 / FO526

(Computer Science) Salary: Commensurate with education & experience

Duties/Responsibilities: Teach undergraduate courses in CS; assist further development of CS program/curriculum; provide academic advisement; participate in scholarly and research endeavors; solicit support for the CS program from local industries and governmental organizations; engage in grant/proposal writing; serve on departmental, school and university committees; and prepare for ABET accreditation. Applicants also must possess effective communication and interpersonal skills, an excellent command of written and spoken English, and a strong teaching record at the college level with evidence of research and scholarly achievement.

Qualified applicants should submit a Commonwealth of Virginia Application for Employment (DPT Form 10-012) to:

Virginia State University
Office of Human Resources
P.O. Box 9412
Room 101, Virginia Hall
Petersburg, VA 23806

All applications must be received by 5:00 p.m. November 30, 2006. Faxed and e-mailed copies will not be considered. Selected candidate must pass a criminal background check.

To obtain the state application, please click on this link: http://jobs.virginia.gov/emplApplication.html.

VSU is an equal opportunity employer.

Washington State University
School of Electrical Engineering and Computer Science
Bioinformatics/Computational Biology Faculty Position

The School of Electrical Engineering and Computer Science at Washington State University invites applications and nominations for a tenure-track position in bioinformatics/computational biology to begin January 2007 or later, at the level of assistant professor.

This position is part of a university-wide initiative to strengthen its programs in the application of computational approaches to various areas of biological science. Areas of research interest include but are not limited to development of statistical, theoretical, or computational approaches for interpreting biological, health, or medical data; mathematical models or computational techniques for the study of biological systems; or quantitative strategies for integrating diverse types of biological information and developing higher-level understanding of complex systems.

Successful candidates will be expected to develop and maintain a vigorous research program supported by extramural funding, to train graduate students, and to participate in graduate and undergraduate teaching.

Required: Earned doctorate in Computer Science or related field by January 2007 and a record of research accomplishments in bioinformatics or computational biology.

Desired: Ability to communicate effectively with both students and colleagues, record indicating outstanding abilities and potential in research and teaching, and interdisciplinary research experience.

Screening will begin October 17th, 2006. Qualified individuals are encouraged to send a letter of application addressing qualifications, a curriculum vitae, a statement of current and long-term research interests, and a statement of teaching experience and interests. Also arrange for four letters of reference that address research potential, teaching, and communication skills.

Materials should be sent to:
B/CB Search Committee Chair
School of Electrical Engineering and

Computer Science
Washington State University
PO Box 642752
Pullman, WA 99164-2752
or by email (PDF or text documents) to:
robbinsj@eecs.wsu.edu.

Full Notice of Vacancy can be viewed at: http://www.hrs.wsu.edu/employment/FAPvacancies.asp?searchin=Faculty (Search #4344).

EEO/AA/ADA.

Wayne State University
Department of Computer Science
Tenure-Track Faculty Positions

The Department of Computer Science of Wayne State University invites applications for several tenure-track faculty positions at the Assistant/Associate Professor level. We are seeking applicants from all areas of Computer Science with preference for Software Engineering, Bioinformatics, Artificial Intelligence (data mining, computational linguistics, computer gaming) and Theory and Algorithms.

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 should have strong publication and funding records.

The Department of Computer Science offers BS, MS and Ph.D. degrees. Federal and state agencies, as well as industry, support a variety of our research programs. Our graduate enrollment includes seventy Ph.D. students, the majority of whom are supported. The Department's total annual R&D expenditures average between $3-4 million. Faculty actively maintain collaborative relationships with many other centers and departments within the university, including the School of Medicine, which is the largest single-campus medical school in the country.

Wayne State University, located in Detroit, Michigan's Cultural Center, is an urban Carnegie-I public 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.

Submit applications online at: http://jobs.wayne.edu.

Applications should include a letter of intent, a statement of research and teaching interests, a CV, and contact information for at least three references. All applications received prior to January 8, 2007 will receive full consideration. However, applications will be accepted until the positions are filled.

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

Williams College
Department of Computer Science
Assistant Professor

The Department of Computer Science at Williams College invites applications for a tenure-track opening at the Assistant Professor level beginning in fall of 2007. A more senior appointment is possible in exceptional circumstances. New faculty will join seven current members of the department in supporting a thriving undergraduate computer science major.

Candidates should have a commitment to excellence in teaching, an active research program, and should, by September 2007, possess a Ph.D. in computer science or a closely related discipline.

Williams College is a highly selective, coeducational liberal arts college of 2100 students located in the scenic Berkshires of western Massachusetts. The Department of Computer Science offers a congenial working environment with small classes, excellent students, and state-of-the-art facilities. Many opportunities exist for collaboration across disciplines, particularly with other faculty in the sciences. Faculty will normally teach three courses each year (i.e., one or two each semester), along with associated labs.

Applications should include a curriculum vitae, teaching and research statements, and contact information for three references, at least one of whom can evaluate the candidate's promise as a teacher.

Candidates should ask their references to send letters directly to the search committee.

Applications, letters, and questions about the position should be addressed to:
Prof. Andrea Danyluk, Chair
Department of Computer Science
47 Lab Campus Drive
Williams College
Williamstown, MA 01267
or: search@cs.williams.edu.

Applications received by January 1, 2007 will receive full consideration. As an equal opportunity, affirmative action employer,

Williams College strongly encourages women and members of minority groups to apply.

Yale University
Computer Science Department
Faculty Positions

The Yale Computer Science Department intends to hire one or more highly qualified candidates for junior faculty positions beginning in the 2007-2008 academic year, in the areas of databases, networking, operating systems, and/or system security. Applicants are expected to excel in both research and teaching. They will find many opportunities for research collaborations both inside and outside the Computer Science department.

Interdisciplinary work is encouraged, with Yale's world-class faculty in such computationally active fields as biology, chemistry, economics, engineering, geophysics, management, mathematics, medicine, psychology, physics, and statistics. Yale faculty regularly have the opportunity to teach excellent students, both graduate and undergraduate, in relatively small classes.

Candidates must hold a Ph.D. in computer science or related discipline. Applications submitted by January 15, 2006 will be given highest priority. We encourage applications from women and minority scholars.

Yale is an affirmative action/equal opportunity employer. Our home page may be found at www.cs.yale.edu.

Send vitae and have at least three letters of reference sent to:
faculty-recruiting@cs.yale.edu
or to:
Faculty Recruiting Committee
Department of Computer Science
Yale University
P.O. Box 208285
New Haven, CT 06520-8285
Questions may be directed to:
faculty-recruiting@cs.yale.edu.

Professional Opportunities

Professional Opportunities

The University of Connecticut
Dean of Engineering

The University of Connecticut is seeking a dynamic and visionary Dean of Engineering. The University of Connecticut is a Carnegie Foundation Research I university and is ranked the number one public university in New England (*U.S. News & World Report*, America's Best Colleges, 1999 - 2006). The University of Connecticut has enjoyed a renaissance fueled by the State's ongoing $2.3 billion investment in the university infrastructure. The Dean is the chief academic and administrative officer of the School of Engineering and oversees five academic departments, 12 undergraduate and 10 graduate degree programs and a multiplicity of interdisciplinary research centers, with over 100 full-time tenured/tenure-track faculty members (including 40 Fellows of professional societies and over 30 editors of leading journals), an annual operating budget of $20.3 million, and research expenditures of approximately $18 million annually. The UConn School of Engineering occupies five dedicated buildings (and one planned) on the main campus in Storrs, and has just over 1,500 full-time undergraduate and 350 full-time graduate students. Three of our faculty members are members of the National Academy of Engineering; of these, one is also a member of the National Academy of Sciences. The School has established eight Endowed Chairs or Named Professorships throughout the five departments, with funding available for additional positions.

As the chief executive officer of the School of Engineering, the Dean provides academic, intellectual, and administrative leadership to the School, and reports directly to the Provost. Candidates must have an outstanding academic record that clearly warrants appointment as a tenured Full Professor. Candidates must also have significant administrative or managerial experience. Demonstrations of visionary leadership and commitment to diversity are especially desirable.

While the Search Committee will accept applications and nominations until a new Dean is selected, interested individuals are encouraged to submit their materials to the following address by December 1st to assure optimal consideration:

R. William (Bill) Funk
Consultant to the Search Committee and Provost
2100 McKinney Avenue, Suite 1800
Dallas, TX 75201
Email: allegra.feito@kornferry.com
Fax: 214-954-4380

Confidential inquiries concerning the search can also be made to:

William C. Stwalley, Search Committee Chair
Physics Department Head and Board of Trustees Distinguished Professor
Department of Physics, University of Connecticut, Storrs, CT 06269-3046
Email: w.stwalley@uconn.edu
Phone: 860-486-4924, Fax: 860-486-3346

The University of Connecticut and the University of Connecticut School of Engineering are affirmative action/equal opportunity employers.

See also **www.engr.uconn.edu** and **www.uconn.edu**.

University of Connecticut

The University of New Mexico
Great people doing great things

COMPUTER SCIENCE
FACULTY POSITIONS
Requisition JR #6068

DEPARTMENT OF COMPUTER SCIENCE

We invite applications for two tenure-track faculty positions at the Assistant Professor level. An appointment at the Associate level may be considered for exceptionally strong candidates. We seek applicants from across computer science, including systems and networks, theory and algorithms, software design and engineering, graphics and visualization, architecture, and AI and adaptive systems. We are a strongly interdisciplinary department and are particularly interested in applicants pushing the boundaries of computer science with other fields, including but not limited to: bioinformatics and biological computation; embedded systems and sensor networks; scientific computing and simulation; physics and computing; and game theory and economics.

Candidates must have completed a doctorate in CS or a relevant area by August 15, 2007. Complete job posting at: **http://www.cs.unm.edu/jobs**

For best consideration, complete applications must be received December 15, 2006, although we will continue to accept applications until the positions are filled. Each application must include a cover letter, a curriculum vitae, a research statement, a teaching statement, and the names and email addresses of three or more individuals who have been asked to provide letters of reference. Applicants should arrange for reference letters to be sent via hard copy or email directly to the Faculty Search Committee. The cover letter should summarize the applicant's experience, indicate the level of the appointment sought, refer to JR#6068, and must include an original signature.

David Ackley
Chair, Faculty Search Committee
Department of Computer Science, MSC01 1130
1 The University of New Mexico
Albuquerque, NM 87131-1386

Email should be sent to: **faculty_search@cs.unm.edu**

The University of New Mexico is an Equal Opportunity/Affirmative Action
Employer and Educator.

Department Chairs and Lab/Center Directors
Early Notice – Snowbird 2008

MARK the DATES!
July 13-15, 2008