

COMPUTING RESEARCH NEWS

A Publication of the Computing Research Association

November 2007

Vol. 19/No. 5

Cyber-Enabled Discovery and Innovation

By Sirin Tekinay and Jeannette M. Wing, NSF

The National Science Foundation (NSF) recently announced its newest foundation-wide, multidisciplinary initiative, "Cyber-Enabled Discovery and Innovation (CDI)," released as a solicitation <http://www.nsf.gov/pubs/2007/nsf07603/nsf07603.htm>. In a nutshell, CDI is computational thinking for science and engineering. Computational thinking refers to what the CISE community does in research and education on a daily basis: creating and creatively using computational concepts, methods, models, algorithms, and tools.

CDI seeks revolutionary research in all frontiers of science and engineering enabled by computational thinking. CDI accelerates the huge paradigm shift in the way in which science and engineering will be conducted in the future. It offers a means for tomorrow's scientists to be trained in and skilled with using computational methods and tools.

CDI projects are to advance more than one field of science or engineering, where computational thinking—that is, "computing" broadly interpreted—counts as one. For years, our community has been reaching beyond computer and information science and engineering,

forming intellectual partnerships and establishing the role of computational thinking in other fields of science and engineering. The asymmetric role of computational thinking in the success of CDI gives CISE an instrumental role within the Foundation; indeed, CISE serves as the lead directorate in NSF for CDI. We now have an exceptional opportunity to contribute in ways that are truly transformative for all of science and engineering research and education.

CDI Themes

The CDI solicitation calls for ambitious, groundbreaking projects within and across three interrelated thematic areas. These areas are ripe with potential for computer and information scientists and engineers to address bold new challenges.

We are drowning in data! The first theme, *From Data to Knowledge*, focuses on enhancing human cognition and generating new knowledge from a wealth of digital data. CDI seeks to address the fast-growing problem of deriving new knowledge from data sets that are incompatible, heterogeneous, very large, or rapidly flowing. From the use of new computational models to algorithms to tools, scientists and

engineers can confirm the expected and reveal the unexpected.

Our systems are growing in complexity. The second theme, *Understanding Complexity in Natural, Built, and Social Systems*, focuses on deriving fundamental insights on systems comprising multiple interacting elements. Complex systems, from the Internet to atmospheric phenomena, encase human life. This theme promotes the exploration and modeling of natural interactions, connections, complex relations, and interdependencies at all spatio-temporal scales in order to understand, mimic, synthesize, and exploit complex systems.

We work in cyberspace. The third theme, *Building Virtual Organizations*, focuses on enhancing discovery and innovation by bringing people and resources together across institutional, geographical, temporal and cultural boundaries. Virtual Organizations (VOs) are a vehicle for not only producing transformative outcomes, but also transforming the means of obtaining them. Cyber-based platforms that link together cyber-tools, data sets, and new intellectual partnerships can profoundly change the landscape of research and education in all science

and engineering disciplines, including the science of teaching and learning.

CDI welcomes projects that are contained within or cut across these three themes.

CDI Examples

With the disclaimer that the best research and education outcomes are those beyond our imagination, here is a sense of the nature of potential CDI research projects.

Understanding and predicting meso-scale weather, including extremely destructive phenomena such as tornadoes and flash floods, requires high volumes of data that must be assimilated into high-resolution models. The needed input data are diverse, including not only atmospheric parameters such as temperature, pressure and wind speed, but data on land topography, ground cover, locations of bodies of water, and many other variables that can potentially affect local weather. We need networks of smart observational instruments that can adapt their operation modes to changing conditions and alert automated modeling systems to significant

Cyber-Enabled Discovery
Continued on Page 7

Inside CRN

Expanding the Pipeline.....	2	'COMPETES' Act	5
CISE AD Column	3	Starting Salaries for CS Majors	7
Musings from the Chair	3	Professional Opportunities.....	8
Image Task Force.....	4		

NCAR: Advancing Scientific Discovery to Benefit Society

By Marijke Unger

This is another in a series of CRN articles describing the activities of CRA's government and industry laboratory members. Others are posted at: <http://www.cra.org/reports/labs>.

The National Center for Atmospheric Research (NCAR) is a Federally Funded Research and Development Center, primarily sponsored by the National Science Foundation (NSF), and devoted to service, research, and education in atmospheric and related sciences. NCAR's mission is to understand the behavior of the atmosphere and associated physical, biological and social systems, and to support and extend the capabilities of the university community and broader national and international scientific communities by providing access to large-scale facilities, tools, and expertise. NCAR's activities as an integrator, innovator and community

builder contribute to the development of predictive Earth system science that can help sustain Earth's habitability, improve environmental quality, safeguard human health, reduce the impacts of natural disasters, and increase economic productivity.

NCAR traces its roots back to 1956, when the National Academy of Sciences convened a committee of distinguished scientists to investigate the state of meteorology. Noting the size and complexity of atmospheric problems and the inadequate resources for solving them, the committee recommended an exponential increase in support for basic research. Coupled with new funding, the committee planned to establish a national facility for atmospheric research to be operated by a consortium of universities with support from NSF. Four years later, the National Center for Atmospheric

Research opened its doors in Boulder, Colorado, as an NSF program managed by the nonprofit University Corporation for Atmospheric Research (UCAR).

Computational and Information Systems Laboratory

NCAR has a rich history in supercomputing. It was home to the first commercially available Cray 1, and has kept pace not only with computing technology, but also with the rapidly growing networking and data storage needs of the atmospheric sciences community. Making this happen is NCAR's Computational and Information Systems Laboratory (CISL), which provides a broad range of resources and services, from top-end supercomputers and applied

NCAR
Continued on Page 6

NONPROFIT ORG.
U.S. POSTAGE
PAID
WASHINGTON, DC
PERMIT NO. 993

CRA
1100 Seventeenth Street, NW
Suite 507
Washington, DC 20036-4632

Computing Research Association

Board Officers

Daniel A. Reed
Chair
University of North Carolina
at Chapel Hill

Lori Clarke
Vice Chair
University of Massachusetts

Carla Ellis
Secretary
Duke University

Philip Bernstein
Treasurer
Microsoft Research

Board Members

Annie I. Antón
North Carolina State University

William Aspray
Indiana University

Andrew A. Chien
Intel Corporation

Anne Condon
University of British Columbia

George V. Cybenko
Dartmouth College

Richard A. DeMillo
Georgia Institute of Technology

Marie desJardins
University of Maryland,
Baltimore County

Eric Grimson
Massachusetts Institute of
Technology

Mary Jean Harrold
Georgia Institute of Technology

Laura M. Haas
IBM Almaden Research Center

Michael Jones
Microsoft Research

Peter Lee
Carnegie Mellon University

J Strother Moore
University of Texas at Austin

David Notkin
University of Washington

Martha E. Pollack
University of Michigan

Jennifer Rexford
Princeton University

Robert Schnabel
Indiana University

Fred B. Schneider
Cornell University

Marc Snir
University of Illinois
at Urbana-Champaign

Eugene Spafford
Purdue University

Robert F. Sproull
Sun Microsystems Laboratories

David Tennenhouse
New Venture Partners

Frank Tompa
University of Waterloo

Moshe Vardi
Rice University

Jeffrey Vitter
Purdue University

Benjamin Wah
University of Illinois
at Urbana-Champaign

Richard Waters
Mitsubishi Electric
Research Labs

Bryant York
Portland State University

Executive Director

Andrew Bernat

CRN Editor

Jean Smith

Affiliate Societies



CACS/AIC

siam.

IEEE
COMPUTER
SOCIETY

USENIX

Expanding the Pipeline

Networking Networking Women (N²Women)

By Tracy Camp and Wendi Heinzelman

As we know, women are a minority in the computer science community. Several organizations, such as CRA-W, ACM-W, the Anita Borg Institute, and the National Center for Women in Technology, have diverse efforts underway to increase the number of women in all fields of computer science. In addition to these field-wide efforts, we should assist women in finding female role models, female mentors, and/or female peers within their particular research discipline in order to reduce the isolation that many women researchers feel. This can best be achieved through communities that connect women in the same discipline, and several recent efforts have been initiated to stimulate such discipline-specific communities. For example, CRA-W and CDC have, with NSF support, sponsored workshops targeted at women and under-represented minorities in computer architecture (July 2006) and in programming languages (May 2007).

Networking Networking Women (N²Women) is a new discipline-specific community for researchers in the communications and networking research fields. The main goal of N²Women is to foster connections among the under-represented women in computer networking and related research fields. N²Women allows women to connect with other women who share the same research interests, attend the same conferences, face the same career hurdles, and experience the same obstacles. By the very nature of interactions among such a group of peers, there is naturally mentoring and imparting of advice, even if informally. Furthermore, such a group inherently provides the structure for mentoring and encouraging the younger members of the community (e.g., graduate students and junior faculty) in their career pursuits. These interactions ultimately will increase the numbers of women in the communications and networking research areas; and, in some ways more importantly, they will increase the satisfaction that women feel with their careers.

N²Women began in May 2006. Our first meeting was held at the ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc) in Florence, Italy, and was sponsored by ACM SIGMOBILE. Since May 2006, eight other N²Women meetings have been organized at a number of prestigious ACM and

IEEE research conferences: IEEE SECON 2006, ACM MobiCom 2006, Grace Hopper Celebration of Women in Computing 2006, ACM SenSys 2006, IEEE Infocom 2007, ACM/USENIX MobiSys 2007, IEEE SECON 2007, and ACM MobiCom/Hoc 2007. N²Women events have been (or are being) organized by several different members of the N²Women community, including the authors, Laura Galluccio (University of Catania), Niki Trigoni (University of London), Yingying Chen (Rutgers, the State University of NJ), Christina Nita-Rotaru (Purdue University), Cecilia Mascolo (University College of London), Qi Han (Colorado School of Mines), and Wenye Wang (North Carolina State University).

Some N²Women meetings have been informal, where attendees use the venue to get to know each other in an intimate environment or discuss a specific topic of interest (e.g., integrating family life into one's career). Other meetings have included an invited presentation. For example, Dr. Vida Ilderem, Vice President of Motorola's Embedded Systems Research Lab, spoke at the IEEE SECON 2007 N²Women meeting; and Dr. Margaret Martonosi, Professor and Associate Dean for Academic Affairs at Princeton University, spoke at the ACM/USENIX MobiSys 2007 N²Women meeting. Both speakers provided valuable advice that they had learned from their own careers on topics such as finding a mentor, career planning, and the value of networking.

N²Women has grown to more than 140 members from around the world. The members are mainly female graduate students, female faculty at research universities, or female employees at research labs. The N²Women community has an email list, N2Women@acm.org, to assist in our networking goals. This enables our members to share information about events or opportunities relevant to the group members, such as information about special workshops or funding opportunities targeted at women in communications and networking.

N²Women has received generous support from several sponsors, including Microsoft, Motorola, ACM SIGMOBILE, and the IEEE Communications Society. This financial support has enabled us to hold most of our meetings free of charge to attendees, which has the benefit

of enabling many financially strapped students to attend and benefit from the networking and mentoring opportunities provided by these meetings. Our sponsors have been supportive of our mission, and we are grateful for their contributions. In addition to our corporate and ACM/IEEE sponsors, the main organizers of many of the conferences where we have held N²Women meetings have been extremely supportive, providing valuable assistance in the organization of these meetings and helping us secure financial support for them. In fact, Fred Bauer, Director of IEEE Communications Meetings and Conferences, first approached us about organizing a meeting at IEEE INFOCOM 2007. We thank all of these researchers for their support of our N²Women efforts.

We are currently developing a survey to poll the N²Women members on what topics and/or activities they would like to have at future N²Women meetings. We are also planning an N²Women Workshop, as we have found that the short meetings we have at conferences (typically a breakfast before the conference program begins) do not provide enough time to network and discuss not only the challenges that women in computer science research face, but also potential ways that we, as a community, can address these issues. As part of the workshop, we plan to include opportunities for the N²Women members to present their research to other members of the community for feedback, and to provide formal programs on topics of interest, such as obtaining funding, leadership skills, conflict management, and mentoring. We are actively searching for sponsors to support the N²Women Workshop as well as future N²Women meetings; please contact the authors for a list of benefits that financial sponsors receive.

We have found the organization of a discipline-specific group to be relatively easy, especially when compared to the benefits received. We encourage other researchers to organize similar communities, and we are happy to provide any guidance needed. In the case of N²Women, we organized an initial meeting at MobiHoc 2006 and then polled the women who attended to see if there was interest in such a group. The response was overwhelmingly positive. We, therefore, contacted

Networking Networking Women
Continued on Page 6

Message from the CISE AD Thinking About Computing

By Jeannette M. Wing, Assistant Director of NSF for CISE

Greetings! I have been the Assistant Director for CISE for three months. It has been eye opening!

I begin by sharing with you a set of questions I have been posing to and for our community. I call these “Deep Questions” because they are the kind of far-reaching questions that drive our own day-to-day research and that can inspire the young to enter our discipline. Here they are:

1. P = NP?
2. What is computable?
3. What is intelligence?
4. What is information?
5. (How) can we build complex systems simply?

The first needs no explanation, neither in what it means nor in what its answer would imply for our field.

In answering “What is computable?” we must consider the underlying machine, abstract or physical, that is the computer. Consider the Internet as a computer. Now ask “What is computable?” Consider a molecular computer, a DNA computer, or even a quantum computer. If those kinds of computers are not mind-bending enough for you, consider a human and a machine working together as a single computer to solve problems that neither can solve alone. Now ask “What is computable?”

The founders of artificial intelligence challenged us with the third question in the 1950s. As our

understanding of human speech, vision, language, and motor skills has grown, and as we have made tremendous technical advances in computer science, neuroscience, cognitive science, and the behavioral sciences, the landscape has dramatically changed. We can now probe more deeply and more broadly, than when the question was originally posed, in our quest to understand intelligence from the neuron to the brain, from a person to a population.

Nature has her own way of encoding information and it is not as simplistic as using 0’s and 1’s. The genetic code is one obvious example. More sweepingly, by interpreting a DNA strand, a cell, or an organism as a reactive system that processes inputs from its environment and produces outputs that affect its environment, it is no longer metaphorical when we say biology is an information science. Even in computing, we have a chain of representations from bits to data to information to knowledge. And with quantum computing, it’s not bits, but qubits.

Our ingenuity creates computer, communication, and information systems that enhance our daily lives. These systems are complex. Their complexity gives us the richness in functionality that we enjoy today, with time and space performance that spoil us. Their complexity, however, also makes it difficult for us to analyze,

model, or predict system behavior, let alone respond to emergent behavior of multiple interacting systems. As complex as these systems are, it is both wonderfully and stunningly amazing they work! Can we build systems with simple and elegant designs that are easy to understand, modify, and evolve, yet still provide the functionality of systems that we take for granted today and dream of for tomorrow? More profoundly, is there a complexity theory for our real-world systems as there is for the algorithms we invent?

Engineering Too

CISE is more than science, it is engineering too. We design, build, analyze, and manage hardware and software systems. Like other engineering disciplines our systems are constrained by the physical world: they interact with Mother Nature, the human user, and, of timely importance, the attacker. These environments are unpredictable, unforgiving, and uncontrollable. Unlike other engineering disciplines, our systems are unconstrained in the virtual world: through the unique and inherent power of software our systems are limited only by our own imagination. Our avatars defy gravity, tap into infinite resources, and never die.

I hope you join me in pondering these scientific questions and in

marveling at our engineering prowess. I welcome you to share your own Deep Questions and visions for computing with all of us.

CISE Updates and Thanks

I am pleased to announce that Richard Karp, UC Berkeley, is the new CISE Advisory Committee Chair, and that Ty Znati, University of Pittsburgh, is the new Computer and Network Systems Division Director.

I am excited to announce the new foundation-wide Cyber-enabled Discovery and Innovation program (see front page article). For FY08, CISE is sponsoring other initiatives, including Expeditions in Computing, all of which I mentioned in my October Dear Colleague Letter, which is posted on the CISE website (<http://www.cise.nsf.gov>).

I thank Peter Freeman for his past stewardship of CISE and for passing on to me a well-managed directorate. I thank Al Aho for his service as CISE AC Chair and Suzi Iacono for her service as Acting CNS DD. I would like to express my sincerest appreciation to Dr. Deborah Crawford, Deputy Assistant Director for CISE, who served as Acting DD for CISE for six months before I joined NSF.

I am eager to continue active engagement with all of you as I serve the community in my new role. ■

Musings from the Chair Mind-to-Mind: Broadening Access

By Dan Reed, CRA Board Chair



My friend, Ray Ozzie, the creator of Lotus Notes and now Microsoft’s chief architect, relates a wonderful story about his undergraduate experience, when

he worked as part of the Plato¹ project at the University of Illinois. Plato, you may recall, was an early computer-aided instruction (CAI) system that included touch-sensitive plasma displays (a precursor to today’s plasma televisions), computer-synthesized music, a chat system, message boards and email. A thriving electronic community grew up around Plato, which shaped the professional lives of many—more on that shortly.

As Ray tells the Plato story, he was partnered on a software development project with a Plato project staff member he’d never met. They kept different hours (Ray was an undergraduate with irregular hours, after all), but they interacted via Plato’s chat system. Unlike most of today’s chat systems, Plato didn’t

buffer lines until a carriage return, but transmitted every character as it was typed.

Normally, the idiosyncrasies of a chat system would not have been an issue, but Ray’s software development partner was a terrible typist, “hunt and peck” with lots of spelling errors, backspaces, and shortened sentences. Despite the limited typing skills of Ray’s partner, he wrote some of the tightest and best-structured code Ray had ever seen. It was what any of us who has written software would call elegant, even beautiful. Ray was impressed.

Still, Ray struggled to reconcile the conundrum—amazingly poor typist but brilliant software architect. Later, Ray met the developer, stunned to see that he was quadriplegic and typed with a mouth tube. It was a transforming experience, the realization that computing was a powerful social tool that connects people mind-to-mind and enriches and empowers people to achieve their full potential.² It is a lesson we would all do well to remember.

Ray, like others who worked on Plato, has often said that it was

the defining experience of his life. As he put it, it was “... a peek at what the Internet would ultimately become. It was a microcosm; an online community in an era when there weren’t online communities.” It both showed him what computing could do and engaged him with collaborators whose shared mission was to accomplish something important, something astounding and transformative. This is the power of computing and what drew each of us to it, curious and excited.

I believe we are at a computing inflection point. Today, computing is the enabling technology of a knowledge world, from our information infrastructure to healthcare, finance, national defense and even entertainment. Yet we seem to be struggling to articulate a vision of the computing future, one where new and transformative ideas can flourish and engage a new generation of researchers. It’s time to dream big dreams — again.

As a transformative experience, Plato was not unique. Many, if not all of us, can tell stories of major projects that shaped a generation

of researchers and created the foundations of modern computing. As we think about the Computing Community Consortium (CCC)’s call for visions³ and the importance of engaging undergraduates in research and educational experiences that shape their lives, remember Plato and projects like it. Let’s invent the future.

Notes:

¹University of Illinois Plato system, http://en.wikipedia.org/wiki/PLATO_System

²“Speaking Mind to Mind,” *The New York Times*, December 1, 2002, <http://query.nytimes.com/gst/fullpage.html?res=9A01E3D91438F932A35751C1A9649C8B63>

³ Computing Community Consortium (CCC), <http://www.cra.org/ccc/>

Dan Reed, CRA’s Board Chair, is the Chancellor’s Eminent Professor and Senior Advisor for Strategy and Innovation at the University of North Carolina at Chapel Hill. He also directs the interdisciplinary Renaissance Computing Institute (RENCI). Contact him at reed@renci.org. ■

Perhaps the Greatest Grand Challenge: Improving the Image of Computing

By Jill Ross

Distinguished leaders from ACM, CRA, IEEE-CS, USENIX, SIAM, AAAI, NCWIT, and from Microsoft, Intel and HP, hired me to conceive and execute a national campaign to improve the public image of computing. I need your help and engagement as a vital part of this endeavor.

Talented young people are turned off by computing's image.

Between 2000 and 2005, interest in computer science as a major among incoming freshmen fell 70 percent as "image" quickly became a primary concern across academic institutions, corporations, computing associations, and government agencies.¹

At Princeton in 2005, Maria Klawe described the effects of image saying:

*"The public image of computing discourages many talented young people, especially women and minorities, from choosing to study computer science. For at least the last decade the computing profession has been widely viewed by high school students, parents, teachers, and counselors as being for individuals who have been obsessed with computers since puberty and want to program sixteen hours a day. Moreover those who choose to study computer science are often stereotyped as lacking social skills and other interests, and as individuals who work and study in an isolated environment."*²

Since then, the situation has improved. A recent report from the National Association of Colleges and Employers indicates that new computer science graduates are now among the highest paid of any major with an average offer of \$53,051—a 4.5 percent increase over 2006.³ And there has been a significant shift in categories of jobs in IT with 25.4 percent fewer programmers, yet 25 percent more software engineers and over 70 percent more network systems and data communications analysts.⁴ One 2006 ACM study finds employment in IT is actually 17 percent higher than at the height of the dot-com boom, even in the face of increased offshoring. "Everyone was worried about the offshoring bogeyman," says Moshe Vardi, an author of the ACM study. "But the big whoosh of jobs to India never happened."⁵ In fact, of the 28 fastest growing occupations, the National Bureau of Labor Statistics reports that seven are in computing with a predicted average growth rate of 48.1 percent by 2014.⁶

With such a strong job market you would expect increases in computing enrollments, but according to the annual HERI report on incoming freshmen that has not happened.⁷ Broad misconceptions prevail in the minds of people across America and interest continues to decline.

To dig deeper into these image issues during my first months on the job, I have interviewed more than a

hundred people, attended conferences, read a variety of articles and gathered recent research. One study involving about 800 high school calculus and pre-calculus students showed 80 percent of students had "no idea" what computer scientists actually do.⁸ Another study of undergraduate women with high SAT scores found the top reasons for not choosing CS/CE are "I'm just not interested" and "I don't think I'll like the work."⁹

People With the Aptitude for Computing Lack the Interest To Pursue It

Let's dig deeper into the root cause of this lack of interest. My own investigations turned up four distinct viewpoints about computing: those of the general public, the American teen, the CS student and the computing professional. I highlight these as origination points to tap into as we help people connect the dots from where they are today in their perceptions and where we want them to be—pursuing computing as a viable, exciting and positive choice for their future.

General Public's Image of Computing

- Computing = programming.
- Geeks and nerds sit in dark rooms in front of screens programming all day.
- To compute means to "use" computers, cell phones, iPods and other gadgets.
- There are no jobs due to offshoring and layoffs.

Teen's Image of Computing

- Use is important, especially connecting with friends in real time. Of all American youth ages 12-17 (over 12 million of them), 55 percent use an online social networking site.¹⁰
- Computing is tightly integrated into daily life, and since most are self-taught they think they already know everything about computing (the reality is they only know how to use technology).⁷
- Increasingly being asked by adults how to use technology and recommend what's cool.
- Can be idealistic and eager to bring value into the world.
- Some just want to make money.

Students Today, the Undergraduates Image of Computing

The following findings from a recent study at Georgia Tech on retaining students in computer science shed light on why students stay in the major or leave.¹¹

- Stayers are much more likely to enter CS/CE if positively influenced by a high school teacher.
- Over 91 percent of Stayers said they enjoy solving problems as opposed to 66 percent of Leavers.

- Among the top reasons for entering the major, salary potential only places third behind: 'likes to solve problems' and 'good at math and science.'
- Students list the top three reasons for leaving CS are: unsatisfactory quality of human interaction; too much rigor and workload; and lack of relevance to the real world.

Computing Professionals, Image of Computing

- Satisfied with their individual role as innovators and their positive impact on society.
- Recognize the need to give computing a *more human and less abstract orientation*.¹²
- Intend to preserve the rigor of computer science as a discipline.
- Some encourage expanding the boundaries of computing through interdisciplinary collaboration.
- Many are concerned about continued under-representation of women and minorities in computing.

What Are We Going To Do?

These varying views of computing point out the work ahead of us and the real opportunity for change.

The Next Steps: The National Campaign "iCompute"

I am engaging a visionary youth marketing firm that has the pulse of Gen Y and knows how to make social change; I am also creating a partner architecture to support a national image campaign. Together, we will ignite a new conversation about computing and creativity and deliver it to youth through social media—in a way they will consume, in a tone that is attractive, and with a message that is relevant to them. This "iCompute" Campaign has a four-phased approach:

1. *Call-to-Action*: Engage the computing community. Aggregate resources. Align on a new image.

2. *Summit on the Future*, a guide for teens as a future vision to encourage enrollments.
3. *Conduct a tour* with teen journalists engaging their peers directly. Capture their reactions. Stir debate.
4. *Public outreach* through a key set of those who influence teens, such as journalists and bloggers. As we undertake Phase 1, I ask for your help as a member of the computing community.

Take the Challenge

To create a consistent way to speak to the public, I need your views in your voice. Please take time to thoughtfully answer 10 strategic questions through this on-line tool. I will aggregate answers into a set of talking points for use by the research community. To take the challenge, go to: www.imageofcomputing.pbwiki.com.

Summary

Computing has fueled much of our economic wealth and innovation over the last decades, and it will provide the lion's share of new job growth over the coming decades. Information technology is a fundamental tool of U.S. business and of national security; it is changing the economic and social foundations of our society. The key role of computing makes it essential that we engage our youth and attract creative talent. As computer scientists, we need to make sure that students and the broader general public have a foundational understanding of our discipline and how they might participate as future researchers, innovators and professionals. Please join this important cause.

(End Notes — See p. 22).

Jill Ross is Director, Image of Computing, at the University of Colorado at Boulder (Contact: e-mail: jill.ross@colorado.edu; tel: 303-898-9048). ■

Computing Research Association Seeks Deputy Director

Position Description

Reporting to the Executive Director, the Deputy Director serves as CRAs chief operating officer, leading a management team that includes the Director of Policy, the Director of Programs and the Director of Finance and Operations. The Deputy Director is responsible for the day-to-day management of CRA and the overall development and implementation of its projects and programs. In addition, the Deputy Director assists in the development and preparation of the annual work plan and budget. In the Director's absence, the Deputy Director serves as the acting Director.

The ideal candidate is an experienced professional with a demonstrated record of successful leadership and significant experience building teams and managing multiple, concurrent projects. He or she will possess excellent interpersonal and communication skills, with a demonstrated ability to negotiate, influence and collaborate with both internal and external stakeholders.

Additional details about the position and how to apply are posted on the CRA website at: <http://www.cra.org>.

CRA is an Equal Opportunity Employer. Women and minority applicants are especially encouraged to apply.

While Appropriations Languish, Congress Passes Landmark Science Authorization

'COMPETES' Act Will Bolster Science Education, Research Programs

By Peter Harsha

Despite a lack of progress in August and September towards resolving the veto threat causing a logjam in the FY 2008 federal appropriations process,¹ many in the science advocacy community did have reason to celebrate. In early August, the President signed into law a landmark science and education authorization bill aimed at bolstering U.S. innovation and preserving American competitiveness.

The 288-page bill, the "America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act" (H.R. 2272), represents a compilation of virtually every major piece of innovation- or competitiveness-related legislation introduced in either the House or the Senate over the past two years. The overarching goal of the bill was to enact the recommendations of the National Academies' December 2005 study, *Rising Above the Gathering Storm*, which raised red flags all over Washington when it warned Congress that unless decisive action was taken to bolster U.S. science, technology, engineering and mathematics education and research support, the United States was in great danger of losing its competitive edge.

The bill (now Public Law 110-69) takes two basic routes to fostering the innovation the country will require to stay competitive in an increasingly global world. It addresses federal support for research—both authorizing large amounts of new funding for three key science agencies (National Science Foundation, NIST, and the Department of Energy's Office of Science), setting a target to double those agencies' budgets over seven years, and by creating a new high-risk research agency at the Department of Energy (called the Advanced Research Projects Agency - Energy, or ARPA-E, in a nod to the DARPA-like character Congress hopes the agency will adopt). And the bill addresses a diversity of Science, Technology, Engineering and Mathematics (STEM) Education efforts, authorizing \$43 billion over the next three years to bolster federal STEM education programs, ranging from K-12 teacher programs, to new opportunities for undergraduate and graduate STEM students and efforts to improve the participation of under-represented groups in the STEM fields.

In addition, the bill contains two particularly noteworthy provisions of interest to the computing community.

The first is the inclusion in H.R. 2272 of the High-Performance Computing Research and Development Act. The HPC R&D act has been proposed in various forms in every session of Congress since the 106th (the current Congress is the 110th) and has never gained the

full approval of the Congress—almost always for reasons unrelated to the bill. The bill has, in sessions past, been approved by the House, only to languish in the Senate due to jurisdictional fights over other bills; been approved by the House Science Committee, only to run afoul of budget disputes with the GOP Leadership; and been held hostage over fights about NASA between the House and Senate. In fact, until the approval of the conference report in late July, it was assumed that this version of the HPC R&D Act might meet a similar fate, as word escaped that some of the Senate conferees thought its inclusion might cause some jurisdictional friction between two Senate committees (Energy and Commerce, that both claim HPC jurisdiction). But those problems were resolved, and the bill includes a version of the bill that was passed overwhelmingly by the House early this session, plus an extra section that authorizes efforts in "Advanced Information and Communications Technology Research" at NSF, including research on:

- affordable broadband access, including wireless technologies;
- network security and reliability;
- communications interoperability;
- networking protocols and architectures, including resilience to outages or attacks;
- trusted software;
- privacy;
- nanoelectronics for communications applications;
- low-power communications electronics;
- implementation of equitable access to national advanced fiber optic research and educational networks in noncontiguous States; and
- other areas the Director [of NSF] finds appropriate.

The provision also allows NSF to fund multiyear, multidisciplinary "Centers for Communications Research" to "generate innovative approaches to problems in information and communications technology research."

Otherwise, the HPC R&D Act remained essentially unchanged from the House version, which included two particular provisions worth noting: it requires the White House Office of Science and Technology Policy to develop and maintain a research, development, and deployment roadmap for the provision of federal high-performance computing systems; and there is now an explicit requirement that the President's advisory committee for IT (now the President's Council of Advisors for Science and Technology (or PCAST)) review not only the goals of the federal Networking and

Information Technology Research and Development program, but the funding levels as well, and report the results of that review to Congress every two years.

The second noteworthy provision in the COMPETES bill is one that was originally included in the House-passed NSF Authorization Act of 2007 (H.R. 1867), that should help clarify NSF's role in supporting efforts that seek to encourage the participation of women and under-represented groups in computing, science, technology, engineering and mathematics. As CRA has noted previously,² this is a response to long-standing concerns from CRA and other members of the computing and science communities about NSF's general policy of only supporting "novel approaches" (rather than sustained approaches) to increasing participation in STEM fields. As a result of NSF's policy, many successful efforts have had to completely rework their programs so as to appear novel enough to qualify for renewed funding from NSF—an outcome that, to many in the community, represented a serious waste of effort and inefficient use of time and funding. The House Science and Technology Committee agreed, and included language in the NSF Authorization that addressed the issue by allowing the NSF Director to review such programs one year before their grants expire and issue extensions of up to three years, without re-competition, to those efforts that appear to be successful at meeting their stated goals. The committee also emphasized that it believes this sort of effort—maintaining the strength and vitality of the U.S. science and engineering workforce—is appropriately part of the agency's mission. That language was ultimately approved as part of the NSF Authorization and was included without change in the COMPETES Act.

While passage of the COMPETES Act has given many in the science advocacy reason to celebrate, it is certainly not the end of innovation efforts in the Congress or the Administration. Though this bill sets significant funding targets for NSF, NIST and DOE Office of Science, it does not actually appropriate any funding itself, so the focus continues to be on House and Senate appropriators as they wind their way through the appropriations process later this year. There will also be further efforts to address some of the pieces of the various innovation agendas that are not represented in H.R. 2272—like a permanent extension of the R&D tax credit.

But the bill does represent a big victory for the science community—one that was a long time coming for many who have been working these issues around Washington over the

better part of the last decade. As we wrote on the Computing Research Policy Blog on August 8, 2007: "We commend the President and the Congress for having the vision and the commitment to push ahead on these issues, even when it didn't seem as politically popular as it is today. And we commend the members of the science community for speaking up on these issues, serving on the advisory committees, and participating in the grassroots efforts to make Congress aware of the issues. Now, just make sure you go out and do world-leading science—take risks, think audaciously . . . demonstrate as you've done so well in the past why America needs to continue to be an incubator for invention, discovery, and innovation."

For the latest on the FY 2008 Appropriations process and its effect on computing research funding, see the Computing Research Policy Blog at <http://cra.org/blog>.

End Notes

1. For more on the root of the logjam, see "Key Appropriations, Authorization on Track; But Veto Threat Could Put Science Funding in Doubt" in the September 2007 edition of *Computing Research News*.
2. See <http://www.cra.org/govaffairs/blog/archives/000582.html>. ■

CRA Board Member Elections 2008

Nominations Due:
November 30, 2007

Details:
<http://www.cra.org/temp/nominations.html>

CRA Service Awards 2008

Distinguished Service Award

A. Nico Habermann Award

Nominations Due:
February 1, 2008

Details: <http://www.cra.org>

**NCAR
from Page 1**

mathematics and modeling, to advanced computer science research.

This year, CISL replaced its IBM POWER4 supercomputer with an IBM POWER5+ system that has more than doubled the total computing capacity at NCAR. And, with the mid-2008 arrival of an IBM POWER6 system—named ‘bluefire’—NCAR anticipates achieving a computation rate exceeding 60 teraflops (a teraflops is one trillion floating point operations per second). Each of these upgrades provides the community with world-class capabilities to meet advanced scientific computational needs. Once installed, bluefire will be the most powerful computer dedicated to model development for the Earth sciences.

Bluefire will be used to develop, tune, and validate the next generation of climate and weather models, and it will run a significant portion of NCAR’s simulations for a key international state-of-the-climate scientific document, the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

NCAR is a full participating member of the NSF-sponsored TeraGrid, a partnership of people, resources and services that enables discovery in U.S. science and engineering. Through coordinated policy, grid software, and high-performance network connections, the TeraGrid integrates a distributed set of high-capability computational, data-management and visualization resources to make research more productive. With Science Gateway collaborations and education programs, the TeraGrid also connects and broadens scientific communities.

CISL deployed NCAR’s computational TeraGrid node in July, allowing researchers with NSF computing grants access to 4.5 million processor-hours of BlueGene/L computing annually. The system, named ‘frost,’ requires a fraction of the power and space of most production systems and is operated in partnership with the University of Colorado. With frost, the TeraGrid boasts more than 250 teraflops of

computing capacity, and more than 30 petabytes (30 quadrillion bytes) of online and archival data storage, with rapid access and retrieval over high-performance networks.

Enabling Science

In addition to hardware, networking and infrastructure, NCAR is also a leader in Earth system model development, simulations and visualization.

The Weather Research and Forecasting (WRF) model, one of several NCAR collaborative partnerships, is a next-generation weather prediction system designed to serve both operational forecasting and atmospheric research needs. NCAR scientists, supporting the U.S. Department of Energy and U.S. Department of Homeland Security, are using real-time data from an advanced version of WRF to simulate the most destructive features of hurricanes. This research will enhance model projections of potential storm damage and improve warnings of floods, power outages, and road blockages. The WRF model generated real-time predictions of the paths and intensities of all 2007 named storms. WRF partners include NOAA, the U.S. Navy, the U.S. Air Force, the Federal Aviation Administration, and the University of Oklahoma. The Advanced Research WRF (ARW) is currently the most widely used model of its kind, with more than 4,900 users in nearly 80 countries.

The Community Climate System Model (CCSM) is one of the world’s leading global climate models. It provides state-of-the-art simulations of the Earth’s past, present, and future climate states. Using CCSM, scientists can anticipate the impact of such events as continued carbon dioxide emissions or volcanic eruptions on the global climate. As the model becomes more refined and computing capability increases, researchers will be able to determine the probability of certain climate or weather events on a much tighter regional scale. CCSM is also an important tool for paleoclimatologists seeking insights into ice ages and other major climate events in the past. CCSM played a critical role in the IPCC’s Fourth Assessment Report, and many NCAR scientists were

involved in authoring the report.

The Earth System Grid (ESG), a collaborative project funded by the U.S. Department of Energy (DOE), is one of the first services that NCAR offered the TeraGrid system. It gives TeraGrid users access to vast repositories of climate model data and to data management tools. The ESG project recently received funding through a DOE Scientific Discovery through Advanced Computing proposal. The next phase of ESG will expand the project to a global scale, include computation facilities, and add NOAA as a collaborating partner.

NCAR also provides cutting-edge tools that allow the scientific community improved access to valuable data resources. For instance, the Community Data Portal (CDP)—NCAR’s institutional repository for data, models, frameworks, and IPCC analyses—supports remote data upload and management for field projects. The Earth System Modeling Framework (ESMF) is a unique national effort, supported by a large number of institutions, which will enable unified modeling activities for the next generation of models under development. ESMF provides a platform that reduces the difficulties of working in separate systems, so that independent components of different models of the Earth system can be linked into a cohesive whole. For example, researchers can study the ocean, atmosphere, and land surfaces concurrently, ultimately generating a drastically improved whole Earth system view. In some ways, ESMF’s greatest contribution has been sociological: it changes the way modelers think about model development. ESMF receives funding from NASA, NOAA, and the U.S. Department of Defense.

VAPOR, the Visualization and Analysis Platform for Ocean, Atmosphere, and Solar Researchers, is a tool developed by CISL in partnership with U.C. Davis and Ohio State University. Much like Google Earth, it gives researchers remote access to high-resolution images, and allows desktop or laptop computers to handle very large data sets without the limitations of large data transfers. VAPOR generates advanced interactive 3D visualizations,

tightly coupled with quantitative data analysis, and runs on most UNIX and Windows systems equipped with modern 3D graphics cards.

Education and Outreach

Cultivating a world-class, broadly inclusive science and engineering workforce is a strong focus at NCAR. To nurture up-and-coming scientific talent, several of NCAR’s labs run advanced studies and internship programs. CISL’s Summer Internships in Parallel Computational Science (SIParCS) program targets students with backgrounds in computational science, applied mathematics, computer science, or the computational geosciences. This prototype program provides opportunities for exceptional students to gain practical experience with a wide variety of parallel computational science problems by working with the high-performance computing systems and applications related to NCAR’s Earth system science mission. Ultimately, SIParCS seeks to address future shortages of trained scientists and engineers capable of using and maintaining these high-end systems to achieve the goals of 21st century computational geoscience research.

Looking Ahead

NCAR’s scientific computing resources continue to pave the way for scientific discovery. And while the cutting-edge science is significant in its own right, much of NCAR’s work has a direct societal impact. Understanding our Earth system and how human activities affect its balance are crucial in dealing with issues such as climate change. And understanding the degree and nature of the changes we face is essential for policy decisions, adaptation strategies, and general preparedness. NCAR is uniquely positioned to combine its significant computational and information resources with the intellectual power of its user community to solve some of society’s most pressing challenges.

Marijke Unger is an External Relations Specialist at NCAR/CISL. ■

**Networking Networking Women
from Page 2**

two technical organizations for our research community, ACM SIGMOBILE and the IEEE Communications Society, and asked if they would support our mission. Again, the response was overwhelmingly positive, and led to our email service being provided by ACM and our website being provided by IEEE. Once an email list and a website exist for a new community, it is simply a matter of advertising the group to those who would benefit from joining (e.g., email your female

research colleagues and relevant research lists). Once the group has been established, members of the group (not just the group organizers!) organize meetings at the conferences that they attend. These meetings, typically breakfast or lunch get-togethers, are fairly easy to organize; we have created a document called “10 Simple Steps to Organize an N²Women Meeting” that we are happy to share with those interested.

For more details about N²Women, to get involved with N²Women, or to get advice about beginning a new discipline-specific community similar to N²Women, please email N2Women-Info@acm.org

or visit our website, <http://www.comsoc.org/n2women/>.

Tracy Camp joined the Colorado School of Mines in 1998 and is currently a Professor of Computer Science in the Department of Mathematical and

Computer Sciences. Wendi Heinzelman is an Associate Professor of Electrical and Computer Engineering and of Computer Science at the University of Rochester, where she has been a faculty member since 2001. ■

CRA-W Grad Cohort Workshop

Invitation to Participate

March 13-14, 2008 - Seattle WA

See: <http://www.cra.org/craw/gradcohort>
Application deadline: December 10, 2007

Starting Salary Offers to CS Majors

By Jay Vegso

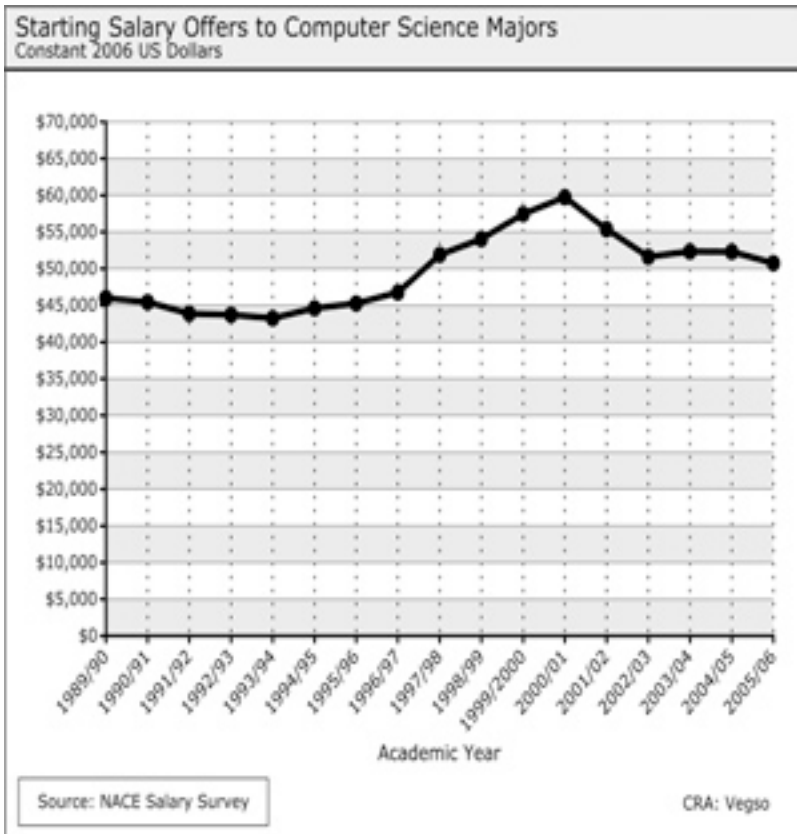
There are many sources for salaries in the information technology sector. Most focus on specific occupations or types of industry. The National Association of Colleges and Employers reports starting salary offers to new college graduates at the bachelor's degree level. The survey collects data from college and university career services offices.

The graph presents the starting salaries offered to computer science majors, adjusted for inflation to 2006 dollars. The effect of the "dot-com" boom and bust of the late 1990s and early 2000s is evident. Three other items are worth mentioning. The first is that starting salary offers since the end of the IT bubble have been about 15 percent higher than those before it.

Second, graduating computer science majors consistently receive some of the highest starting salary offers among all majors, exceeded only by a few of the engineering fields (see the table). The third point is that the drop in offers seen in 2006 was reversed in 2007. In current dollars, computer science majors saw a 4.5 percent increase in salary offers between 2006 and 2007.

Sources: National Association of Colleges and Employers, <http://www.naceweb.org/>; NACE Research, Starting Salary Offers: Historical Perspective Update 1990 to 2005 (Bethlehem, PA, 2007).

Jay Vegso can be contacted at jvegso@cra.org.



Average Starting Salary Offers to Class of 2007 College Graduates		
Major	Average salary offer (\$)	Percent increase on previous year
Chemical engineering	59,218	5.2
Computer engineering	55,920	5.3
Electrical engineering	55,333	3.8
Mechanical engineering	54,057	4.3
Computer science	53,051	4.5
Information sciences & systems	49,966	5.9
Civil engineering	48,998	6.3
Economics (business/managerial)	47,782	n/a
Management information systems	47,407	4.7
Finance	46,442	n/a
Accounting	46,292	3.0
Business administration/management	43,256	5.1
Marketing	39,269	5.6
Political science/government	35,261	6.5
History	35,092	6.1
Sociology	32,161	3.4
English	31,924	1.7

Cyber-Enabled Discovery from Page 1

events. We need new algorithms to process the incoming data streams in real time and to command the observational instruments in real time. Feeding this data into computational models will produce even more massive amounts of output data to process. We need new computational techniques and tools for visualizing the results so humans can focus their attention on the behaviors of interest, and not be overwhelmed with the inherent complexity of the systems under study. Such research has the potential to transform our understanding of meso-scale weather and enable the accurate prediction of destructive phenomena, all the while requiring new advances in computational thinking.

Predicting weather, of course, is only one scientific grand challenge. Similar examples can be found in astronomy, from discovering brown dwarfs to new galaxies; in the life sciences, from understanding protein structure to plant genomics; in the geosciences, from modeling the inner core to the earth's surface to the sun; and so on. Computational thinking is key to helping scientists and engineers realize their research dreams.

Even our own field of computing yields its own needs to extract knowledge from data and to understand complexity. Discerning

anomalous from normal behavior within a stream of events is a challenge in monitoring a network. In January 2003, the Slammer worm caused a denial-of-service attack infecting 75,000 victims in 10 minutes. In August 2007, a faulty network interface card on a desktop computer caused the computers for the United States Customs and Border Protection Agency to be down for nine hours, keeping more than 17,000 travelers flying into Los Angeles International Airport stuck on planes for hours. A few days later a software flaw shut down the global Skype network for two days, affecting 220 million users. As we become intertwined with "the network" of all kinds of sensing, computing, communicating, and controlling devices, a single failure can have a domino effect that results in large-scale disruptions. These cascading effects are reminiscent of the proverbial butterfly that flaps its wings in the African Sahara and takes the blame for hurricanes on our shores. Advances in network science, drawing from economic theory, multi-scale analysis, and network information theory, can help us model, simulate, and better predict the complex behavior of networks of networks.

CDI Modalities

The nature of CDI necessitates collaborations, potentially international and potentially with industry. CDI is unique: it marks the threshold of a transform in science and engineering

that will avalanche into a general disruption of traditional theories, methods, and models. Beyond traditionally defined interdisciplinary research and education, with CDI we can expect new knowledge in the gaps and overlaps between existing disciplinary fields of science.

CDI views research activities in terms of *modes*—classifying a project based on its collective intellectual energy and potential outcomes, as opposed to applying simple thresholds to its budget. In its first cycle, CDI will support two types of projects, as defined in the solicitation. Type I projects are efforts led by a small collaborative group of researchers; Type II projects are efforts led by a larger group. In 2009, in addition to Type I and II projects, CDI plans to support Type III projects which are larger, center-scale efforts. The addition of each collaborator to any type of project should have a multiplicative effect on the transformative impact of the project.

All types of projects are encouraged to integrate education and research, where education is interpreted in the broadest sense—from all levels of formal education to the public at large.

CDI Competition

For FY 2008, NSF has allocated a minimum of \$26M, pending the availability of funds, for CDI. A big team of program officers from every

research directorate and programmatic office of the NSF formulated the CDI solicitation and is now ready for the unique challenges of the multidisciplinary review process.

Letters of Intent (LoI) from project team leaders are required and allowed until November 30, 2007. The accuracy of information in the LoI is extremely important in that it will be the basis for NSF's preparation for the review of the corresponding proposal. Proposals will be reviewed in a two-tier process: preliminary proposals are due by January 8, 2008. Based on the expert panel's evaluation, successful project teams will be invited to submit full proposals by April 29, 2008. The first cycle of CDI will conclude with awards made by the end of July 2008.

To conclude, we encourage researchers and educators in the computer and information science and engineering community to work with other scientists and engineers, and by putting your collective expertise together, advance computational thinking in the discovery of new science. Send us your creative, bold, and ambitious ideas!

Sirin Tekinay, who co-chairs the CDI Working Group, is the Program Director for Communications Foundations at NSF. Jeannette M. Wing is the Assistant Director for the NSF Computer and Information Science and Engineering Directorate.

Professional Opportunities

CRN Advertising Policy

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

CRA Seeks Deputy Director

See ad on page 4

American Sentinel University Computer Science/Information Systems Assistant Professors Position

American Sentinel University is looking for talented faculty to be part of an exciting online institution that values quality teaching and positive student outcomes as their top priority.

Denver based American Sentinel University invites applications for two faculty positions at the Assistant Professor level in Computer Science and Information Systems. Primary responsibilities include:

- Instruction
- Student advisement
- Curriculum development
- Accreditation

Candidates will possess a doctorate from an accredited institution of higher learning. The full-time positions, based in Denver, Colorado will teach a wide variety of courses including:

- Computers
- Programming (C++, .NET)
- Software engineering
- Databases
- Web design

Our goal is to offer the best traditions of American education to students who for time, geography or financial reasons are unable to complete their education in a traditional campus based school. We have been educating students for nearly 20 years and are accredited by the Distance Education and Training Council (recognized by the US Department of Education).

Our plan is to seek additional accreditations, both regional (Higher Learning Commission), and specialized. Our preference is for faculty who are academically and professionally prepared to engage an eager, excited and dynamic student base of working professionals. E-learning experience preferred.

Apply online at:
<https://forms.americansentinel.edu/JoinUs/>

American Sentinel University is a for-profit institution that was founded as a Vanderbilt University technology organization and is an Affirmative Action/Equal Employment Opportunity employer.

Arizona State University School of Computing and Informatics CSE Department Faculty Positions

The Department of Computer Science and Engineering is looking for outstanding faculty in all areas and at all levels but with special emphasis on senior faculty candidates at the associate or full professor level in the areas of (1) embedded systems, (2) information security and assurance, and (3) graphics and visualization.

The expected starting date for these positions is August 16, 2008. Applicants are required to have Ph.D. in computer science, computer engineering, or a closely related field. Evidence of research/scholarly activity, teaching and service in computer science and engineering appropriate to the rank are required qualifications. Evidence of scientific, academic, and organizational leadership,

educational innovation, and demonstrated effectiveness in establishing industry partnerships appropriate to rank, desired. The successful candidates will be expected to establish an extramurally funded research program and participate in the interdisciplinary research and teaching initiatives, teach graduate and undergraduate courses, and provide service in the Department of Computer Science and Engineering.

The Computer Science and Engineering (CSE) department of the School of Computing and Informatics, located in the Tempe campus in the metropolitan Phoenix area, has a strong research program. CSE is one of the main driving forces in line with ASU's vision about the New American University, promoting excellence in its research to positively impact social and economic development. To complement CSE's leading position in research and teaching, we are in active collaboration with the research centers and consortiums that are the core of State of Arizona's and ASU's investments. Those include the Consortium for Embedded Systems, whose members also include Intel and Motorola; ABioDesign institute, a hub for biotechnical and biodesign research in central Arizona; the Translational Genomics Research Institute (TGen); and the International Genomics Consortium. Other interdisciplinary research centers that the department closely interacts with include the Partnership for Research In Spatial Modeling (PRISM), the Center for Ubiquitous Computing (CUbiC), and the Arts, Media, and Engineering Center (AME).

Applications will be reviewed, starting from January 15, 2008 and bi-weekly thereafter until the search is closed. Early applications are strongly encouraged. Application packages must include a cover letter, detailed curriculum vitae, research and teaching statements, 5 publications that best characterize your research contributions, and the names, addresses, and phone numbers of four references.

Application packages should be uploaded via the website:
<http://sci.asu.edu/hiring>.

Please direct any questions to the Chairperson of the recruiting committee at: cse.recruiting@asu.edu.

ASU is an equal opportunity, affirmative action employer.

Ashland University

Department of Mathematics & Computer Science

Assistant Professor Position

The Department of Mathematics and Computer Science at Ashland University invites applications for a tenure-track Assistant Professor position in Computer Science, beginning August 2008. A Ph.D. in Computer Science, or the equivalent, is required.

For details see:
<http://www3.ashland.edu/mcs/cssearch.html>

Brandeis University

Department of Computer Science

Tenure-Track Position

The Department of Computer Science at Brandeis University solicits applications for a tenure-track faculty position at the level of assistant professor, beginning Fall 2008. Applicants must have, or be close to completing, a Ph.D. in Computer Science or a related field, and demonstrate potential for excellence in research and teaching.

The Computer Science Department has faculty in diverse research areas, and offers programs leading to B.A., B.S.,

M.A., and Ph.D. degrees. Located in the Volen Center for Complex Systems, the department offers significant opportunity for interdisciplinary collaboration. More information about the department can be found at <http://www.cs.brandeis.edu>.

We are looking for exceptional candidates in all areas of Computer Science, to strengthen the department's research and teaching expertise in systems, artificial intelligence, and theory, including areas of machine learning, evolutionary computation, scientific informatics, languages and linguistics, logic and computation, storage systems and databases, and search, as well as interdisciplinary fields such as human/computer interaction, bioinformatics, and educational computing.

Please send applications including resume, teaching statement, research statement, names of three references and up to three representative papers to:
Chair, COSI Faculty Search
Department of Computer Science
Brandeis University
415 South Street
Waltham, MA 02454
Review of the applications will begin November 1, 2007. For full consideration the application should be received by January 1, 2008.

Brandeis University is an equal opportunity employer, committed to building a culturally diverse intellectual community, and strongly encourages applications from women and minority candidates. For further information, send mail to recruiting@cs.brandeis.edu.

Brown University

CCMB

Faculty Position

Brown University seeks highly qualified candidates for one open rank, tenure-track or tenured faculty position with a preference for assistant professor in the Center for Computational Molecular Biology (CCMB). The growing CCMB currently has four full-time faculty members, two in Computer Science, one in Applied Mathematics and one in Biology. Candidates are sought in all areas of computational biology and bioinformatics, particularly those who specialize in research areas complementary to and synergistic with those of current faculty. The research areas of the current Center faculty are: algorithmic methods and statistical inference in genomics, comparative genomics and evolution, gene regulatory networks, regulatory genomics, mathematical models of genetic variation, and cancer genomics.

The successful applicant will be expected to have a demonstrated potential for excellence in research and have outstanding teaching skills. Junior faculty applicants should show the potential to establish an externally funded research program; senior faculty applicants should have established such a program. The appointee will participate in the continuing development of Brown's established undergraduate Computational Biology curriculum and a newer graduate curriculum built upon the foundation of Brown's widely recognized record of teaching innovation and academic excellence. The appointee will have the opportunity to participate in several interdisciplinary projects, including collaborations with faculty in the Center for Genomics and Proteomics, the Center for Cardiovascular Research and other multidisciplinary programs at Brown and affiliated hospitals. The appointment will be in one of the following top-



www.careers.ualberta.ca

Assistant or Associate Professor, Health Informatics

The Department of Computing Science at the University of Alberta is seeking a qualified individual to fill a tenure track position at the level of Assistant Professor or Associate Professor in a research area that has direct applicability to health-related applications. The successful candidate will be working in a large support environment, including the resources of a teaching hospital, an emerging health informatics program, and a supportive regional health care organization.

Candidates are required to have a PhD in Computing Science, Health Informatics, or a related discipline. Some areas of interest include data management (warehousing, electronic health records, ontologies), data mining, data security, data visualization, user interfaces, and decision support systems. The successful candidate must have a strong computing science background and an established track record of applying their research to health-related applications. Experience working in the health sector is desirable. Salary is commensurate with experience. The University of Alberta offers competitive salaries and an extensive benefits package.

The candidate is expected to establish their own research program, supervise graduate students, and teach at both the graduate and undergraduate level. The Department highly values curiosity-driven research. Strong communication skills, project management, inter-personal skills, and team leadership are important qualities.

The Department is well known for its collegial atmosphere, dynamic and well-funded research environment, and superb teaching infrastructure. Its faculty are internationally recognized in many areas of computing science, and enjoy collaborative research partnerships with local, national, and international industries. The University of Alberta, located in the provincial capital of Edmonton, is one of Canada's largest and finest teaching and research institutions, with a strong commitment to undergraduate teaching, community involvement, and research excellence. As a population center of over one million people, Edmonton offers a high-quality, affordable lifestyle that includes a wide range of cultural events and activities, in a natural setting close to the Canadian Rockies. Alberta's innovative funding initiatives for supporting and sustaining leading-edge IT research have attracted world-class researchers and outstanding graduate students to our Department and to the campus. Further information about the Department and University can be found at <http://www.cs.ualberta.ca/>.

The competition will remain open until a suitable candidate is found. Candidates should submit a curriculum vitae, a one-page summary of research plans, a statement of teaching interests, reprints of their three most significant publications, and the names of references (with contact information).

Interested applicants may apply to:

Iris Everitt, Administrative Assistant
Department of Computing Science
University of Alberta
Edmonton, Alberta, Canada T6G 2E8
Email: everitt@cs.ualberta.ca

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. The University of Alberta hires on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.

Professional Opportunities

ranked departments: Division of Applied Mathematics, Department of Computer Science, or Division of Biology and Medicine.

Applicants should submit curriculum vitae, representative preprints or reprints, and their research and teaching plans with emphasis on their interdisciplinary expertise. Additionally, candidates for Assistant Professor should arrange to have at least three letters of recommendation sent directly to the contact address. Candidates for Associate or Full Professor should provide names and contact information for at least five references, who will be contacted for letters of recommendation by the search committee at an appropriate time. All applications will be treated confidentially. Application review will commence on December 10, 2007 and continue until the position is filled. All documents should be sent electronically in PDF to:

ccmbfs@cs.brown.edu

In addition, please send the cover letter and letters of recommendation to:

Sorin Istrail, Chair
CCMB Search Committee
Center for Computational
Molecular Biology
Brown University
Box 1910
115 Waterman Street
Providence, RI 02912

For further information, see <http://www.brown.edu/Research/CCMB>

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

Butler University

Computer Science and Software Engineering

Assistant Professor & Two-year Post-Doctoral Position

The Department of Computer Science and Software Engineering at Butler University (www.butler.edu/csse) invites applications for two positions:

1. A tenure-track position at the Assistant Professor level, and
2. A post-doctoral position in high performance computing

Both positions will start in August, 2008.

For more details, please see: <http://www.butler.edu/cs> or contact Jon Sorenson (sorenson@butler.edu).

Cal Poly State University

Computer Science Department
Computer Engineer Position

The Computer Science Department and Computer Engineering Program, at Cal Poly, San Luis Obispo, invite applications for a full-time, academic year, tenure-track Computer Engineering faculty position beginning September 8, 2008. Rank and salary is commensurate with qualifications and experience.

Duties include teaching core undergraduate courses, and upper-division and master's level courses in a specialty area; performing research in a mainstream area of computer engineering; and service to the department, the university, and the community. Applicants from all mainstream areas of computer engineering are encouraged to apply. A doctorate in Computer Engineering, Computer Science, Electrical Engineering, or a closely related field is required. Candidates in the areas of architecture and parallel computing are especially encouraged to apply. 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 engineering. Demonstrated ability in written and oral use of the English language is required. Computer Engineering is a joint program between the Departments of Computer Science and Electrical Engineering.

Cal Poly offers Bachelor's Degrees in Computer Engineering, Computer Science, Software Engineering and Electrical Engineering, and Master's Degrees in Computer Science and Electrical 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

to complete a required online faculty application, and apply to Requisition #101387.

For full consideration, candidates are required to attach to their online application: (1) resume, (2) cover letter, (3) candidate's statement of goals and plans for teaching and research. Upon request, candidates selected as finalists will be required to submit three letters of reference and official transcripts for final consideration.

Review of applications will begin January 7, 2008; applications received after that date may be considered.

Questions can be emailed to: cpe-recruit@csc.calpoly.edu. Please include requisition #101387 in all correspondence. For further information about the department and its programs, see www.csc.calpoly.edu and www.cpe.calpoly.edu.

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

EEO.

Cal Poly State University

Computer Science Department
Faculty Position

Full-time academic year tenure track faculty positions available in the Computer Science Department at Cal Poly, San Luis Obispo, California, beginning September 8, 2008. Rank and salary is commensurate with qualifications and experience. 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 and software engineering are encouraged to apply. A doctorate in Computer Science, Software Engineering or a closely related field is required. Candidates must have a strong commitment to teaching excellence and laboratory-based instruction; dedication to continued professional development and scholarship; and a broad-based knowledge of computer science. Demonstrated ability in the written and oral use of the English language is required. 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 #101386. Review of applications will begin January 7, 2008; 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. Candidates selected as a finalist will be required to submit three letters of reference and official transcripts for final consideration.

Questions can be emailed to: csc-recruit@csc.calpoly.edu. Please include requisition #101386 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.

Caltech

Center for the Mathematics of Information (CMI)

Postdoctoral Fellowship Program

Caltech's Center for the Mathematics of Information (CMI) announces openings in the CMI Postdoctoral Fellowship Program, starting in fall 2008. The CMI is dedicated to fundamental mathematical research with an eye to the roles of information and computation throughout science and engineering. Areas of interest include algorithms, complexity, applied combinatorics, applied probability, statistics, information and coding theory, geometry processing, multiresolution methods, control and optimization. Please apply and have three reference letters sent directly as instructed at:

<http://www.ist.caltech.edu/joinus/positions.html>

All candidates' materials are due by Friday, December 14th, 2007 and reference letters are due by Monday, December 17th, 2007.

Positions are contingent upon completion of the Ph.D.

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

Carnegie Mellon University

Postdoc Positions

Applications are invited for postdoc positions. A Ph.D. in Computer Science, Computer Engineering, or Statistics is required. Candidates should possess a demonstrated potential and strong commitment to quality research.

Candidates having primary interest and expertise in privacy-conscious management and mining of data, security theory and applications, graph and network mining, social networks, bioinformatics, and social computing will be given preference.

To apply, please send CV to Prof. Justin Zhan at:

justinzhan@andrew.cmu.edu

Carnegie Mellon University

School of Computer Science
Faculty Positions

The School of Computer Science seeks faculty candidates with a strong interest in research, outstanding academic credentials, and an earned Ph.D. Candidates for tenure-track appointments should also have a strong interest in graduate and undergraduate education.

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

organizations. Please refer to the hiring website for specific information on specializations sought.

Applications should include curriculum vitae, statement of research and teaching interests, copies of 1-3 representative papers, 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 directly to the Faculty Search Committee (hard copy or email), to arrive before January 15, 2008. Letters will not be requested directly by the Search Committee. All applications should indicate citizenship and, in the case of non-US citizens, current visa status.

Applications and reference letters may be submitted via email (postscript or .PDF format) to:

faculty-search@cs.cmu.edu.

Please include the subject line "Application Submission" with your application. Applications should be received no later than January 15, 2008, but may be accepted for review after that date until all positions are filled.

Hard Copy materials may be sent to:
Faculty Search Committee
School of Computer Science
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15260

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

Clemson University

School of Computing
Director Position

Clemson University is firmly committed to expanding the role of computing in both research and educational programs throughout the University. We have established a new School of Computing, and as the first step in a major expansion, we now invite applications for the position of School Director at the Full Professor level. A Ph.D. in Computer Science or a closely related discipline, and evidence of significant research in the form of publications, external funding, patents, or the design of major industrial hardware or software products is required.

For this position we seek candidates with the vision, research credentials, and leadership skills necessary to implement a program of exceptional quality. The initial plan for the school may be found online at: <http://www.cs.clemson.edu/School/initialplan.pdf>.

Candidates should send (electronically, in PDF format) a cover letter, curriculum vitae, and names of three references to: search@cs.clemson.edu

If unavoidable, hard copies may be mailed to:

Search Committee Chair
School of Computing
Clemson University
Clemson, SC 29634-0974

Nominations for this position are also welcome. All application materials must be received by December 1, 2007 to receive full consideration; however, the search will remain open until the position is filled.

(continued)

REMINDER TO CS&CE CHAIRS (Ph.D-Granting Institutions)

Taulbee Surveys Were Due November 9

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

Questions? Contact: [survey\[at\]cra.org](mailto:survey[at]cra.org)

Professional Opportunities

Clemson University is the Land Grant University of South Carolina. It is located on the edge of Lake Hartwell in the foothills of the Blue Ridge Mountains.

Clemson University is an Affirmative Action/Equal Employment Opportunity Employer and does not discriminate against any individual on the basis of age, color, disability, gender, national origin, religion, sexual orientation or veteran status.

Clemson University School of Computing Division Leader Position

Clemson University is firmly committed to expanding the role of computing in both research and educational programs throughout the University. We have established a new School of Computing, and as the first step in a major expansion, we now invite applications for 3 positions at the Full Professor level as Division Leaders for the school's divisions of Computer Science, Computational Arts, and Information Technology. A Ph.D. in Computer Science or a closely related discipline, and evidence of significant research in the form of publications, external funding, patents, or the design of major industrial hardware or software products is required.

For all positions we seek candidates with the vision, research credentials, and leadership skills necessary to lead and direct research and academic effort in a focused area.

The Division Leader will support the School Director in the implementation of a new School of Computing. The initial plan for the school may be found online at <http://www.cs.clemson.edu/School/initialplan.pdf>.

Candidates should send (electronically, in PDF format) a cover letter, curriculum vitae, and names of three references to: search@cs.clemson.edu

If unavoidable, hard copies may be mailed to:

Search Committee Chair
School of Computing
Clemson University
Clemson, SC 29634-0974

Nominations for these positions are also welcome. All application materials must be received by December 1, 2007 to receive full consideration; however, the search will remain open until the positions are filled.

Clemson University is the Land Grant University of South Carolina. It is located on the edge of Lake Hartwell in the foothills of the Blue Ridge Mountains.

Clemson University is an Affirmative Action/Equal Employment Opportunity Employer and does not discriminate against any individual on the basis of age, color, disability, gender, national origin, religion, sexual orientation or veteran status.

Colby College Computer Science Full-time Assistant Professor Position

Full-time tenure-track position, assistant professor, starting September 2008. Review of applications will begin November 1, 2007.

For more information, see: <http://www.cs.colby.edu/jobs/>

College of William and Mary Computer Science Department Faculty Positions

Applications are invited for two tenure-track faculty positions in Computer Science for Fall 2008 at all academic ranks. We are interested in individuals with research expertise in all areas of computer science. 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.

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:

07search@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 December 15, 2007 and continue until both positions are filled.

The College is an EEO/AA employer.

Colorado State University Department of Computer Science Faculty Position

The Department of Computer Science at Colorado State University solicits applications for a tenure-track faculty position preferably at the level of assistant professor, beginning Fall 2008. Applicants must have a Ph.D. in computer science or a related field, and demonstrate potential for excellence in research and teaching.

The department has over 275 undergraduate majors and 150 graduate students in Master's and Ph.D. programs. The department has 19 tenure-track faculty with strong research programs in artificial intelligence, computer vision, distributed computation, embedded systems, networks, security, and software engineering. We encourage applications in these areas as well as in bioinformatics, databases, high performance computing, human computer interaction, and wireless networks.

Colorado State University is located in Fort Collins, at the base of the Rocky Mountains. Fort Collins was ranked first in "Best Places to Live" in the western U.S. among small cities by Money Magazine. More information can be obtained at <http://www.cs.colostate.edu>

Candidates who can enhance the department's commitment to diversity and multiculturalism through research, teaching, and outreach are encouraged to apply.

Applications must be received by January 7, 2008 at:

<http://www.natsci.colostate.edu/searches/compsi/>.

The anticipated start date is August 16, 2008.

Complete applications of semi-finalists will be reviewed by all faculty in the Department.

CSU is an EO/AA employer.

Cornell University School of Electrical and Computer Engineering Faculty Positions

Cornell University School of Electrical and Computer Engineering is seeking outstanding candidates for faculty positions at all ranks in all areas of ECE who can contribute to addressing the intellectual problems of our discipline. We are particularly interested in candidates who can drive new research initiatives by supplementing our existing strengths in the areas of nanoscale science and engineering, computer systems, and communications and networking. Areas of interest encompass experimental and theoretical nanoscale science

and engineering; materials for energy conversion; information processing; communications and networking; as well as energy supply and delivery; and improved health care, human/machine connectivity, and management and security of information.

The successful candidate must 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. A PhD degree is required for appointment.

Applications should be submitted via the School's on-line application system at:

<https://fast.ece.cornell.edu>

and 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.

Applications received by January 15, 2008 will be assured full consideration.

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. Cornell University actively seeks to meet the needs of dual career couples.

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

Duke University Department of Computer Science Faculty Positions

The Department of Computer Science at Duke University invites applications and nominations for faculty positions at all levels, to begin August 2008. We are interested in strong candidates in all active research areas of computer science, both core and interdisciplinary areas, including distributed systems, computer architecture, networking, security, database systems, algorithms, artificial intelligence, machine learning, image analysis, and computer vision.

The department is committed to increasing the diversity of its faculty, and we strongly encourage applications from women and minority candidates.

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

A Ph.D. in computer science or related area is required. To guarantee full consideration, applications and letters of reference should be received by January 7, 2008.

Durham, Chapel Hill, and the Research Triangle of North Carolina are thriving, family-friendly communities. Duke and the many other universities in the area offer a wealth of education and employment opportunities for spouses and families.

Duke University is an affirmative action, equal opportunity employer.

Ecole polytechnique fédérale de Lausanne School of Computer and Communication Sciences Faculty Positions

The School of Computer and Communication Sciences at EPFL invites applications for faculty positions in computer science. We are primarily seeking candidates for tenure-track assistant professor positions, but suitably qualified candidates for senior positions will also be considered.

Successful candidates will develop an independent and creative research program, participate in both

undergraduate and graduate teaching, and supervise PhD students.

Candidates from all areas of computer science will be considered, but preference will be given to candidates with interests in algorithms, bioinformatics, graphics, machine learning, and design methodologies for integrated systems.

Significant start-up resources and research infrastructure will be available. Internationally competitive salaries and benefits are offered.

To apply, please follow the application procedure at:

<http://icrecruiting.epfl.ch>

The following documents are requested in PDF format: curriculum vitae, including publication list, brief statements of research and teaching interests, names and addresses (including e-mail) of 3 references for junior positions, and 6 for senior positions.

Screening will start on January 1, 2008.

Further questions can be addressed to: Professor Willy Zwaenepoel
Dean School of Computer and Communication Sciences
EPFL CH-1015
Lausanne, Switzerland
recruiting.ic@epfl.ch

For additional information on EPFL, please consult: <http://www.epfl.ch> or <http://ic.epfl.ch>

EPFL is an equal opportunity employer.

Emory University Math & Computer Science Department Faculty position

The department of Math & Computer Science invites applications for an open-rank tenured/tenure-track faculty position beginning Fall 2008. This position is subject to funding approval from Emory's strategic plan and other initiatives. We seek to hire exceptional faculty in any area within Mathematics and Computer Science that either builds on existing departmental strengths or bridges disciplines, both internally and across other Emory constituencies. A detailed listing of current research interests and a description of our academic mission may be found on the department website <http://www.mathcs.emory.edu>.

Candidates must have outstanding research and teaching credentials, and a PhD in an appropriate field. Informal inquiries and applications consisting of a CV, research and teaching statements, and three letters of reference should be emailed to:

search@mathcs.emory.edu

Screening begins on November 9, 2007.

Women and underrepresented minorities are especially encouraged to apply.

Emory University is an Equal Opportunity/Affirmative Action Employer.

**CRA Academic
Careers
Workshop**
for
New Faculty and
Advanced Graduate
Students
in
Computing-Related
Disciplines

**February 25-26, 2008
Washington, DC**

Details: <http://www.cra.org>

Professional Opportunities

Emory University

The Distributed Computing Laboratory Research Fellow

The Distributed Computing Laboratory at Emory University invites applications for a Research Fellow in the area of distributed and cooperative resource sharing. This lab within the department of Math & Computer Science at Emory is engaged in several research projects in high-performance metacomputing and collaborative problem solving environments, and related issues in networking, groupware technologies, and distributed computing. Expertise is sought in one or more areas of computer systems, data management, parallel processing, networking, and distributed systems.

The Research Fellow will join the principal investigators of these projects and play a leading role in project conceptualization, design, implementation and publication/presentation. Educational requirements include an advanced degree in CS or closely related discipline, preferably with specialization in networks and distributed high-performance computing. In addition, applicants should be knowledgeable about experimental concurrent computing, via coursework, thesis projects, or prior experience.

Screening of applications will begin immediately and continue until the position is filled. An initial appointment for a one year term is anticipated with the possibility of reappointment. Inquiries and applications should be sent to:

postdoc@mathcs.emory.edu
with the subject line "DCL Postdoc Application."

Emory University is an affirmative action/equal opportunity employer.

Emory University

Computational and Life Sciences (CLS) Independent Career Development Post- doctoral Fellowships

The Computational and Life Sciences Strategic Initiative (CLS) at Emory University explores new scientific frontiers at the interface of computation, synthetic sciences and systems biology. CLS encompasses three broad focus areas: Computational Science and Informatics (modeling, simulation, and information-based knowledge discovery), Synthetic Sciences (synthetic biology, chemical biology, biomaterials science, and bio-nanoscience), and Systems Biology (exploration of living systems across multiple scales via high-throughput quantitative methods).

Emory seeks the best and brightest young scholars for a prestigious appointment, the CLS Independent Career Development Postdoctoral Fellowship. These will be three-year appointments with unparalleled independence and generous resources. The fellowship starts at \$50,000 per year and includes up to \$25,000 in discretionary research funds depending on the area of investigation. Strong preference will be given to applicants who design and propose an independent project that draws on the strengths of, and fosters collaboration between, at least two CLS faculty members. For a list of CLS faculty and their areas of interest see <http://www.cls.emory.edu>. It is expected that the proposed project will form the basis of the applicant's ongoing independent career. To prepare the applicant for future scholarly success, he/she may be engaged in additional career development activities including academic course work, training in ethics, mentorship and personnel management as well as teaching opportunities and grant writing workshops (see <http://www.cls.emory.edu/career>). It is expected that Fellows will apply for independent research funding in the first year of support. There will be up to five fellows appointed each year.

A complete application (consisting of the following, preferably in PDF) should be submitted to the Education Committee,

Computational and Life Sciences, Emory University, by email to:

cls-postdoc-apply@emory.edu

A full CV. Unofficial transcripts of undergraduate and graduate course work (official transcripts will be required at the time of interview). Three letters of references (including Ph.D. advisor) from professionals familiar with the research and academic achievements of the applicant. These letters should be forwarded directly by the referee to:

cls-postdoc-apply@emory.edu.

A detailed statement of proposed research (5 page limit). The description should include the names of the proposed co-mentors and a description of how the proposed project will benefit from association with these CLS faculty. Letters (or email correspondence) from the CLS faculty who will co-mentor and collaborate with the Fellow describing the resources they will contribute (space, mentoring activities, research funds, additional resources, etc). A proposed budget for discretionary research funds with a short justification.

Emory University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and members of minority groups.

Florida State University

Department of Computer Science Assistant Professor Position

The Department of Computer Science invites applications for a tenure-track position at the Assistant Professor rank. Areas of preference are computer vision and computer systems; strong applicants with expertise in other areas of Computer Science will also be considered. Applicants should hold a PhD in Computer Science or a closely related field, and have excellent research and teaching accomplishments/potential.

The department offers degrees at the BS, MS, and PhD levels. FSU is classified as a Carnegie Research I university. Its primary role is to serve as a center for advanced graduate and professional studies while emphasizing research and providing excellence in undergraduate education. Further information can be found at <http://www.cs.fsu.edu>

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

Screening will begin January 1, 2008 and will continue until the position is filled. Please use the on-line application form at:

<http://www.cs.fsu.edu/positions/apply.html>

Questions can be e-mailed to: recruitment@cs.fsu.edu.

The Florida State University is an Equal Opportunity/Affirmative Action employer, committed to diversity in hiring.

Franklin & Marshall College

Department of Mathematics & Computer Science

Assistant/Associate Position

Franklin & Marshall College invites applications for a tenure-track position in the Mathematics & Computer Science department, beginning Fall 2008.

The successful candidate will have a Ph.D. in Computer Science, evidence of scholarly achievement, and demonstrated interest in collaborating with colleagues from other disciplines. We will consider outstanding candidates at the rank of either Assistant Professor or Associate Professor.

While initial appointment will be in the Department of Mathematics, the College is committed to forming a new department of Computer Science. The successful candidate will be expected to help design and implement a new computer science major.

Our teaching load is 3/2 and includes participation in the College's general education requirement, "Foundations,"

and/or our First-Year Seminar program. Salary will be competitive with computer science salaries at other liberal arts institutions.

Candidates should submit the following to:

Barbara Nimershiem, Chair
Computer Science Search Committee
Franklin & Marshall College
P.O. Box 3003
Lancaster PA 17604-3003

a letter of application, a curriculum vitae, teaching and research statements, a graduate transcript; and three letters of recommendation, including at least one that addresses the applicant's teaching ability.

We will not accept electronic versions of application materials. Completed applications received by December 3, 2007 are guaranteed full consideration, although review of applications will continue until the position is filled. Direct any questions to Barbara Nimershiem at barbara.nimershiem@fandm.edu or 717-291-3932.

Franklin & Marshall College is a highly selective liberal arts college located in Lancaster, Pennsylvania, about one and one half hours from both Philadelphia and Baltimore. For more information about the College, see our web site at www.fandm.edu.

Franklin & Marshall College has a demonstrated commitment to cultural pluralism through the hiring of women and minorities.

EOE.

Harvard University

Computer Science Department Faculty Positions

Over the past several years, Harvard's Computer Science faculty has doubled in size, moved into a state-of-the-art teaching and research facility, and made a serious commitment to fostering collaboration with other academic disciplines. The Computer Science program benefits from its outstanding undergraduate and graduate students, an excellent location, significant industrial collaboration, and substantial support from the Harvard School of Engineering and Applied Sciences.

We invite applications for faculty positions within Computer Science, and strongly encourage applications from qualified women and minorities. We seek outstanding applicants from all areas of Computer Science at the junior (assistant professor) level to begin in the fall semester of 2008.

Candidates should have an outstanding research record and a strong commitment to undergraduate teaching and graduate training. Applicants must have completed a Ph.D. by September 1, 2008. Information about Harvard's current faculty, research, and educational programs is available at <http://www.seas.harvard.edu/research/computerscience.html>.

Candidates should send a curriculum vitae, a list of publications, a statement of research and teaching interests, and up to three representative papers (ideally as a single PDF document) to the following email address:

cs-search@seas.harvard.edu

In addition, candidates should have at least three letters of reference sent to the above address. Alternatively, material may be sent via surface mail to:

CS Search Committee
School of Engineering and Applied Sciences
Harvard University
Maxwell Dworkin 143
33 Oxford Street
Cambridge, MA 02138

Applications will be reviewed as they are received. For full consideration, applications should be received by January 31, 2008.

Harvard is an Equal Opportunity/Affirmative Action employer.

Henry M. Jackson Foundation

Bioinformatics Cell (BIC)

Research Scientist Position

We are looking for a dynamic scientist to join the U.S. Army Medical Command's Bioinformatics Cell (BIC). This opening is for a (junior or senior) Ph.D.-level scientist with background in statistics, mathematics, computer science, engineering, or related discipline interested in pursuing research in the development and application of analysis tools and mathematical models to solve biomedical problems. In particular, we are looking for a candidate with background and interest in machine-learning algorithms, data mining, and predictive modeling and control algorithms, as they relate to biomedical time-series physiologic data.

The candidate should have very strong analytical skills as well as a broad and solid mathematical background. The candidate is expected to simultaneously work in multiple projects involving a diverse and inter-disciplinary team of scientists across multiple laboratories. Background or experience in developing analysis tools for bioscience applications is desirable but not essential. This position is located in Frederick, Maryland.

To apply send resume to:

Jaques Reifman, Ph.D.
Email: reifman@bioanalysis.org
Web: <http://www.bhsai.org>
Phone: 301-619-7915

Iona College

Computer Science Department Assistant Professor Position

Multiple tenure-track positions starting Fall 2008.

Please see full description and requirements at:

www.iona.edu/academic/artsscience/hiring

Iowa State University

Electrical and Computer Engineering Department

Faculty Positions

The Electrical and Computer Engineering Department at Iowa State University has immediate openings for faculty positions at all levels. Applications will be accepted from highly qualified individuals for regular faculty positions in the department in all core areas of expertise in Electrical or Computer Engineering, especially in: Computer engineering with emphasis on embedded systems; VLSI with emphasis on analog/mixed-signal/RF IC design and bio applications; Software engineering; Information assurance and security; and Distributed decisions sciences, controls, and applications.

(continued)

Department Chairs and Lab/Center Directors

CRA Conference at Snowbird

MARK the DATES!

— July 13-15, 2008 —

Professional Opportunities

Faculty positions are also available in Interdisciplinary research areas as part the Iowa State University College of Engineering's aggressive mission to fill 50 new college-wide positions with faculty who possess the talent to address the challenges that define worldwide quality of life and have global impact. The positions are targeted in the following interdisciplinary research and education cluster areas: Biosciences and Engineering Energy Sciences and Technology Engineering for Extreme Events Information and Decision Sciences Engineering for Sustainability

Duties for all positions will include undergraduate and graduate education, developing and sustaining externally-funded research, graduate student supervision and mentoring, and professional/institutional service.

All candidates must have an earned Ph.D. degree in Electrical Engineering, Computer Engineering, Computer Science or related field; and the potential to excel in the classroom and to establish and maintain a productive externally funded research program. Associate and Full Professor candidates must, in addition, have an excellent record of externally funded research and internationally recognized scholarship. Exceptional senior candidates may be considered for endowed research chair/professorship positions.

Rank and salary are commensurate with qualifications. Screening will begin on November 1, 2007, and will continue until positions are filled. To guarantee consideration, complete applications must be received by 1/18/2008.

For regular faculty positions, apply online at:

<http://iastate.jobs.com>. Vacancy #070478.

For information on positions in the cluster areas and application process, visit <http://www.engineering.iastate.edu/clusters>.

ISU is an EO/AA employer.

Lehigh University
Department of Computer Science and Engineering
Tenure-Track Position

Applications are invited for a tenure-track position at the Assistant Professor level in the Department of Computer Science and Engineering at Lehigh University starting in August 2008.

Effective teaching at both the undergraduate and graduate level, along with a demonstrated potential for research, are essential prerequisites. The successful applicant will hold a Ph.D. in Computer Science, Computer Engineering, or a closely related field, or expect to receive the degree by August 2008. Outstanding candidates in all areas of computer science research will be considered, but our current priorities lie in software engineering and computer architecture/parallel processing. Applicants should have an interest in teaching core courses in one or more of these areas as well.

In addition to jointly overseeing the degree program in Computer Engineering with our sister department, Electrical

and Computer Engineering, the CSE Department participates in number of multidisciplinary programs that offer opportunities for collaboration and involvement in sponsored research projects. These include efforts in bioengineering, mobile robotics, computer and sensor networks, scientific computing, and design arts. Lehigh offers bachelors, M.S., and Ph.D. degrees in Computer Science and in Computer Engineering, as well as a B.S. in Computer Science and Business jointly administered between the CSE Department and the College of Business and Economics.

Lehigh is ranked among the top 35 national research universities. A private institution rated "most selective" by both Barron's and Peterson's guides, Lehigh enjoys a beautiful sylvan setting in Bethlehem, PA, 80 miles west of New York City and 50 miles north of Philadelphia, an accessible and convenient location which offers an appealing mix of urban and rural lifestyles.

Applications can be submitted online at:

<http://www.cse.lehigh.edu/faculty-search>, and should include a cover letter, vitae, and both teaching and research statements. In addition, please provide the names and email addresses of at least three references. Applications will be evaluated until the position is filled, but materials should be received by January 31, 2008 to receive full consideration.

Lehigh University is an affirmative action and equal employment opportunity employer, and is committed to recruiting and retaining women and minorities.

Questions concerning this search may be sent to faculty-search@cse.lehigh.edu.

Macalester College
Department of Mathematics and Computer Science
Tenure-Track Position

We invite applications for a tenure-track position beginning Fall 2008. Applicants must have a PhD in Computer Science or a related area. Review of applications begins January 1, 2008.

For more information, see <http://www.macalester.edu/mathcs>.

Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science
Faculty Positions

The Department of Electrical Engineering and Computer Science (EECS) seeks candidates for faculty positions starting in September 2008. Appointment would be at the assistant or untenured associate professor level. In special cases, a senior faculty appointment may be possible. Faculty duties include teaching at the graduate and undergraduate levels, research, and supervision of student research. We will consider candidates with backgrounds and interests in any area of electrical engineering and computer science. Faculty appointments will commence after completion of a doctoral degree.

Candidates must register with the EECS search website at <https://eecs-search.eecs.mit.edu>, and must submit application materials electronically to this website. Candidate applications should include a description of professional interests and goals in both teaching and research. Each application should include a curriculum vitae and the names and addresses of three or more individuals who will provide letters of recommendation. Letter writers should submit their letters directly to MIT, preferably on the website or by mailing to the address below. Please submit complete application by January 15, 2008.

Send all materials not submitted on the website to:

Professor W. Eric L. Grimson
Department Head
Electrical Engineering and Computer Science
Massachusetts Institute of Technology
Room 38-401 77 Massachusetts Avenue
Cambridge, MA 02139
M.I.T. is an equal opportunity/affirmative action employer.

McGill University
School of Computer Science
Assistant Professor Position (BIO)

The School of Computer Science at McGill University wishes to invite applications for a tenure-track position at the assistant professor level, to begin August 1, 2008. Applications for more senior positions are also welcome. We are searching for a computational biologist who is interested in one of the following areas: algorithms in bioinformatics, machine learning/statistical inference in bioinformatics, dynamical models in bioinformatics, and bioinformatics database and system design. Applicants should have a strong computational or mathematical background.

Bioinformatics at McGill University has greatly expanded over the past seven years and candidates would benefit from the world class medical school and biomedical research programs. The McGill Centre for Bioinformatics is comprised of approximately 16 members who are involved in large scale projects that include (but are not limited to) areas such as genomics, epigenomics, functional genomics, proteomics, structural biology, cheminformatics, clinical informatics, modelling in physiology, and evolution.

Complete PDF format applications, including a curriculum vitae, a list of publications with copies of one or two sample reprints, a research statement, and the names and e-mail addresses of three references should be sent to:

biosearch@cs.mcgill.ca.

Applications will be reviewed as soon as they are received. No applications will be accepted after January 15, 2008.

McGill University is the top-rated research university in Canada. It is located in the heart of vibrant, multicultural Montreal. More information on the School may be found at <http://www.cs.mcgill.ca>

For information on the McGill Centre for Bioinformatics, see <http://www.mcb.mcgill.ca>.

McGill University is committed to equity in employment and diversity. It welcomes applications from indigenous peoples, visible minorities, ethnic minorities, persons with disabilities, women, persons of minority sexual orientations and gender identities and others who may contribute to further diversification. All qualified applicants are encouraged to apply; however, in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

McGill University
School of Computer Science
Assistant Professor Position (GEO)

The School of Computer Science at McGill University invites applications for one tenure-track position at the assistant professor level, to begin August 1, 2008, in the general area of geometric computation.

The successful candidate must have a strong theoretical foundation and should be active in research on geometric problems and their applications.

Complete PDF format applications, including a curriculum vitae, a list of publications with copies of one or two sample reprints, a research statement as well as a teaching statement, and the names and e-mail addresses of three references should be sent to:

geometry@cs.mcgill.ca

Applications will be reviewed as soon as they are received. No applications will be accepted after January 15, 2008.

The School of Computer Science offers a collegial environment with opportunities for interaction with world class researchers in areas including (but not limited to): computational geometry, discrete mathematics, mobile robotics, shape analysis, appearance modeling, bioinformatics, cryptography and quantum information, reasoning and learning, and scientific computing.

For further information on the School, see <http://www.cs.mcgill.ca>.

McGill University is committed to equity in employment and diversity. It welcomes applications from indigenous peoples, visible minorities, ethnic minorities, persons with disabilities, women, persons of minority sexual orientations and gender identities and others who may contribute to further diversification. All qualified applicants are encouraged to apply; however, in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Miami University
Electrical and Computer Engineering
Chair Position

Applications are invited for department chair/full professor with the vision to enhance strong undergraduate programs, to cultivate plans for a graduate program, and to advance research efforts. The Chair is the academic and administrative leader of the department. The chair must successfully work with a broad range of constituencies including faculty and staff, students, high school students and their parents, employers, industrial representatives, alumni, potential donors, the Dean and his staff, chairs of other departments within the School, and many other campus service departments. The chair, in consultation with the faculty and dean, will make decisions regarding curriculum, facilities, hiring, promotion, tenure, accreditation processes, course scheduling, and future directions of the department. A significant aspect of the chair's responsibilities includes faculty and student recruitment, faculty and staff development, and providing guidance and evaluation for promotion and tenure, and fiscal budget management. A successful candidate will be an accomplished educator with superior academic background and leadership skills.

Requirements: Doctorate in Electrical or Computer Engineering or a related discipline; significant academic experience, established record of teaching, research and service appropriate for the appointment to the rank of full professor with tenure.

Desire: Experience in an academic setting with appropriate administrative experience; ABET accreditation experience.

Send vitae, teaching and research statement, and a vision statement outlining leadership philosophy and arrange three letters of recommendation to

CRA Welcomes New Academic Members

Marymount University - IT
McGill University - CS
Tecnologico de Monterrey, ITESM,
Monterrey Campus - DTIE
University at Albany, SUNY - CI
University of Idaho - CS
University of Massachusetts, Lowell - CS
Wellesley College - CS

Professional Opportunities

be sent to:

Professor Douglas A. Troy
Computer Science and Systems
Analysis
Oxford, OH 45056 USA
Email: ECEChairSearch@muohio.edu
Review of applications will begin
December 1, 2007 and will continue until
the position is filled.

For additional information, visit
our web site <http://ece.muohio.edu/ChairSearch.html>.

Miami University is a public institution
regularly ranked among the top twenty
public universities in undergraduate
education in the nation.

Miami University is an EOE/AA
employer. For information regarding
campus crime and safety, visit www.muohio.edu/righttoknow.

MIT

**The Broad Institute
Computational Biologist/Group Leader
Position**

Apply your computing skills to DNA
at MIT.

Have stellar computational skills, PhD
or equivalent experience? Enjoy solving
nearly impossible problems? We'll retrain
you to work with cutting-edge DNA
technology.

We find biomedical applications for
new DNA sequencing instruments yielding
billions of short DNA sequences like:
ATGTAATTTCAAATGTTAGCT-
CATTTTTGTTAATG.

We need you on our team to solve the
hard mathematical and computational
challenges using terabytes of these data.
We invent algorithms, delve deeply in the
data, code like crazy, help design laborato-
ry experiments: we do whatever is needed
to make the new technologies fulfill their
promise to unlock the mysteries of genom-
ics and biomedical research in critical areas
like cancer, human genetics, infectious
disease, antibiotic discovery, genome evolu-
tion, man's inhumanity to man, and the
number 42.

We seek candidates from highly diverse
backgrounds, industrial and academic.
Mathematical and computational experi-
ence and excellence required, including
superb C++ skills in a Linux or Unix
environment. Biology training helpful but
not required as you can learn on the job.
Outstanding oral and written communica-
tion skills, joy in teamwork. A group leader
position is also open for a candidate with
proven leadership experience in computa-
tional science.

The Broad Institute of MIT and Har-
vard has an intense, exciting environment,
world-class laboratory and computing
facilities, hundreds of scientists tackling a
wide range of critical problems in biology
and medicine. Come join us.

Apply now at:
<http://hrweb.mit.edu/staffing/search>
for mit-00003916 and mit-00004577,
Computational Biologist and Group
Leader positions.

We are an equal opportunity, affirma-
tive action employer.

MIT and Harvard University

**The Broad Institute
Associate Computational Biologists
Positions**

The Broad Institute of MIT
and Harvard seeks two Associate
Computational Biologists in its Center
for Cancer Genome Characterization.
Will join a major effort being mounted by
Broad and Dana-Farber Cancer Institute
to discover the principal genetic causes
of human cancer, both germ-line and
somatic. As part of this project, a large
volume of genomic data will be generated,
including DNA sequence, SNP array, and
gene expression data. Seek individual to
join center efforts to develop, test, and
apply algorithms for defining the genetic
lesions that lead to cancer; extract robust
signals from noisy experimental data and
help to pinpoint the experimental sources

of noise; develop and apply state-of-the-art
machine learning and classification tools
to classify tumors and genetic lesions;
assess statistical significance of genomic
alterations and their associations with
each other and with clinical parameters;
develop software using tools such as
MATLAB, R, etc.; and work closely
with experimental biologists to analyze
data and in collaboration with software
engineers to generate robust and stable
versions of the software.

Requirements: A Ph.D. in
mathematical, physical, or computer
science or engineering or comparable
research experience; and significant
experience with computer programming
and computational biological applications.

Outstanding candidates with a
bachelor's or master's degree and three
to eight years of experience will also be
considered. A strong background in
statistics and machine learning techniques
needed. Excellent oral and written
communication skills and the ability to
perform both self-directed and guided
research required. Excellent collaborative
skills with high level researchers expected.

Interested candidates may apply
on-line at:

<http://web.mit.edu/jobs>.

Please reference job number mit-
00004619.

MIT is an equal opportunity/
affirmative action employer.

Applications from women, minorities,
veterans, older workers, and individuals
with disabilities are strongly encouraged.

The Broad Institute was founded to
empower scientists of all kinds to work
together on difficult, diverse, critical
genomic and biomedical challenges. The
Institute is a unique collaboration between
the MIT and Harvard academic and
medical communities, and it offers the
resources and benefits provided to all MIT
employees, including:

- * Competitive pay
- * Medical, dental, life insurance plans
- * 401(k) plan with matching
contributions
- * Tuition assistance plan
- * Four weeks of vacation after one year
- * T-Pass subsidy program
- * Athletic and fitness centers
- * Child care services

Join a team that works the way you've
always wanted to work.

MIT and Harvard University

**The Broad Institute
Group Leader Position**

The Broad Institute of MIT and
Harvard is seeking a Group Leader, New
Sequence Analysis, to lead Ph.D.-level
computational R&D team. Will investi-
gate fundamental properties of emerging
DNA sequencing technologies, solve nearly
impossible algorithmic problems, translate
to robust and efficient computational tools,
invent analysis techniques for prodigious
data sets, collaborate in experimental design
and data analysis to optimize molecular
biology processes, and collaborate on scien-
tific advances in biology and medicine.

Duties include leading data analy-
sis and development of computational
programs; setting priorities and delegat-
ing tasks to the team as appropriate;
understanding the field and goals of the
Institute vis-a-vis the sequencing technolo-
gies, collaborating with associate director
to develop goals for the group; actively
participating in analysis and development
projects in addition to assuming leadership
responsibilities; assessing appropriate size
and composition of the group, managing
hiring, mentoring group members, and
providing feedback and annual evaluation;
providing computational, analytical, and
engineering guidance to staff; presenting
orally at internal and external meetings
and in other forums; writing reports
for internal and external use; leading or
participating in writing scientific publica-
tions of the group's work; and working
collaboratively with other scientists at the

Institute on various projects in a fast-paced
environment.

Requirements: management experience
in computational analysis or engineer-
ing; ability and desire to learn and master
new technical challenges; exceptionally
deep computational understanding and
abilities; seven-plus years' experience; and
an advanced degree in math, physics, or
computer science, or comparable research
experience. Industry experience a plus.
Extensive experience with C++ in a UNIX
or Linux environment required. Outstand-
ing written and oral communication skills
needed. Must be flexible and able to excel
in a rapidly changing environment.

Interested candidates may apply on-line
at:

<http://web.mit.edu/jobs>

Please reference job number
mit-00004577.

MIT is an equal opportunity/affirma-
tive action employer.

Applications from women, minorities,
veterans, older workers, and individuals
with disabilities are strongly encouraged.

The Broad Institute was founded to
empower scientists of all kinds to work
together on difficult, diverse, critical
genomic and biomedical challenges. The
Institute is a unique collaboration between
the MIT and Harvard academic and
medical communities, and it offers the
resources and benefits provided to all MIT
employees, including:

- * Competitive pay
- * Medical, dental, life insurance plans
- * 401(k) plan with matching
contributions
- * Tuition assistance plan
- * Four weeks of vacation after one year
- * T-Pass subsidy program
- * Athletic and fitness centers
- * Child care services

Join a team that works the way you've
always wanted to work.

Montclair State University

**Department of Computer Science
Assistant or Associate Professor Position**

The Department of Computer Science
invites applications for a tenure-track
assistant or associate professor in computer
science starting September 1, 2008. The
Department's 13 faculty support the BS
with an ABET CAC accredited track, the
BS in Information Technology and the
MS in Computer Science. The position
requires a willingness to teach a variety
of computer science and information
technology courses at all levels to ethnically
diverse students. The candidate will work
as a member of interdisciplinary teams as
the Department develops and modifies
computing undergraduate and graduate
programs. In addition, the successful
candidate is expected to support the
teaching of and to pursue research in
database and applications of database.

Qualifications include experience in
Object Oriented technology and modern
architectures with several operating
systems and a PhD in Computer Science
or very closely related area with research
in database and applications of database
technology. Candidates must have good
communication skills. We give preference
candidates with experience in teaching
undergraduate computing courses and in
working as a member of a team. All faculty
are expected to have an ongoing research
plan, to commit to quality teaching, to
be involved in professional activities, and
to pursue grants. Rank and salary are
dependent on qualifications. Candidates
should complete the online interest form at:

[http://cs.montclair.edu/cssearch/
Interest-Form.html](http://cs.montclair.edu/cssearch/Interest-Form.html).

Send hardcopy (no email documents)
that includes resume, at least three
professional references, statement of
research interests, teaching philosophy
with experience, and professional goals to:
Search Committee - V# F31
Department of Computer Science
Montclair State University
Montclair, NJ 07043

Screening begins immediately and
continues until the position is filled.

New Mexico State University

**Department of Computer Science
Assistant Professor Position**

The Computer Science Department
at New Mexico State University invites
applications for a full time 9-month tenure-
track position at the assistant professor
level, with appointment starting in the
Fall semester 2008. We are particularly
interested in candidates with expertise
in data mining and data management.
Men and women, and members of all
racial and ethnic groups, are encouraged
to apply. Salary will be competitive and
commensurate with qualifications and
experience.

The minimum qualifications are
a Ph.D. degree in Computer Science
or in a closely-related discipline by
the time of appointment, along with
demonstrated evidence of excellence in
teaching and research. We particularly
solicit applications from candidates with
experience in inter-disciplinary research
activities and candidates whose research
foci complement and integrate the existing
research activities in the Department,
in areas like knowledge representation,
bioinformatics, software engineering,
and wireless and sensor networks. The
successful candidate will be expected to
develop an independent research program
and teach graduate and undergraduate
courses in Computer Science.

The Department has strong research
and educational programs, extensive
computing infrastructure (which includes
several parallel and distributed platforms),
and various computing and research
laboratories. The Department offers
undergraduate and graduate (MS and
Ph.D.) degrees in Computer Science;
it actively participates in several inter-
disciplinary educational programs. The
Department has received extensive funding
for support of its instructional and
research activities from a broad spectrum
of agencies, including a \$4.5M grant from
NSF to establish a Center for Research
Excellence in Bioinformatics. NMSU
is located in southern New Mexico, the
"Land of Enchantment", just 50 miles
from the El Paso airport.

NMSU is a land grant institution,
with strong research programs (Carnegie
Research Extensive) and a tradition in
serving a diverse student population
(NMSU is a Minority-serving Institution).
The NMSU campus houses the Physical
Science Laboratory and has close ties
to Sandia and Los Alamos National
Laboratories, the White Sands Missile
Range, and the National Center
for Genomics Research. For more
information, please visit <http://www.cs.nmsu.edu>

Applicants should submit a letter of
intent, a complete curriculum vitae, a

(continued)

CRA-W Distributed Mentor Program

**Undergraduate Summer
Research Internships**

**Application Deadline for
Summer 2008**

February 15, 2008

Details: <http://www.cra.org/Activities/craw/dmp/>

Professional Opportunities

research and teaching statement, and at least three letters of reference to:

Dr. Enrico Pontelli
CS Faculty Search Chair
Department of Computer Science
New Mexico State University
P.O. Box 30001, MSC CS
Las Cruces, NM 88003

Inquiries by email (faculty_search@cs.nmsu.edu) are welcome. Screening will begin December 1, 2007. Applications will be accepted until the position is filled.

New Mexico State University is an EEO/AA Employer. Offer of employment is contingent upon verification of individual's eligibility for employment in the United States.

New York University Computer Science Department Faculty Positions

The department expects to have several regular faculty positions beginning in September 2008 and invites candidates at all levels. We will consider outstanding candidates in any area of computer science with systems (including networking, operating, distributed and parallel systems) a high-priority area for one position. We also seek candidates in computational statistics for either a position in the Computer Science Department or a joint position with another NYU department.

Faculty members are expected to be outstanding scholars and to participate in teaching at all levels from undergraduate to doctoral. New appointees will be offered competitive salaries and startup packages, with affordable housing within a short walking distance of the department. New York University is located in Greenwich Village, one of the most attractive residential areas of Manhattan.

The department has 32 regular faculty members and several clinical, research, adjunct, and visiting faculty members. The department's current research interests include algorithms and theory, computational biology, computer vision, cryptography, distributed and parallel computing, graphics and multimedia, machine learning, natural language processing, networking, scientific computing, and verification and programming languages.

Collaborative research with industry is facilitated by geographic proximity to computer science activities at AT&T, Google, IBM, Lucent, Matsushita, NEC, Siemens and Telcordia.

Please apply online at:
http://webern.cs.nyu.edu/faculty_applications/.

To guarantee full consideration, applications should be submitted no later than Jan. 2, 2008; however, this is not a hard deadline, as all candidates will be considered to the extent feasible, until all positions are filled. Visiting positions may also be available.

New York University is an equal opportunity/affirmative action employer.

North Carolina State University Department of Computer Science Faculty Positions

The Department of Computer Science at NC State University (NCSU) seeks to fill multiple tenure-track faculty positions starting August 16, 2008. Exceptional candidates in all areas of Computer Science (CS) will be considered, but of particular interest are candidates specializing in Computer Gaming, Security, and Software Engineering. All candidates should have a strong commitment to academic and research excellence commensurate with the expectations of a major research university. These credentials include a doctorate in CS or a related field. While the department expects to hire faculty predominantly at the Assistant Professor level, candidates with exceptional research records are encouraged to apply for senior level positions.

The department has recently moved into a new building on the NC State University Centennial Campus (<http://centennial.ncsu.edu>) locating it at the hub of a dynamic and integrated network of university and industry research organizations, many of which are associated with companies in the nearby Research Triangle Park. The Department is in a period of growth. It currently has over 40 tenured/tenure-track faculty and almost 1100 students, approximately 500 of which are graduate students. Its research is sponsored by a number of agencies and industries, and its research expenditures are growing steadily. The department created two strategic centers in 2007, the Digital Games Research Center and the Center for Open Software Engineering. We have one of the largest numbers of winners of the prestigious NSF Early Career Award (16 total). We are the only U.S. department ever to win the IEEE Computer Society International Design Competition (third place in 2003 and first place in both 2005 and 2006). We also are one of the oldest Computer Science degree programs in the United States, and will celebrate our 40th anniversary in 2007. The department is in NCSU's College of Engineering, which has recently received significant increases in private and public funding, faculty positions, and facilities that will assist the Department in attaining its goals.

NC State University is located in Raleigh, capital of North Carolina, which forms one vertex of the world-famous Research Triangle Park (RTP). RTP is an innovative environment, a metropolitan area with one of the most diverse industrial bases in the world, and that promotes research in technology and science. RTP currently boasts such major tenants as Cisco Systems, EMC, Fidelity Investments, GlaxoSmithKline, IBM, Network Appliances, Nortel Networks, SAS Institute, Red Hat (headquarters located on the NCSU Centennial Campus), RTI International, and many others, including a number of game development companies, numerous software companies, two renowned medical schools and many large hospitals, pharmaceutical and medical device companies, and so on. The Research Triangle area is routinely recognized in nationwide surveys as one of the best places to live in the U.S. We enjoy excellent health care options, outstanding public schools, affordable housing, and great weather, all in proximity to the mountains and the seashore.

Review of the applications will begin January 15, 2008; however, the positions will remain open until suitable candidates are identified. Applicants should submit the following online at:

<http://jobs.ncsu.edu>.
(reference position number 04-69-0706): cover letter, curriculum vitae, research statement, teaching statement, and names and complete contact information including email addresses and phone numbers of four references.

Candidates can obtain further information about the department and its research programs from <http://www.csc.ncsu.edu>. Inquiries may be sent via email to facultyhiring@csc.ncsu.edu.

North Carolina State University is an equal opportunity and affirmative action employer. In addition, NC State University welcomes all persons without regard to sexual orientation. Individuals with disabilities desiring accommodations in the application process should contact the Department of Computer Science at 919-515-2858.

Penn State Harrisburg School of Science, Engineering & Technology Assistant Professor Position

School of Science, Engineering and Technology, invites applications for the tenure-track position of Assistant Professor of Computer Science effective Fall

Semester 2008. The successful candidate will have experience and research interest in database design, data mining, and/or bioinformatics. Candidates will be evaluated on teaching and research potential. Ph.D. in Computer Science is required. Faculty are expected to teach courses for the B.S. and M.S. degrees in Computer Science, pursue scholarly research and publication, contribute to curriculum development, participate in University and professional service activities, advise undergraduate and graduate students, and serve on graduate level degree committees.

For information on Penn State Harrisburg, please visit our websites at: www.hbg.psu.edu and cs.hbg.psu.edu.

Applicants are invited to submit current curriculum vitae, a list of three references with one reference addressing candidate's teaching effectiveness, a personal statement of research and teaching objectives that includes a list of preferred courses to teach. Please submit to:

Chair, Computer Science Search Committee
c/o Mrs. Dorothy J. Guy
Director of Human Resources
Box: CRA-26153
Penn State Harrisburg
777 West Harrisburg Pike
Middletown, PA 17057-4898

Application review will begin immediately and continue until the position is filled.

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

Plymouth State University Department of Computer Science and Technology Chair

Plymouth State University (PSU), one of four institutions that makeup the University System of New Hampshire, is a comprehensive regional university offering a rich, teaching/student-focused learning environment for approximately 4,200 undergraduate students encouraging scholarship, research and service-oriented projects. The University's Strategic Plan places increasing emphasis on scholarship and both encourages and supports faculty in that effort.

Located in a beautiful New England setting, PSU is very fortunate to be surrounded by some of the country's most beautiful and accessible natural landscape. Faculty and staff, as well as students, come to Plymouth State for its caring academic community and friendly campus, the Main Street New England setting, and easy access to New Hampshire's great outdoors.

The Department of Computer Science and Technology at PSU seeks a dynamic teacher/scholar for the position of Chair of the Department of Computer Science and Technology to lead the Department in developing curricula for the decade ahead. The individual selected must have a record as a successful teacher/scholar and demonstrated leadership ability. This position is a tenure-track appointment that reports to the Provost. Rank will be at the associate professor or professor level based upon prior experience and credentials. The term of the Chair position shall extend three years and is renewable after review in the last semester of the term by the department faculty, the Vice President for Academic Affairs and the President. The Department of Computer Science and Technology offers two degrees: an ABET accredited B.S. in Computer Science and a B.S. in Information Technology.

The Department staff consists of 4 full-time faculty, 7 part-time faculty, a full-time administrative assistant and a half-time technician. Preferred start date for this position will be January 2008. However, a later start date will be considered if current contractual obligations prohibit starting at the earlier date. Candidates from all areas and sub-disciplines of Computing are encouraged to apply although breadth in

training and interest will be highly valued.

Visit PSU's website at <http://www.plymouth.edu/hr/jobs/chaircompsci.html> to review a full description of this position including duties & responsibilities, minimum qualifications, desired qualifications, background check requirement, requested application materials, deadline for application, and where to submit your application.

Plymouth State University is an EEO/AA Employer. We are committed to creating an environment that values and supports diversity, equity and inclusiveness across our campus community and encourage applications from qualified individuals who will help us achieve this mission. Hiring is contingent upon eligibility to work in U.S.

Purdue University Department of Computer Science Tenure-Track Positions

The Department of Computer Science at Purdue University invites applications for tenure-track positions beginning August 2008. While outstanding candidates in all areas of Computer Science will be considered, preference will be given to applicants with a demonstrable research record in operating systems, software engineering, and theory. Candidates with a multi-disciplinary focus are also encouraged to apply. Of special interest are applicants with research focus in computational science and engineering, bioinformatics, and health-care engineering. The level of the positions will depend on the candidate's experience. The Department of Computer Science offers a stimulating and nurturing academic environment. Forty-four 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/>.

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, 2007, and will continue until the positions are filled.

Purdue University is an Equal Opportunity/Equal Access/Affirmative Action employer fully committed to achieving a diverse workforce.

Rochester Institute of Technology

Center for Advancing the Study of Cyberinfrastructure (CASI)
Postdoctoral Research Fellow Staff & Ph.D. Student Positions

The Rochester Institute of Technology invites applications for immediate

Professional Opportunities

openings as a Postdoctoral Research Fellow in Cyberinfrastructure, a Staff position, and five Ph.D. students to join the Center for Advancing the Study of Cyberinfrastructure (CASCI). CASCI conducts a large variety of research as part of its more than fourteen cyberinfrastructure related laboratories.

The successful applicant will conduct research in the field of cyberinfrastructure, with a focus on the scientific software services, dynamic and scientific workflows, scientific portals, distributed computing, Grids, and Grid applications. Background in one or more of these areas is required for the Postdoctoral and staff positions.

Applications will continue to receive full consideration until the positions are filled by suitable candidates. To find out more on how to apply visit <http://casci.rit.edu/jobs>.

RIT is committed to equal employment opportunity and affirmative action.

Gregor von Laszewski
Center for Advancing the Study of
CyberInfrastructure
Rochester Institute of Technology
Building 74 Room 1078
102 Lomb Memorial Drive
Rochester, NY 14623

Rutgers State University of New Jersey

Computer Science Department
Research Associate

Qualification requirements: Ph.D. in Computer Science. Research experiences on modeling human motion, tracking, and recognition of dynamic human motion such as facial expressions and gait. In addition, publications on fundamental research in computer vision and machine learning such as visual shape and appearance learning based on nonlinear manifold embedding. It would be desirable for the candidate to have experience on facial motion modeling and tracking.

Education and Skills Required: Ph.D. in Computer Science or closely related field exceptional research; achievement and strong research background and promise plus strong skills in C++ and MATLAB are required. Several years of experience with computer vision code.

Please send vitae and at least three letters of reference to:

Dr. Dimitris Metaxas
c/o Ms. Maryann Holtsclaw
Division of Computer and Information
Sciences
Rutgers University
110 Frelinghuysen Road
Piscataway, NJ 08817
Rutgers University is an equal
opportunity/affirmative action employer.

Saint Louis University Department of Mathematics and Computer Science

Assistant Professor Position

Saint Louis University, a Catholic, Jesuit institution dedicated to student learning, research, health care, and service, seeks applicants for a tenure-track position as Assistant Professor of Computer Science in the Department of Mathematics and Computer Science. The position will begin in August 2008. Applications received by January 1, 2008 are assured full consideration.

Quality is the key criterion; all areas of specialty will be considered. Ph.D. in Computer Science or related field required. A successful applicant must have commitment to excellence in undergraduate education and demonstrated potential for a continuing research program. The Department currently has 28 faculty members and offers both a BA and BS program in Computer Science as well as BA, BS, MA and PhD programs in Mathematics.

Formal applications with cover letter and CV must be made online at:
<http://jobs.slu.edu>
(Requisition #20070739)

Additional supporting materials must be submitted at: <http://euler.slu.edu/cssearch> including, CV, statements of research interests and educational philosophy, and the names of three or more persons serving as references, including at least one who can address the candidate's teaching ability. Contact cssearch@slu.edu for more information.

Saint Louis University is an Affirmative Action/Equal Opportunity Employer (AA/EOE) and encourages the nominations of and application from women and minorities.

Simon Fraser University

Faculty of Applied Sciences

Leadership Chair Position

The Government of British Columbia, Canada is supporting the establishment of a small number of permanent BC Leadership Chairs at public post-secondary institutions. These endowed BC Leadership Chairs are designed to attract world-class faculty, strengthen the province's capacity for innovative research, promote British Columbia as a centre for cutting-edge research, enhance economic development and position the province as a leader in the knowledge-based economy. The Faculty of Applied Sciences at Simon Fraser University has been awarded one of these endowed Chairs and invites applications for this Leadership Chair in Medical Imaging as part of an initiative to further develop Medical Imaging Science within the Faculty of Applied Sciences. The recruited individual will hold a joint-position at the rank of Professor in Computing Science, Engineering Science and/or Kinesiology and is expected to lead an emerging area of strength within the Faculty. We seek to attract an internationally recognized expert in Medical Imaging who will bring extensive expertise to SFU in minimally one of the following areas: biomedicine, medical image acquisition, medical image analysis, computer vision, visualization, and applied mathematics. The goal as Chair will be to provide a focus for regional research efforts in these areas and facilitate collaboration with health researchers across the campus, local hospitals, and the provincial biomedical imaging sector.

SFU provides a rich research environment on which to build. The candidate is expected to unite those directly involved in researching the entire medical imaging process, including the imaging physics and chemistry, the computational image analysis and its application, the study of the biomedical aspects of disease, with a particular focus on cardiac defects and stroke, and the challenges of assisting diagnosis and communicating medical imaging results across networks of health care professionals and hospitals. SFU has defined a major strategic objective to facilitate collaborations across traditional disciplinary and institutional boundaries. Across the university, the Faculties of Applied Sciences, Health Science, Science, and Arts and Social Sciences provide a wealth of collaborative opportunities; in addition, SFU has a number of key partnerships with hospitals in the region. Within the Faculty of Applied Sciences, the combination of Schools, including Computing Science, Engineering, and Kinesiology, facilitates inter- and multi-disciplinary research.

SFU serves about 25,000 students and the main campus is located on top of Burnaby Mountain in Greater Vancouver. The campus commands magnificent mountain and ocean views. The lower mainland area of British Columbia is known for its mild climate and excellent recreational opportunities. All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority. The University is committed to employment equity and welcomes applications from all qualified women and men, including

visible minorities, aboriginal people, persons' with disabilities, gay men and lesbians. Applications will be accepted until the position is filled but applicants are encouraged to apply by November 15th. Under the authority of the University Act, personal information that is required by the University for academic appointments will be collected.

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

Dr. Wade Parkhouse
Associate Dean Research and Graduate
Studies
Faculty of Applied Sciences
Simon Fraser University
8888 University Drive
Burnaby, B.C. V5A 1S6 Canada
Email: parkhous@sfu.ca

Stanford University

Department of Computer Science

Faculty Position

The Department of Computer Science at Stanford University invites applications for a tenure-track faculty position at the junior level (Assistant or untenured Associate Professor). We give high priority to the overall originality and promise of the candidate's work rather than the candidate's sub-area of specialization within Computer Science.

We are seeking applicants from all areas of Computer Science, including Foundations, Systems, Artificial Intelligence, Graphics, Computer Vision and Perception, Databases, and Human-Computer Interaction. We are also interested in applicants doing research at the frontiers of computer science with other disciplines, such as biology, neuroscience, and economics, and arts, with potential connections Stanford's main multidisciplinary initiatives: Human Health, Environment and Sustainability, the Arts and Creativity, and the International Initiative.

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

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

Search Committee Chair
c/o Laura Kenny-Carlson
Stanford University
Gates Hall 278
Stanford, CA 94305-9025

or via electronic mail to:

search@cs.stanford.edu.

The review of applications will begin on January 9, 2008, and applicants are strongly encouraged to submit applications by that date; however, applications will continue to be accepted until the position is filled.

Stanford University is an affirmative action, equal opportunity employer.

SUNY College at Oneonta Mathematics, Computer Science & Statistics Department

Assistant Professor Position

SUNY College at Oneonta invites applications for a tenure-track position at the rank of Assistant Professor in the Department of Mathematics, Computer Science & Statistics. This is a continuing position with an initial appointment

Sign Up for CRA Announcements

Receive e-mail messages
about CRA projects and
events on a regular basis.

To subscribe, see details at
<http://www.cra.org>

of two years. The expectations include instruction, research, college service, advisement, and continuing professional development. Start date for this position is August 2008. Qualifications required: Ph.D. in Computer Science at time of appointment (A.B.D. will be considered.)

Preferred:

Demonstrated collegiate teaching excellence; Strength in theory of computing, human computer interaction, and/or parallel & distributed systems; and ability to teach diverse courses in an undergraduate Computer Science major program preferred.

To apply: send application letter, resume, copies of graduate transcripts (official required at time of appointment), and have three professional reference letters sent to:

Dr. Leo J. Alex, Chair, Mathematics
Computer Science, and Statistics
Department
Box CR (#1054-Y)
SUNY Oneonta
Oneonta, NY 13820-4015

SUNY Oneonta values a diverse college community. The college does not discriminate on the basis of age, disability, marital or parental status, national or ethnic origin, race, religion, sex, sexual orientation, and gender identity or veteran status. Moreover the College is an EEO/AA/ADA employer. Women, persons of color, and persons with disabilities are encouraged to apply.

Swarthmore College

Computer Science Department

Assistant Professor Position

Applications are invited for a tenure-track assistant professor position (pending administrative approval) and for a one year leave replacement position at the assistant professor level. Both positions begin August 2008. Swarthmore College is a small, selective liberal arts college located in a suburb of Philadelphia. The Computer Science Department offers majors and minors in computer science at the undergraduate level. The teaching load is 2 courses per semester. Applicants must have teaching experience and should be comfortable teaching a wide range of courses at the introductory and intermediate level.

For the tenure-track position we will consider all areas of CS that complement our current offerings, particularly applied algorithms. Candidates should additionally have a strong commitment to involving undergraduates in their research. A Ph.D. in CS by or near the time of appointment is required. We expect to begin interviewing in late January 2008.

For the leave replacement position, all areas of CS will be considered. Depending on administrative approval, the leave replacement position could be a multi-year appointment. A Ph.D. in CS is preferred (ABD is required). We expect to begin interviewing in mid February 2008.

See:

<http://www.cs.swarthmore.edu/jobs>
for application submission information and more details about both positions.

Swarthmore College is an equal opportunity employer. Applications from women and members of minority groups are encouraged. Applications will be accepted until the positions are filled.

Professional Opportunities

Texas A&M University

Department of Computer Science
Faculty Positions

Texas A&M University is at the end of a five-year growth campaign to hire 447 faculty members as part of its historic Vision 2020 plan to establish the University as a consensus top-ten public institution. This campaign includes over 100 new positions for the Dwight Look College of Engineering. As part of the expansion, the Department of Computer Science is recruiting for multiple tenure-track positions at all levels: assistant, associate, and full professor.

Exceptional candidates will be considered in all areas, but special consideration will be given to those in Security. We are also looking for distinguished candidates at the level of full professor. Qualified candidates for all positions must have a Ph.D., and will be expected to teach courses, mentor graduate students, and establish a vibrant research program with substantial impact and external funding.

The Department of Computer Science has 38 tenure-track faculty members currently. The faculty holds over 60 important and influential professional positions, including editorships for scientific journals and general chairs of technical conferences. The faculty is also well-recognized for contributions to their fields, with research known throughout the international academic community and global industry alike. The department currently has one National Academy of Engineering member, five IEEE fellows, one ACM Fellow, and ten PYI/NYI/CARREER awardees.

Texas A&M University is centrally located in College Station, Texas, which is roughly equidistant from three of the 10 largest cities in the United States (Houston, Dallas and San Antonio) as well as the State Capital (Austin). Texas A&M ranks in the top-20 U.S. institutions for the enrollment of National Merit Scholars. Enrollment includes approximately 45,000 students, with 8,700 pursuing graduate degrees. Each year, Texas A&M's 2,500 faculty conduct more than \$500 million worth of sponsored research projects.

Additional information about faculty recruiting is available at <http://www.cs.tamu.edu/facprospective>.

Prospective candidates should apply online at:

<https://apply2.cs.tamu.edu/gts/applicant/faculty/>.

For questions about the positions, please contact search@cs.tamu.edu.

Texas A&M is an equal opportunity/affirmative action employer and actively seeks candidacy of women and minorities. Applications are also encouraged from dual-career couples.

Texas State University-San Marcos

Department of Computer Science
Tenure-Track Positions

Applications are invited for two tenure-track positions at the rank of Assistant 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.

Transylvania University

Computer Science Department
Assistant/Associate Professor Position

Transylvania University (<http://www.transy.edu/>), an independent, residential, liberal arts college of 1,150, invites applications for a full-time, tenure-track position at the Assistant/Associate Professor level in computer science beginning September 1, 2008.

Ph.D. required, with a strong commitment to teaching in a liberal arts environment. In addition to being able to teach a wide variety of computer science courses, preference will be given to candidates with interdisciplinary interests, such as cognitive science, scientific computing, or mathematics. Teaching opportunities may also include periodic contribution to the College's Foundations of the Liberal Arts program. Bingham Awards for Excellence in Teaching may provide substantial salary supplements for exceptional candidates or smaller start-up awards for recent Ph.D.s.

Applications including curriculum vitae, graduate and undergraduate transcripts, and three letters of recommendation should be sent to:

Dr. Tylene Garrett
300 North Broadway
Lexington, KY 40508
tgarett@transy.edu

In your cover letter please identify and describe your specialty area in computer science, as well as any interdisciplinary interests you might have. This position is open until filled; but to assure full consideration, applications should be received no later than December 15, 2007.

Transylvania University is an Equal Opportunity Employer and is committed to building a faculty that reflects the diversity of American society.

Tufts University

Department of Computer Science
Assistant Professor Position

The Computer Science Department of Tufts University is seeking applicants at the assistant professor level for a tenure-track position in Cognitive Science or related area to begin September 2008.

Exceptional candidates at the associate professor level will be considered. The exact area of research interest is less important than demonstrated research excellence and existing, or strong potential for, extramural funding. The successful candidate should be able to teach courses in Cognitive Science and/or Artificial Intelligence as part of our new undergraduate interdisciplinary major in Cognitive and Brain Sciences, as well as introductory courses in computer science and more advanced undergraduate and graduate courses in the candidate's area of expertise. Preference will be given to candidates who complement the Department's expertise in Machine Learning, Human-Computer Interaction, Graphics, and Computational Biology.

Applicants should submit a C.V., a research synopsis, a statement of teaching philosophy, three letters of recommendation, and copies of representative scholarly work to:

Cognitive Science Search Committee
Tufts University
Department of Computer Science
Medford, MA 02155

Review of applications will begin October 15, 2007, and will continue until the position is filled.

Members of underrepresented groups are strongly encouraged to apply. For a full position announcement and information about how to apply, please view the following url: <http://www.cs.tufts.edu/people/careers>.

Tufts University is an Affirmative Action/Equal Opportunity employer. We are committed to increasing the diversity of our faculty.

Umeå University, Sweden

Department of Computing Science & HPC2N

Post Doctoral Researcher and PhD Student Positions

Umeå University, Sweden is seeking outstanding candidates for 1-3 Post Doctoral and 1-2 PhD Student positions. The positions focus on design of service-oriented Grid infrastructure in projects funded by the Swedish Research Council and EU. See www.gird.se for current research.

The group is affiliated with the Globus Alliance, NESSI, the CoreGRID Network of Excellence, SweGrid, NDGF, and EGEE.

For full announcement and instructions how to apply, see: www.cs.umu.se/openpos/grid or contact Erik Elmroth: elmroth@cs.umu.se.

University of Arizona

Department of Computer Science
Faculty Position

<http://www.cs.arizona.edu>

Applications are invited for a tenure-track faculty position. Our preference is to hire at the Assistant Professor level, but we will consider outstanding applications for a tenured position. Candidates must hold a doctorate in computer science or a related field, has a commitment to excellence in teaching, and demonstrates excellence in research.

The Department of Computer Science at the University of Arizona has a long history of research accomplishment, influential software distribution, and substantial external funding. Currently there are also significant interdisciplinary collaborations, especially with the biological sciences. Major funding has included four NSF infrastructure grants. Current research areas include algorithms, architecture, bioinformatics, compilers, computational geometry, databases, distributed systems, embedded systems, networks, operating systems, security, sensor networks, vision, and visualization.

We welcome applications in all areas. We are particularly interested in candidates whose research is in algorithms, data mining/machine learning, distributed systems/networking, or security.

For full details and instructions on how to apply, please visit:

<http://www.cs.arizona.edu/recruiting/faculty.html>.

Review of applications will begin January 8, 2008 and continue until the positions are filled.

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

University of Arizona

Department of Computer Science
Department Head Position

<http://www.cs.arizona.edu>

Applications are invited for the position of Head of the Department of Computer Science. Candidates should have a Ph.D. in Computer Science or a related field. They are expected to have a strong record of teaching and research at a university, but candidates from industry with a strong research record are also encouraged to apply. Administrative experience, particularly at a university, will be an asset. The successful candidate will bring strong academic leadership, vision, and innovation.

The University of Arizona is well known for its broad research strengths and exceptional interdisciplinary programs and institutes. The Computer Science Department, within the highly regarded College of Science, has a long history of core research in computing science, and is rapidly expanding collaborative efforts across campus. Currently there are 17 faculty, about 100 graduate students,

and 500 undergraduate majors. The department (www.cs.arizona.edu) has an aggressive plan for growth, and the formation of a School of Computational and Mathematical Sciences will improve the positioning of the department across campus and provide substantial new resources including a new building and additional faculty.

The University of Arizona is in Tucson, AZ with a metropolitan population of over 800,000. Spanish, Mexican, and Native American influences mark a city that celebrates its differences and preserves its traditions, and provides a fitting backdrop for a university. The beautiful Sonoran desert, surrounding mountains, and more than 300 days of sunshine each year provide many opportunities to enjoy the outdoors.

Salary for qualified applicants is competitive and commensurate with experience. The position includes a commitment from the university for at least three new faculty lines.

For full details and instructions on how to apply, please visit:

<http://www.cs.arizona.edu/recruiting/head.html>

Review of applications will begin November 15, 2007 and continue until the position is filled. As an equal opportunity and affirmative action employer, the University of Arizona recognizes the power of a diverse community and encourages applications from individuals with varied experiences, perspectives, and backgrounds.

University of California, Berkeley EECS Department

Assistant Professor

The University of California, Berkeley invites applications for several approved tenure-track positions in Electrical Engineering and Computer Sciences at the Assistant Professor level, and one approved position at the Associate or Full Professor level, beginning Fall 2008, subject to budgetary approval. We also consider possible joint appointments with other Berkeley departments. 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 quality 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. Review begins November 15, 2007; candidates are urged to apply by that date. The application period closes February 15, 2008, and applications received after that date will not be considered.

To apply, go to URL:

<http://www.eecs.berkeley.edu/Faculty-Jobs/>.

Online applications are strongly encouraged. If you do not have Internet access, you may mail your application materials to:

CS Search Committee
c/o Debra Zaller
381 Soda Hall
UC Berkeley
Berkeley, CA 94720-1776

Recommenders providing letters should submit them directly via the URL listed above by January 18, 2008. Reference letters are NOT requested directly by the department. Recommenders may view the UC Berkeley Statement of Confidentiality

Professional Opportunities

at <http://apo.chance.berkeley.edu/evalltr.html>.

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

University of California, Davis Department of Statistics Assistant Professor Position

A tenure-track Assistant Professor beginning 7/1/2008. Requires Ph.D. in Statistics or related field and active interest in statistical research problems linked to cosmology at UC Davis (see <http://universe.ucdavis.edu/>).

By 12/1/07, email vitae and research interests to:

universe@wald.ucdavis.edu.

Send at least three letters of reference, reprints/preprints, and transcripts (if Ph.D. after 2006) to:

Universe Search Committee
Statistics Department
University of California
Davis, CA 95616

UC Davis is an affirmative action/equal employment opportunity employer and is dedicated to recruiting a diverse faculty community. We welcome all qualified applicants to apply, including women, minorities, individuals with disabilities and veterans.

University of California, Irvine Donald Bren School of Information and Computer Sciences

Endowed, Distinguished Faculty Positions

Having recently received a transformational gift, the Donald Bren School of Information and Computer Sciences has been endowed with ten "Bren Chairs" which we seek to fill with distinguished scholars who work on emerging issues in any area of information and computational sciences, including cross-disciplinary research integrating information and computer sciences with other disciplines.

These appointments are at the rank of senior, distinguished professor. Future appointments are to begin July 2008 or later. Scholars doing truly cross-disciplinary research may be jointly appointed with another school at UC Irvine.

Candidates should bring an integrative outlook to the discipline, enthusiasm in engaging with professional and business communities and the general public, collaborating with UCI scholars who study issues of information and computing technology, and support for the development of advanced technologies and applications. We envision Bren chairholders to serve as catalysts on campus to establish educational and research programs that foster an interdisciplinary perspective. Accordingly, candidates should not only have a strong disciplinary background with a distinguished record of scholarly publications and extramural funding, but also a proven track record of innovation, collaboration, stimulation and leadership in both education and research.

Candidate screening will begin immediately upon receipt of curriculum vitae. Electronic application is preferred; please refer to the following web site for instructions:

http://www.ics.uci.edu/employment/employ_faculty.php

Applications or nominations should include a cover letter indicating the area of primary research, a CV, up to five recent publications, and identification of five or more references. Paper applications should be sent to:

Attn: Faculty Recruiting – Endowed Distinguished Professor
Donald Bren School of Information and Computer Sciences
University of California, Irvine
Irvine, CA 92697-3425

The Bren School of ICS has excellent faculty, innovative programs, high quality students and outstanding graduates as well as strong relationships with local and national high tech industry. As one of eleven academic units at UC

Irvine, an independent school with three departments—Computer Science, Informatics, and Statistics—the Bren School has a unique perspective on the information technology disciplines that allows a broad foundation from which to build initiatives that explore many applications of computing. With approximately 1000 undergraduates, 100 masters and 275 doctoral students, and 70 faculty members, ICS is one of the largest computing programs in the country.

Many faculty in the school engage in interdisciplinary research through various organizations such as the Institute for Genomics and Bioinformatics (IGB), the California Institute for Telecommunications and Information Technology (Calit2), ACE (Arts Computation Engineering), among others. The Bren School of ICS just dedicated a contemporary high-tech building designed to enhance collaborative research and education, and continues to grow. Outstanding candidates in all relevant areas and at other ranks are encouraged to contact us.

UC Irvine (<http://www.uci.edu>) is targeted as a growth campus for the University of California. It is one of the youngest UC campuses, yet consistently ranks among the nation's best public universities. UCI is located three miles from the ocean in Southern California with an excellent year-round Mediterranean climate. The area surrounding campus offers numerous outdoor and fine arts opportunities and the public school system in Irvine is ranked one of the highest in the nation.

UCI is an equal opportunity employer committed to excellence through diversity and strongly encourages applications from all qualified candidates, including women and minorities. UCI is responsive to the needs of dual career couples, is dedicated to work-life balance through an array of family-friendly policies, and is the recipient of a National Science Foundation ADVANCE award for gender equity.

University of California, Los Angeles

Department of Computer Science Tenure-Track Positions

The Department of Computer Science in the Henry Samueli School of Engineering and Applied Science at the University of California, Los Angeles, invites applications for tenure-track positions in all areas of Computer Science and Computer Engineering. Applications are also encouraged from distinguished candidates at senior levels.

Quality is our key criterion for applicant selection. Applicants should have a strong commitment to both research and teaching and an outstanding record of research for their level. We seek applicants in any mainstream area of Computer Science and Computer Engineering such as software systems, embedded systems and machine learning as well as those with a strength in emerging technologies related to computer science such as bio-computing, nano architectures, and nanosystems.

To apply, please visit:

<http://www.cs.ucla.edu/recruit>.

Faculty applications received by January 31, 2008 will be given full consideration.

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

University of California, Merced School of Engineering Faculty Positions

Applications are invited for tenured and tenure-track faculty positions in Electrical Engineering and Computer Science to begin July 1, 2008.

We seek exceptionally qualified candidates in all areas of Computer Science. Applications from interdisciplinary teams of computer scientists offering an integrated research approach will be considered for a total of two positions at tenured and tenure-track

levels. A Ph.D. in Computer Science or a related field and demonstrated excellence in research are required. Special attention will be paid to applicants who participate in interdisciplinary research. For more information: <http://eecs.ucmerced.edu>

University of California, Santa Barbara

Department of Computer Science Junior Endowed Chair

The Department of Computer Science at the University of California, Santa Barbara, has established a new Endowed Chair to recruit an assistant professor who shows the potential to become a leader in Computer Science research. The Endowment will provide the appointee with annual funds towards his or her research, teaching, and public service. We seek applications from outstanding candidates in all areas of computer science to fill this tenure-track position effective July 2008.

The Department of Computer Science has grown rapidly, both in size and stature, over the past 10 years, accompanied by a five-fold increase in extramural funding. The department, with 30 faculty and more than 100 doctoral students, is part of the College of Engineering, which is ranked among the top 20 in the nation by the 2007 US News and World Report. Additional information about the department and our graduate program can be found at <http://www.cs.ucsb.edu>

Applicants are expected to hold a doctoral degree in Computer Science or a related field, show outstanding research potential, and have a strong commitment to teaching. Primary consideration will be given to applications received by December 15, 2007; however, the position will remain open until filled. Applications should be submitted electronically as PDF documents to:

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

Applications must include a detailed resume, research and teaching statements, and the names and addresses of four references.

The 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 Equal Opportunity/Affirmative Action employer.

University of California, Santa Cruz

Computer Engineering Department Associate/Full Professor Position

The Department of Computer Engineering at the University of California, Santa Cruz invites applications for a tenured (Associate or Full Professor) faculty position. We seek outstanding applicants with research interests in Autonomous Systems. Potential areas of specialization include robotics, control, mechatronics, and assistive technology. The department is launching an initiative in autonomous systems and mechatronic engineering, and seeks an individual to join our core faculty in this area and to lead the development of new research and degree programs.

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, statements of research and teaching plans, URLs of selected reprints, and names of 3-5 people who are willing to write letters of recommendation. We strongly encourage electronic submission of your materials. Directions & information <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 #808

To ensure full consideration, applications must arrive by January 1, 2008.

Information about Baskin School of Engineering at UCSC <http://www.soe.ucsc.edu/>

Information on the positions cerecruit@soe.ucsc.edu.

UCSC is an EEO/AA/IRCA Employer.

University of California, Santa Cruz

Computer Science Department Assistant Professor Positions

The UCSC Computer Science Department seeks qualified applicants for the following tenure-track faculty positions within the Baskin School of Engineering:

Assistant Professors Interests:

Outstanding applicants with research excellence in either computational aspects of videogame design such as artificial intelligence, real-time animation/graphics and HCI; or computational digital media in the context of videogames, including game design, game studies and game art. Position: 810-08

The department has strong graduate and undergraduate programs. Research and instruction are supported by excellent computing facilities and state-of-the-art laboratories in the new Engineering 2 building. UCSC is close to Silicon Valley and has strong ties with many of the high technology companies in the area. Faculty salaries are competitive and opportunities for consulting are extensive.

A detailed job description and application instructions are available at: www.soe.ucsc.edu/jobs/810-081pgflyer.pdf

For full consideration, all materials should reference position number 810-08 and arrive by January 4, 2008.

UCSC is an EEO/AA/IRCA Employer.

University of Central Arkansas Computer Science Department

Faculty Positions

The Computer Science Department at the University of Central Arkansas (UCA) invites applications for two tenure-track faculty positions at the assistant/associate professor level to start in Fall 2008. Applicants should have a PhD degree in an area of computer science and/or computer engineering. All specialties will be considered. A strong commitment to excellence in teaching and to research involving students is expected.

The department offers BS and MS degree programs and enjoys strong support from local corporations. UCA is committed to excellence in undergraduate and graduate education, and was ranked in the top tier of universities in the south in 2006 and 2007. For more information about the department and the university, visit www.cs.uca.edu.

Applicants should send a curriculum vitae, statements of teaching and research interests, transcripts, and at least three letters of reference to:

Chair, CS Search Committee
Computer Science Department
University of Central Arkansas
201 Donaghey Avenue
Conway, AR 72035

Electronic submission may be sent to: CSsearch@list.uca.edu.

Review will begin on January 8, 2008 and continue until the position is filled.

UCA is an Equal Opportunity Affirmative Action Employer.

University of Houston Department of Computer Science Faculty Positions

The Computer Science Department at the University of Houston (www.cs.uh.edu) invites applications for tenure-track faculty positions starting in August 2008. A wide range of research interests within Computer Science will be considered with an emphasis on software

(continued)

Professional Opportunities

design, software engineering, systems, computational biology and bioinformatics, human-computer interaction, robotics and databases. Preference will be given to candidates at the Assistant/Associate Professor level but exceptional candidates at all levels will get full consideration. Candidates should hold a Ph.D. in Computer Science, Computer Engineering, or a closely related field.

The Department has strong research programs in Computer Systems (high performance computing, networks, real-time systems, security), Data Analysis (information retrieval, data mining, machine learning) and Computational Life Sciences (biomedical image analysis, computational biomedicine, bioinformatics, biometrics). The Department places strong emphasis on basic and applied research, teaching, and interdisciplinary programs, and maintains close ties with the Texas Medical Center and several local and national industrial partners. At present, the Department has 25 tenure-track faculty members and is expected to add several more positions in the next 4 years.

Houston offers an outstanding environment for research and professional opportunities for growth and collaboration. It is host to NASA Johnson Space Center and the largest medical center in the country. Houston is also the epicenter of the world's energy industry.

Applicants should submit their curriculum vitae, a statement of research and teaching goals, and up to two representative publications. Junior candidates should arrange for at least three professional references while senior candidates should provide at least six. All application materials should be submitted on-line at:

<http://www.cs.uh.edu/positions>

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

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

University of Illinois at Chicago Department of Computer Science Joint Faculty Position

The University of Illinois at Chicago invites applicants for an open rank, joint faculty position in Computer Science and Learning Sciences beginning August 16, 2008.

The new Learning Sciences (www.lsci.uic.edu) PhD program, housed in the Graduate College, currently has four joint-appointment faculty members in addition to over a dozen active adjunct faculty. The Department of Computer Science (<http://www.cs.uic.edu>), situated in the College of Engineering, has 27 faculty members, including a human-computer interaction group strongly aligned with the Learning Sciences program. The position will also include membership in the UIC Learning Science Research Institute.

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. The tenure line for the position will be within the Department of Computer Science.

UIC is an Affirmative Action/Equal Opportunity Employer seeking applicants from underrepresented groups and/or with 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 the:

LS/CS Search Committee
c/o Monica Soto
Learning Science Research Institute
1007 West Harrison Street
Room 2048 (MC 057)
University of Illinois at Chicago
Chicago, IL 60607

In addition, we would appreciate receiving electronic copies of all application materials at:

lsearch@uic.edu

Review of applications will begin on November 1, 2007 and continue until the position is successfully filled.

University of Maryland University College

Department of Computer Science Adjunct Faculty Positions

Creative. Caring. Committed.

University of Maryland University College (UMUC) is seeking talented faculty to challenge students in one of higher education's most dynamic learning environments.

UMUC is hiring part-time adjunct and full-time non-tenure track faculty nationwide to teach Computer Science courses for on-site and online delivery formats. We invite you to learn more and apply online at:

www.umuc.edu/facultyrecruit

A terminal degree (i.e. PhD, DBA, JD, etc.) from a regionally accredited institution is required to teach the majority of courses at UMUC. However, in some disciplines, a candidate with a master's degree combined with professional certifications, and industry or teaching experience may also be considered.

As a UMUC adjunct faculty, you can share your knowledge and earn additional income while teaching within a flexible schedule that fits into your fulltime professional life. We provide online training for teaching with Webtycho, our state-of-the-art proprietary online platform.

UMUC is one of the 11 degree-granting institutions of the University System of Maryland. The university is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools. Today, we serve a diverse student body of over 90,000 students around the world.

Women and minority applicants are strongly encouraged to apply.
EOE/F/MC/V.

University of Maryland, College Park

Department of Computer Science Assistant Professor Positions

The Department of Computer Science has several openings for faculty positions effective July 1, 2008. We invite applications for Assistant Professor positions to fill the following areas:

- Natural Language Processing
- Computational Biology

This search is being conducted jointly with the Institute for Advanced Computer Studies. Interested candidates can submit their applications directly to that program at <http://www.cbcb.umd.edu>.

Applications from women and minority candidates are especially welcome.

Candidates with established research programs will be considered for joint appointments between the Department and the Institute for Advanced Computer Studies, the Department of Electrical Engineering, and the Institute for Systems Research.

Candidates should submit their application (curriculum vitae and research summary) online at:

hiring.cs.umd.edu

and have their references upload their letters to that site. At least three research letters and one teaching letter are required. We will begin the review of candidates by

January 14, 2008; therefore, we encourage your early application.

Additional information about academic and research units within the Department of Computer Science at the University of Maryland are available on the World Wide Web at:

<http://www.cs.umd.edu> and at <http://www.umiacs.umd.edu>.

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

University of Massachusetts, 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. Strong applicants from all areas of Computer Science will be considered, especially theoretical computer science, vision, computational biology, software engineering and programming languages. 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 R30070 (tenure-track positions) with your vitae, a research statement, a teaching statement and at least three letters of recommendation. We also invite applications for Research Faculty (R30069) and Research Scientist, Postdoctoral Research Associate, and Research Fellow (R30068) positions in all areas of Computer Science. We have particular availability in information retrieval and search. 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, 2007 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 Michigan, Ann Arbor

Department of Electrical Engineering and Computer Science Faculty Positions

Applications and nominations are solicited for faculty positions in the Computer Science and Engineering (CSE) Division. Qualifications include an outstanding academic record, a doctorate or equivalent in computer engineering or computer science, and a strong commitment to teaching and research. Candidates with a focus in the areas of artificial intelligence, security, computer vision, and cyber-physical systems are encouraged to apply. However, all computer science and engineering applications will be considered. Applications must be received by January 14, 2008.

To apply please complete the form at: <http://www.eecs.umich.edu/eecs/jobs/csejobs.html>.

Electronic applications are strongly preferred, but you may alternatively send resume, teaching statement, research statement and names of three references to:

Professor Satinder Singh Baveja, Chair
CSE Faculty Search
Department of Electrical Engineering and Computer Science
University of Michigan
2260 Hayward Street
Ann Arbor, MI 48109-2121

The University of Michigan is a Non-Discriminatory/Affirmative Action Employer with an Active Dual-Career Assistance Program.

University of Minnesota - Twin Cities

Department of Computer Science and Engineering

Faculty Positions

The Department of Computer Science and Engineering at the University of Minnesota-Twin Cities invites applications for two open tenure-track faculty positions at the Assistant Professor level, though outstanding candidates for more senior positions will be considered. Applicants whose research can contribute in a broad sense to one of the following focus areas will be preferred: Concurrency, Trusted Computing, The Social Web, Networking, Novel Display and Interaction Techniques, E-Commerce, and the broad range of computer technologies for Sensing and Acting in the Physical World. (We are interested in a broad set of novel research in all of these areas, ranging from theory to practice. For instance, Concurrency includes areas such as theory, multi-core and distributed architectures, parallel languages, virtualization, etc.) In addition to these focus areas, outstanding candidates in all areas of computer science will also be considered.

Requirements include a Ph.D. in computer science or a closely related discipline, a commitment to quality teaching, and the ability to carry out outstanding, high-impact research. Senior candidates must possess a distinguished record of research, teaching, and leadership. A generous financial and infrastructure package will be provided.

The Department of Computer Science and Engineering has an outstanding faculty of over forty members who have access to excellent computing and research facilities, both within the Department and at various research centers on campus, including the Minnesota Supercomputing Institute and the Institute for Mathematics and its Applications. The Department also plays a prominent role in the Digital Technology Center. Additional information about the Department and the various centers is available at its home page (<http://www.cs.umn.edu>).

Professional Opportunities

Applicants for this position should submit their application, including a curriculum vitae, research and teaching statements, and the names of at least three references through:

<http://www.cs.umn.edu/about/employment/faculty.php>.

Submissions should be in the form of a single PDF document. For full consideration, applications should be received by January 15, 2008. However, the search will remain open until the positions are filled.

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

University of Nevada, Reno Department of Computer Science and Engineering Assistant Professor Position

Applications are invited for a tenure-track Assistant Professor position beginning August 2008. A Ph.D. in Computer Science or Computer Engineering is required by the date of appointment. Candidates should possess a demonstrated potential and strong commitment to quality research and teaching at the undergraduate and graduate levels. Applicants in any area of computer science and engineering will be considered. Candidates having primary interest and expertise in security, systems, or computer games will be given preference. The department is dynamic and growing and offers the BS, MS, and Ph.D. degrees.

The Reno area has four mild seasons and is a scenic half-hour drive to Lake Tahoe, one of the world's most beautiful alpine lakes. The Pacific Crest Trail is nearby and fantastic ski areas abound. San Francisco and the Silicon Valley are within a short half-day's drive.

To apply, submit a letter and vitae through the website at:
www.unrsearch.com/applicants/Central?quickFind=52537.

Additionally, have 3 letters of reference sent to:

Search Committee Chair
Computer Science and Engineering/171
University of Nevada, Reno
Reno, NV 89557

For more information, visit www.cse.unr.edu.

Closing date: January 15, 2008.
EEO/AA.

University of New Orleans Computer Science Department Tenure-Track Positions

The Department of Computer Science invites applications for tenure-track positions.

The appointments will be primarily at the rank of assistant professor with very competitive salary/start up funds and excellent benefits in a very affordable cost of living area. The department has a particular interest in specialists in bioinformatics and computer security.

Detailed information on the positions can be found at:

<http://www.cs.uno.edu/news/facultypositions.htm#securbio>

University of New Orleans Computer Science Department Computational Biology or Biomedical Informatics Positions

The Department of Computer Science at the University of New Orleans and the

Research Institute for Children invite applications for a tenure-track position.

We seek an individual who combines strong computer science background with laboratory expertise, and who is addressing a problem of biomedical importance. The appointment will be at the rank of Assistant Professor of Computer Science, although higher rank may be considered for outstanding senior candidates. A very a competitive salary, excellent benefits, appropriate startup funds, and ongoing seed support are offered.

Detailed information on the position can be found at:

<http://www.cs.uno.edu/news/facultypositions.htm#compbio>.

University of South Carolina at Columbia Department of Biological Sciences Assistant Professor Position

The University of South Carolina at Columbia invites applications for a tenure-track position at the rank of Assistant Professor in the area of Ecological Forecasting. This position is part of the University's Faculty Excellence Initiative (FEI) program, and will enhance an interdisciplinary research group developing forecasts of ecological responses to climate change in coastal regions. The faculty member will be expected to form strong research collaborations with other hires in this cluster and with existing faculty having strengths in this area.

We seek candidates in the following areas:

(i) conservation biogeography, with an emphasis on issues of habitat fragmentation, connectivity, and changes in community composition across biogeographic scales;

(ii) microclimatology, with focus on moisture and energy fluxes in the boundary layer; and

(iii) signal analysis, with experience in environmental science and capacity to "translate" large scale environmental signals to the scale of an individual organism.

Tenure-home departments may include Biological Sciences, Geography, and Computer Science and Engineering, and a joint appointment with the School of the Environment may be possible. Successful applicants are expected to hold a Ph.D, to have a strong publication record, to establish and maintain an extramurally funded research program, and to teach undergraduate and graduate courses. Applicants should submit a letter of application, statements of teaching and research interests, a curriculum vitae and arrange to have three letters of recommendation sent directly to the chair of the search committee:

Prof. B. S. Helmuth
Department of Biological Sciences
University of South Carolina
Columbia, SC 29208

General inquiries may be made via e-mail to:

helmuth@biol.sc.edu
Telephone 803-777-2100
Fax: 803-777-4002

The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, or veteran status.

University of Southern California Department of Biological Sciences Assistant or Associate Professor Position

The University of Southern California invites applications from outstanding applicants for a tenure-track assistant or beginning associate professor position in Computational Biology and Bioinformatics, starting Fall, 2008. Candidates with a strong background in computer science with applications to genomics and proteomics are encouraged to apply. A Ph.D. or equivalent degree is required. The position is in the interdisciplinary Program in Molecular and Computational Biology in the Department of Biological Sciences. A joint appointment with the computer science department is possible. For additional information about our program, visit our website <http://www.cmb.usc.edu/mcb/faculty.php>.

Interested candidates should email a curriculum vitae, including research plans and three reference letters to:

csearch@college.usc.edu
or
Eleni Yokas
Computational Biology Search Committee
Department of Biological Sciences,
RR1201
University of Southern California
Los Angeles, CA 90089-2910

USC values diversity and is committed to equal opportunity in employment. Women and men, and members of all racial and ethnic groups are encouraged to apply.

University of Texas at Dallas Computer Science Department Chair Position

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 2008. 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 5 miles of the campus, including Texas Instruments, Nortel Networks, Alcatel, Ericsson, Hewlett-Packard, Nokia, Fujitsu, MCI, EDS, and Perot Systems. Almost all the country's leading telecommunication's companies have major research and development facilities in our

neighborhood. Opportunities for joint university-industry research projects are excellent. The Jonsson School has experienced very rapid growth in recent years and will become a top-ranked engineering school within the next five years. Based in large part on a 5-year, \$300 million initiative involving the State of Texas, the University of Texas System, and Texas Instruments, the School is strengthening and expanding its programs by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs (see www.ecs.utdallas.edu/welcome/index.html) For more information, contact:

Dr. D.T. Huynh, Department Head, at 972-883-2169, or send e-mail to: cs-search@utdallas.edu or view the Internet Web page at: <http://www.utdallas.edu/dept/cs/>

The search committee will begin evaluating applications as soon as possible and will continue until the positions are filled.

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

The University of Texas at Dallas
P.O. Box 830688, M/S AD 42
Richardson, TX 75083-0688
Academic Search # 7084

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

University of Texas at Dallas Computer Science Department Faculty Position (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 2008. Candidates must have a Ph.D. degree in Computer Science, Software Engineering, and Computer Engineering. Candidates 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 5 miles of the campus, including Texas Instruments, Nortel Networks, Alcatel, Ericsson, Hewlett-Packard, Nokia, Fujitsu, MCI, EDS, and Perot Systems. Almost all the country's leading 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

(continued)

Anita Borg Early Career Award

Nomination Deadline

February 15, 2008

Details: <http://www.cra.org/Activities/craw/borg>

Professional Opportunities

very rapid growth in recent years and will become a top-ranked engineering school within five years. Based in large part on a 5-year, \$300 million initiative involving the State of Texas, the University of Texas System and Texas Instruments, the School is strengthening and expanding its programs (including Bioengineering) by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs (see www.ecs.utdallas.edu/welcome/index.html) For more information, contact Dr. D.T. Huynh, Department Head, at 972-883-2169, or send e-mail to cs-search@utdallas.edu, or view the Internet Web page at <http://www.utdallas.edu/dept/cs/>

The search committee will begin evaluating applications as soon as possible and will continue until the positions are filled.

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

The University of Texas at Dallas
P.O. Box 830688, M/S AD 42
Richardson, TX 75083-0688
Academic Search # 7085

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

University of Texas at Dallas Computer Science Department 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 2008. 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 5 miles of the campus, including Texas Instruments, Nortel Networks, Alcatel, Ericsson, Hewlett-Packard, Nokia, Fujitsu, MCI, EDS, and Perot Systems. Almost all the country's leading telecommunication's companies have major research and development facilities in our neighborhood. Opportunities for joint university-industry research projects are excellent. The Jonsson School has experienced very rapid growth in recent

years and will become a top-ranked engineering school within the next five years. Based in large part on a 5-year, \$300 million initiative involving the State of Texas, the University of Texas System, and Texas Instruments, the School is strengthening and expanding its programs by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs (see www.ecs.utdallas.edu/welcome/index.html) For more information, contact Dr. D.T. Huynh, Department Head, at 972-883-2169, or send e-mail to

cs-search@utdallas.edu, or view the Internet Web page at <http://www.utdallas.edu/dept/cs/>

The search committee will begin evaluating applications as soon as possible and will continue until the positions are filled.

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

The University of Texas at Dallas
P.O. Box 830688, M/S AD 42
Richardson, TX 75083-0688
Academic Search #7083

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

University of Texas at Dallas Department of Computer Science Faculty Position (Bioinformatics)

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 2008. 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 UT 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 5 miles of the campus, including Texas Instruments, Nortel Networks, Alcatel, Ericsson, Hewlett-Packard, Nokia, Fujitsu, MCI, EDS, and Perot Systems. Almost all the country's leading 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 5-year, \$300 million initiative involving the State of Texas, the University of Texas System and Texas Instruments, the School is strengthening and expanding its programs (including Bioengineering) by recruiting outstanding faculty and Ph.D. students, increasing funded research, and establishing new programs (see www.ecs.utdallas.edu/welcome/index.html) For more information, contact Dr. D.T. Huynh, Department Head, at 972-883-2169, or send e-mail to cs-search@utdallas.edu, or view the Internet Web page at <http://www.utdallas.edu/dept/cs/>

The search committee will begin evaluating applications as soon as possible and will continue until the positions are filled.

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

Academic Search # 7086
The University of Texas at Dallas
P.O. Box 830688, M/S AD 42
Richardson, TX 75083-0688

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

University of Tulsa Department of Computer Science Faculty Position

The University of Tulsa invites applications for a full-time, tenure-track position in Computer Science at the rank of Assistant Professor, to begin in Fall 2008. The Department of Computer Science is situated in the College of Engineering and Natural Sciences. The B.S. degree program in Computer Science is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). Computer science faculty have research interests in a wide range of fields, including security, software engineering, artificial intelligence, bioinformatics, and e-commerce. Funding sources include NSF, DARPA, DoD, AFOSR, ARO and the U.S. Secret Service, along with state grants and private industry. Preference will be given to qualified candidates that can extend existing research programs or show potential to independently build a funded program that will broaden the departmental portfolio. Applicants must have a doctorate in computer science at the time of appointment and show a clear commitment to scholarly publication, to obtaining external funding, and to teaching at both undergraduate and graduate levels.

The University of Tulsa is a private university located in a residential area of Tulsa with an enrollment of approximately 4500 students. The U.S. News & World Report ranks The University of Tulsa at 88th out of 248 national doctoral universities. The Department of Computer Science offers the B.S., M.S., and Ph.D. degrees in CS and a B.S. in information systems technology.

Candidates must submit a letter of application, a full curriculum vitae, a detailed description of research interests, a statement of teaching experience and philosophy, and contact information for at least three references. Submissions can be made via email to:

CS-Faculty-Search@utulsa.edu
or by mail to:
Chair, CS Faculty Search Committee
Department of Mathematical and Computer Sciences
The University of Tulsa

600 South College Avenue
Tulsa, OK 74104-3189

Applications will be reviewed starting January 15, 2008 and continued until the position is filled.

The University of Tulsa is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and underrepresented minorities.

University of Utah School of Computing Faculty Position (Computer Systems)

The University of Utah's School of Computing is seeking to hire a tenure-track faculty member in computer systems, especially compilers and/or parallel/distributed systems. Computer systems researchers at Utah have strong ongoing research programs in operating systems, networking, computer architecture, VLSI, programming languages, embedded and real-time systems, and formal verification. Our program includes large, multi-investigator efforts addressing large-scale problems of significant impact, as well as a number of individual investigator research activities. We wish to build upon these successful efforts by adding a dynamic researcher wishing to develop a strong synergistic research program in the computer systems area.

Applicants should have earned a Ph.D. in Computer Science or a closely related field. The University of Utah is located in Salt Lake City, the hub of a large metropolitan area with excellent cultural facilities and unsurpassed opportunities for outdoor recreation only a few minutes' drive away. Additional information about the school can be found at www.cs.utah.edu.

Please send curriculum vitae, a research goals statement, a teaching goals statement, and names and addresses of at least four references to:

Faculty Recruiting Committee
c/o Mr. Chris Coleman
coleman@cs.utah.edu
(Via email in PDF format)

Applications will be evaluated as received. To be assured of full consideration, applications should be received by January 15, 2008.

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

The University of Utah values candidates who have experience working in settings with students from diverse backgrounds, and possess a strong commitment to improving access to higher education for historically underrepresented students.

University of Utah School of Computing Faculty Position (Computer Graphics)

The University of Utah's School of Computing is seeking to hire a tenure-track faculty member in computer graphics at all levels. Since the 1960s when pioneering graphics research became a core focus at Utah, there has been a vibrant congenial community supporting this activity. Being one of the oldest and most successful graphics programs in the nation, Utah and its alums have played a prominent role in the birth and explosive development of computer graphics. Our program includes large, multi-investigator efforts addressing large-scale problems of significant impact, as well as a number of individual investigator research activities. Currently, computer graphics research has strong programs in modeling/manufacturing, realistic rendering, perception, and scientific visualization. We wish to build upon these successful areas with a dynamic researcher seeking to develop a strong synergistic program in the computer graphics area, especially animation

Professional Opportunities

(including physically based animation) or HCI. The School of Computing offers a specialized M.S. and Ph.D. Computing Degree graduate track in Computer Graphics and Visualization.

Applicants should have earned a Ph.D. in Computer Science or a closely related field. The University of Utah is located in Salt Lake City, the hub of a large metropolitan area with excellent cultural facilities and unsurpassed opportunities for outdoor recreation only a few minutes' drive away. Additional information about the school can be found at www.cs.utah.edu.

Please send curriculum vitae, a research goals statement, a teaching goals statement, and names and addresses of at least four references to:

Faculty Recruiting Committee
c/o Mr. Chris Coleman
coleman@cs.utah.edu
(Via email in PDF format)

Applications will be evaluated as received. To be assured of full consideration, applications should be received by January 15, 2008.

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

The University of Utah values candidates who have experience working in settings with students from diverse backgrounds, and possess a strong commitment to improving access to higher education for historically underrepresented students.

University of Utah

School of Computing
Faculty Position (Robotics)

The University of Utah's School of Computing is seeking to hire a tenure-track faculty member in robotics, especially those aspects related to machine learning and artificial intelligence. The School of Computing has jointly established with the Department of Mechanical Engineering the Robotics Track, which is the second graduate program of study in robotics in the US offering M.S. and Ph.D. degrees. Utah is world-famous for the robot systems produced by its spin-off company Sarcos, including the Utah/MIT Dextrous Hand, the Sarcos Dextrous Arm, and various humanoid robots. Recently the University of Utah was awarded an NSF IGERT grant on the theme Biocentric Robotics. This robotics faculty position, plus one other robotics faculty position being offered by the Department of Mechanical Engineering (broadly in the area of Medical Robotics), build upon the IGERT award.

Applicants should have earned a Ph.D. in Computer Science or a closely related field. We seek dynamic young researchers with exceptional research backgrounds who wish to build a strong research program while complementing our current efforts, and are committed to teaching excellence in robotics and related areas of computer science. Please send curriculum vitae, a research goals statement, a teaching goals statement, and names and addresses of at least four references to:

Faculty Recruiting Committee
c/o Mr. Chris Coleman
coleman@cs.utah.edu
(Via email in PDF format)

Applications will be evaluated as received. To be assured of full consideration, applications should be received by January 15, 2008.

The University of Utah is located in Salt Lake City, the hub of a large metropolitan area with excellent cultural facilities and unsurpassed opportunities for outdoor recreation only a few minutes' drive away. Additional information about the school can be found at www.cs.utah.edu.

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

The University of Utah values candidates who have experience working in settings with students from diverse backgrounds, and possess a strong commitment to improving access to higher education for historically underrepresented students.

University of Waterloo

David R. Cheriton School of Computer Science
Chair Positions

Applications are invited for one or more David R. Cheriton Chairs in Software Systems. These are senior positions and include substantial research support and teaching reduction. Candidates with outstanding research records in software systems (very broadly defined) are encouraged to apply. Successful applicants who join the University of Waterloo are expected to be leaders in research, have an active graduate student program and contribute to the overall development of the School. A Ph.D. in Computer Science, or equivalent, is required, with evidence of excellence in teaching and research. Rank and salary will be commensurate with experience, and appointments are expected to commence during the 2008 calendar year. The Chairs are tenured positions.

With over 70 faculty members, the University of Waterloo's David R. Cheriton School of Computer Science is the largest in Canada. It enjoys an excellent reputation in pure and applied research and houses a diverse research program of international stature. Because of its recognized capabilities, the School attracts exceptionally well-qualified students at both undergraduate and graduate levels. In addition, the University has an enlightened intellectual property policy which vests rights in the inventor: This policy has encouraged the creation of many spin-off companies including iAnywhere Solutions Inc., Maplesoft Inc., Open Text Corp and Research in Motion. Please see our website for more information <http://www.cs.uwaterloo.ca>.

Applications should be sent by electronic mail to:
cs-recruiting@cs.uwaterloo.ca

By post to:
Chair, Advisory Committee on Appointments
David R. Cheriton School of Computer Science
200 University Avenue West
University of Waterloo
Waterloo, Ontario N2L 3G1 Canada

An application should include a curriculum vitae, statements on teaching and research and the names and contact information for at least three referees. Applicants should ask their referees to forward letters of reference to the address above. Applications will be considered as soon as possible after they are complete, and as long as positions are available.

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

University of Wisconsin-Madison Computer Sciences Department *Tenure-Track Position*

The Computer Sciences Department at the University of Wisconsin-Madison has an opening for a tenure-track Assistant Professor.

We invite applications from outstanding candidates in all areas of Computer Science. Applicants should

have a Ph.D. in Computer Science or in a closely related field, and demonstrated strength in scholarly research. Successful candidates will be expected to teach at the undergraduate and graduate level, in addition to establishing a significant and highly-visible research program.

The department is pleased to be a recipient of a Clare Boothe Luce Professorship, which provides salary support and discretionary research funding for an outstanding junior, US citizen or permanent resident, woman faculty member. Should the successful candidate meet the requirements of the Professorship, she will be offered the Professorship subject to final approval by the Henry Luce Foundation.

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

Chair, Faculty Recruiting Committee
Computer Sciences Department
University of Wisconsin-Madison
1210 W. Dayton Street
Madison, WI 53706-1685

Electronic submissions of all application material will also be accepted see:

<http://www.cs.wisc.edu/recruiting> for details

Applicants are encouraged to submit their applications (along with supporting material) as soon as possible, but no later than January 21, 2008.

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

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

Utah State University

Department of Computer Science
Assistant/Associate Professor Position

We invite applications from applicants with research in Software Testing, Broadening Participation in Computing, Parallel and Distributed Systems, or Security.

Apply online:
<http://jobs.usu.edu/applicants/Central?quickFind=52583>
AA/EOE

Washington State University & Harvard University

Computer Science Department
Joint Postdoctoral Fellowship
In Collaboration with the USGS
Cascades Volcano Observatory and NASA JPL:

<http://sensorweb.vancouver.wsu.edu/people/postdoc.pdf>

Washington University in Saint Louis

Department of Computer Science and Engineering
Faculty Positions

The School of Engineering and Applied Science at Washington University has embarked on a major initiative to expand its programs and facilities. As part of this initiative, the Department of Computer Science and Engineering is seeking outstanding faculty in the broad area of digital systems and architecture, including embedded computing, advanced multi-core architectures and hybrid computing systems. We have a special interest in candidates seeking to develop multi-disciplinary collaborations with colleagues in related disciplines. On the applications side, this may include collaborations in systems biology, neural engineering and genetics. On the technology and basic science side, it may include collaborations in electrical engineering, materials and physics. Successful candidates must show exceptional promise for research leadership

and have a strong commitment to high quality teaching at all levels.

Our faculty is engaged in a broad range of research activities including hybrid computing architectures, networking, computational biology, robotics, graphics, computer vision, and advanced combinatorial optimization. The department provides a supportive environment for research and the preparation of doctoral students for careers in research. Our doctoral graduates go on to positions of leadership in both academia and industry. The department values both fundamental research and systems research with the potential for high impact, and has a strong tradition of successful technology transfer. Limits on undergraduate enrollments and the university's growing popularity allow us to offer small classes and close personal attention to a diverse student body of exceptional quality. A faculty known for its collegiality provides a supportive environment for new arrivals. A progressive administration reaches out to academic couples seeking to co-locate, and promotes policies that reward research, teaching, and innovative new initiatives.

Washington University is one of the nation's leading research universities and attracts top-ranked students from across the country and around the world. It is a medium-sized institution, with roughly 6,000 full-time undergraduates and 6,000 graduate students, allowing it to provide both a strong sense of community and a broad range of academic opportunities. Its six professional schools provide advanced education in engineering, medicine, social work, business, law, architecture and art. It has exceptional research strengths in the life sciences and medicine, creating unmatched opportunities for interdisciplinary collaborations for faculty in computer science and engineering. It has one of the most attractive university campuses anywhere, and is located in a lovely residential neighborhood, adjacent to one of the nation's largest urban parks, in the heart of a vibrant metropolitan area. St. Louis is a wonderful place to live, providing access to a wealth of cultural and entertainment opportunities, while being relatively free of the everyday hassles and pressures of larger cities.

Applicants should hold a doctorate in Computer Engineering, Computer Science or Electrical Engineering. Qualified applicants should submit a complete application (cover letter, curriculum vita, research statement, teaching statement, and names of at least three references) electronically to:

recruiting@cse.wustl.edu

Other communications may be directed to Dr. Jonathan Turner at:

jon.turner@wustl.edu

Applications will be considered as they are received. Applications received after January 15, 2008 will receive limited consideration.

Washington University is an equal opportunity/affirmative action employer.

Wellesley College Computer Science Department *Faculty Positions*

Wellesley College is delighted to announce two faculty openings beginning September 2008. The first is for a tenure-track Assistant Professor in Computer Science; the second is for a two-year Hess Fellowship, generously funded by the Norma Wilentz Hess Faculty and Program Fund in Computer Science.

Applicants should have a Ph.D. (or be close to completion) in Computer Science or a related discipline. Strong candidates in any area of specialty will be considered, but we especially encourage applicants in computer systems, computer security, architecture, software engineering, and artificial intelligence, as well as interdisciplinary fields such as human/computer interaction, bioinformatics, educational computing, and ethical, social, and legal aspects of computing.

(continued)

Professional Opportunities

Wellesley College is a highly selective private undergraduate liberal arts college for women that place heavy emphasis on excellence in teaching as well as research. For more information about applying please visit <http://cs.wellesley.edu/cs/positions.html>.

For more information about being a faculty member at Wellesley please see http://www.wellesley.edu/DeanCollege/Diversity/Open_pos/prospectfac.pdf.

The complete application should include a CV, research and teaching statements, and three letters of recommendation, and should be submitted to:

CSSearch@firstclass.wellesley.edu

Applications will be considered until the position is filled. For full consideration, all materials should be received by December 31, 2007.

Questions should be directed by email to Professor Metaxas at pmetaxas@wellesley.edu.

Wellesley College is an Affirmative Action/Equal Opportunity Employer, and we are committed to increasing the diversity of the college community and the curriculum. Candidates who believe they can contribute to that goal are encouraged to apply.

Wright State University

Department of Computer Science and Engineering

Tenure-track Faculty Positions

The Department of Computer Science and Engineering (CSE) at Wright State University seeks applicants for two tenure track Assistant Professor positions. The Department is one of the four departments in the College of Engineering and Computer Science and offers B.S., M.S. and Ph.D. degrees both in Computer Science and Computer Engineering. Candidates for these positions are expected to have an earned Ph.D. in computer science, computer engineering or a closely related field and evidence of scholarship in that field appropriate to the position. Successful candidates will be expected to participate fully in the Department through research, teaching, and service.

The focus of the current search is for faculty specializing in data management, integration and analysis (including Web search, data/text mining, and knowledge discovery), Web2.0/Web3.0/Semantic Web and related research (including use of IR/NLP/KR/AI/learning/statistical approaches), Services Science, and distributed computing using Grid or Service Oriented Architectures. Successful candidates may be able to find significant opportunities for collaborations within the department (e.g., see the Kno.e.sis Center, <http://knoesis.wright.edu>) and across the region with potential for interdisciplinary research in biomedicine, healthcare, and defense applications with the neighboring Wright-Patterson Air Force Base (WPAFB).

The CSE Department currently has 25 faculty members, more than 400 undergraduate students, 90 M.S. and around 40 Ph.D. students. It is housed in an attractive engineering building with well equipped research laboratories. The departmental facilities recently received significant enhancement with the completion of the 50,000 sq.ft. Joshi Research Center, which houses the Kno.e.sis Center, additional research labs, and faculty offices. This addition was made possible by a \$11M award from the State of Ohio to establish a Wright Center of Innovation for Advanced Data Management and Analysis. Salaries and resources are competitive. Additional information about the programs and faculty of the Department as well as any update regarding this advertisement can be found at:

<http://www.cs.wright.edu/cse>><http://www.cs.wright.edu/cse>

Wright State University, an institution of nearly 17,000 students, is located on a

spacious campus with a significant area of protected green space in a growing high-technology suburban community. It is surrounded by commercial (Lexis-Nexis, NCR, Reynolds & Reynolds, etc.) and defense companies, as well as government (e.g., WPAFB) research and development facilities. The University is proactively committed to industrial and government partnerships for research and economic development ventures. A variety of affordable and pleasant living environments, schools and parks, attractive to professionals and families, are conveniently located close to the campus.

Wright State University has a strong institutional commitment to diversity, and we are particularly interested in receiving applications from a broad spectrum of professionals, including underrepresented groups, women, persons with disabilities, and veterans.

Applicants should provide a brief statement of their research, teaching interests, and professional goals. The application should include a complete vita with the names, addresses, telephone numbers, and e-mail addresses of at least four references, plus any additional supporting information. Send applications and supporting information to:

Tenure Track Faculty Search Committee

Department of Computer Science & Engineering

3640 Colonel Glenn Hwy

Wright State University

Dayton, OH 45435

Consideration of candidates begins October 11, 2007 and continues until the positions are filled. For details and additional information, you may contact:

Prof. Thomas Sudkamp, Chair
thomas.sudkamp@wright.edu>thomas.sudkamp@wright.edu

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

Wright State University

Department of Computer Science & Engineering

Chair and Professor Position

The College of Engineering and Computer Science at Wright State University (WSU) in Dayton, Ohio is seeking exceptional candidates for the position of Chair of the Department of Computer Science and Engineering.

The Department of Computer Science and Engineering has 24 full-time faculty members, including eminent scholars and an open NCR Distinguished Professorship. The department offers undergraduate and graduate degrees in computer science and computer engineering. Student population includes over 400 undergraduates, 70 masters, and 30 doctoral students. The department has sustained remarkable growth in faculty strength and numbers, endowed positions, funded research, research centers, new and expanded facilities, and recent state initiatives for technology transfer and industrial incubation and collaboration. The department is well positioned for future expansion through initiatives aligned with emerging research priorities and support of the Dayton region, a recognized hub for IT in both defense and private sectors.

Please see: <http://www.engineering.wright.edu/cse>

Successful candidates are required to have an earned Ph.D. in computer science, computer engineering, or closely related discipline; a balanced record of scholarship, teaching, and service appropriate for the rank of full Professor; and documentation of research leadership. The successful candidate will develop a shared vision for enhancing educational and research programs in the framework of collegiality, enabling effective leadership of an innovative department.

Applicants should submit the following (electronic Word or PDF preferred): cover letter; curriculum vitae; statement of research; statement of education and

leadership philosophies; and names and contact information of five references.

Please submit applications via email to:

CSEChairSearch@wright.edu

or mail to:

CSE Chair Search Committee
College of Engineering and Computer Science

Wright State University

3640 Colonel Glenn Hwy

Dayton, OH 45435

Review of applications will begin January 7, 2008 and continue until the position is filled.

Wright State University is an AA/EO employer.

Yale University

Computer Science Department
Junior Faculty Positions

The Yale Computer Science Department intends to hire one or more highly qualified candidates for tenure-track junior faculty positions beginning in the 2008-2009 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 should hold a Ph.D. in computer science or related discipline. Applications submitted by January 15, 2008 will be given highest priority. Qualified women and minority candidates are encouraged to apply. Yale is an affirmative action/equal opportunity employer. Our home page may be found at <http://www.cs.yale.edu>

Applications should be submitted online at:

<http://www.cs.yale.edu/positions.html>

Questions may be directed to faculty-recruiting@cs.yale.edu

Image of Computing
from Page 4

End Notes

- Higher Education Research Institute at the University of California at Los Angeles, CIRP Freshman Survey. CRA's analysis of the data can be found in the article "Low Interest in CS and CE Among Incoming Freshmen," Jay Vegso, *CRA Bulletin*, <http://www.cra.org/wp/index.php?p=104>.
- Invited Talk, "Changing the Image of Computer Science," Maria Klawe, 2005.
- The press release for the 2007 NACE Salary Survey is available at <http://www.naceweb.org/>. CRA's analysis of NACE data for CS majors can be found in the article "Starting Salary Offers to CS Majors, 1990-2007," Jay Vegso, *CRA Bulletin*, <http://www.cra.org/wp/index.php?p=127>.
- USACM Technology Blog, CRA Study, "IT Job Prospects and Salaries on the Rise," 2007.
- ACM, "Globalization and Offshoring of Software—A Report of the ACM Job Migration Task Force," Aspray, Mayadas, Vardi, 2006.
- National Bureau of Labor Statistics, *Fastest Growing Careers*, 2005.
- "Continued Drop in CS Bachelor's Degree Production and Enrollments as the Number of New Majors Stabilizes," Jay Vegso, *Computing Research News*, Vol. 19/No. 2, March 2007.
- Point Loma Nazarene University, "Why Are Students With the Apparent Aptitude for Computer Science Not Choosing to Major in Computer Science?" Lori Carter, SIGCE 2006.
- IEEE Technology and Society Magazine*, "Just Ask! Why Surveyed Women Chose Not to Pursue IT Courses and Careers," Catherine J. Weinberger, 2004.
- Pew Internet & American Life Project, "Social Networking Websites and Teens: An Overview," Amanda Lenhart and Mary Madden, 2007.
- "Student Perceptions of Computer Science: A Retention Study Comparing Graduating Seniors vs. CS Leavers," Georgia Institute of Technology, Biggers, Brauer and Yilmaz, 2007.
- Position Paper for ICER 06, "Re-creating Computer Science," Peter Denning, 2006.

Postdoctoral Associate

Stony Brook University's Department of Computer Science seeks a Postdoctoral Associate. The Lydia project builds a relational model of people, places, and other entities through natural language processing of news sources and the statistical analysis of entity frequencies and co-locations. This model can be used to identify trends and other information flows through this entity network. Please visit <http://www.textmap.org/> to see our analysis of recent news and blog postings obtained from more than 500 daily online news sources. A two-year post-doctoral position is now available to join our team. **Required:** The applicant should have a background in one of the following: (1) natural language processing or artificial intelligence, (2) text mining or data mining, (3) graph algorithms and the science of networks, or (4) data analysis or visualization. The applicant will be expected to use his/her expertise to improve the quality of our analysis, and help manage a team of roughly ten graduate students as we shift beyond technological issues to questions of what this data means and how best to exploit it. As per sponsor requirements, applicants must be U.S. citizens who hold or will soon hold a Ph.D. in computer science, linguistics, economics, or any related field. Applications will be accepted until the position is filled.

For more information and to apply online visit www.stonybrook.edu/jobs or send


your vita and contact information to: Steven Skiena
Department of Computer Science, Stony Brook University
SUNY, Stony Brook, NY 11794-4400

Email: skiena@cs.sunysb.edu

Equal Opportunity/Affirmative Action Employer.

**STONY
BROOK**

Professional Opportunities



RightNow Technologies
Distinguished Professor of
Computer Science

The Montana State University Computer Science Department is searching for a computing researcher with established or rising prominence in the field. He or she will have an earned Ph.D. in Computer Science or a closely related field, a record of attracting competitive funding, an excellent publication record, and success in mentoring Ph.D. students, or equivalent. The appointment will be at the Associate or Full Professor level, based on experience. A 3-year start-up package that includes additional salary is being provided by RightNow Technologies, which is a leading provider of next-generation Customer Relationship Management solutions to more than 1,800 companies and government agencies worldwide. RightNow is based in Bozeman.

The department prides itself on its growing research endeavors and its innovative curriculum. It attracts highly capable students, including five recent Goldwater scholars and five recent *USA Today* Academic All Americans. Montana State University is a Carnegie Foundation Tier 1 research university with an enrollment of approximately 12,000.

MSU is located in Bozeman, a picturesque Rocky Mountain community of 40,000, situated 90 miles north of Yellowstone National Park. Nearby outdoor recreation includes world-class downhill and cross-country skiing, fishing, backpacking, camping, and wildlife watching. Bozeman enjoys excellent schools and medical services comparable to those found in much larger communities.

Please refer to www.cs.montana.edu/search.php for more information on position requirements and application procedures. ADA/EO/AA/Veterans Preference.

Director - School of Electrical and Computer Engineering – #07616

Located in Ithaca, N.Y., Cornell University is a bold, innovative, inclusive and dynamic teaching and research university where staff, faculty, and students alike are challenged to make an enduring contribution to the betterment of humanity.

Cornell University's College of Engineering invites nominations and applications for the position of Director of the School of Electrical and Computer Engineering. Nominations and applications of women and underrepresented minorities are especially encouraged.

Cornell University, the largest of the Ivy League institutions, has a \$6B endowment, seven world class colleges, 20,000 students and world-renowned faculty. This diverse and vibrant learning community offers an extraordinary wealth of academic resources and research facilities. Located in Ithaca, NY, the picturesque campus is surrounded by the natural beauty of the Finger Lakes.

The largest of the schools and departments in the College of Engineering, the School of Electrical and Computer Engineering, is housed in Phillips Hall, Rhodes Hall, and Duffield Hall, one of the country's most sophisticated nanoscience facilities. The School benefits from a major investment in facilities, faculty, and a capital campaign with a focus on growing its significant endowment.

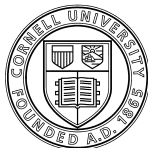
The School of Electrical and Computer Engineering (www.ece.cornell.edu) has tremendous strengths arising from its outstanding faculty, numerous Cornell-based national centers for interdisciplinary research, a balanced emphasis on science and engineering, rich traditions, and a vibrant and fostering environment that breaks down traditional department and discipline boundaries. The School graduated this past year 114 BS, 95 MEng, 20 MS, and 29 PhD students.

The Director is the chief academic and administrative officer of the School providing professional leadership and example with responsibility for overseeing the school governance; curriculum and program development; faculty and student recruitment, development and retention; financial and facilities management, and external relations to enhance the School's reputation and position.

The ideal candidate will possess the following characteristics:


- An earned doctorate degree in electrical or computer engineering or a related field
- A record of excellence as a scholar including outstanding research and a strong commitment to teaching
- The ability to engage faculty to develop a common vision and to successfully influence change to achieve that vision
- Demonstrated leadership and administrative effectiveness including experience in strategic planning, goal setting, fiscal management, and the attainment of organizational objectives
- Excellent communication, problem-solving, conflict management, and negotiation skills with a record of building effective relationships with faculty, staff, alumni, and industry leaders
- Demonstrated commitment to fostering an environment that supports equity and diversity
- The ability to contribute to fund raising activities by inspiring interest in, and commitment to, the School

Applications should include a cover letter, a statement that describes the candidate's interest and qualifications for the position and a curriculum vita. The position will remain open until filled. Review of materials will begin immediately and continue until the new director is selected. Nominations and applications should be sent electronically to ecedirectorsearch@cornell.edu



Cornell University
 Cornell University is an Affirmative Action/
 Equal Opportunity Employer and Educator.

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



The University of New Mexico
Great people doing great things

COMPUTER SCIENCE
FACULTY POSITIONS
 Requisition JR#6318A/B

Department of Computer Science

The Department of Computer Science invites applications for two probationary faculty appointments leading to a tenure decision 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 but not limited to systems and networks, theory and algorithms, software design and engineering, graphics and visualization, 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; preference will be given to candidates in the following fields: bioinformatics and biological computation; embedded systems and sensor networks; scientific computing and simulation; human-computer interaction and social computing; large scale data handling and mining; physics and computing; or game theory and economics.

For more information refer to full job ad at: <http://www.cs.unm.edu/jobs/>

Candidates must have completed a doctorate in CS or a relevant area by August 15, 2008. Applicants should demonstrate a strong commitment to undergraduate and graduate education, have a research profile in one of the general CS areas enumerated above, the ability to establish a nationally visible research program, and demonstrated interest in one of the preferred areas specified above.

For best consideration, complete applications must be received by January 1, 2008. Positions will remain open until filled. Each application must include a cover letter, curriculum vita, research statement, 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#6318A/B, and must include an original signature (handwritten on paper). A hard-copy cover letter is required, but the rest of the application materials may be submitted electronically via:


<https://www.cs.unm.edu/faculty-search>

Cover letters and printed applications should be sent to:

Professor Terran Lane
 Chair, Faculty Search Committee
 Department of Computer Science, MSC 01 1130
 1 University of New Mexico
 Albuquerque, NM 87131

Inquiries should be sent to: faculty_search@cs.unm.edu

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



UNIVERSITY OF ALBERTA
 EDMONTON, ALBERTA, CANADA

www.careers.ualberta.ca

Assistant or Associate Professor, Graphics

The Department of Computing Science at the University of Alberta is seeking a qualified individual to fill a tenure track position at the level of Assistant Professor or junior Associate Professor in the areas of computer graphics, visualization and/or human-computer interaction. Candidates must have a PhD in Computing Science or Electrical Engineering, with specialization in one or more of the above areas. The candidate is expected to establish their own research program, supervise graduate students, and teach at both the graduate and undergraduate level. The Department highly values curiosity-driven research.

The Department is well known for its collegial atmosphere, dynamic and well-funded research environment, and excellent teaching infrastructure. It's faculty are internationally recognized in many areas of computing science, and enjoy collaborative research partnerships with local, national, and international industries. The University of Alberta, located in the provincial capital of Edmonton, is one of Canada's largest and finest teaching and research institutions, with a strong commitment to undergraduate teaching, community involvement, and research excellence. As a population center of over one million people, Edmonton offers a high-quality, affordable lifestyle that includes a wide range of cultural events and activities, in a natural setting close to the Canadian Rockies. Alberta's innovative funding initiatives for supporting and sustaining leading-edge IT research have attracted world-class researchers and outstanding graduate students to our department and to the campus. Further information about the Department and University can be found at <http://www.cs.ualberta.ca/>.


The competition will remain open until a suitable candidate is found. Candidates should submit a curriculum vitae, a one-page summary of research plans, a statement of teaching interests and reprints of their three most significant publications.

Interested applicants may apply to:

Iris Everitt, Administrative Assistant
 Department of Computing Science
 University of Alberta
 Edmonton, Alberta, Canada T6G 2E8
 Email: everitt@cs.ualberta.ca

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. The University of Alberta hires on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.

Professional Opportunities



The University of New Mexico
Great people doing great things

SENIOR COMPUTER SCIENCE FACULTY POSITION
Requisition #JR6317

Department of Computer Science

The Department of Computer Science invites applications for one tenured or probationary appointment leading to a tenure decision faculty position at the Associate or Professor level. Candidates should have a well-established and vigorous computer science research program, in an area including but not limited to systems and networks, theory and algorithms, software design and engineering, graphics and visualization, 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; preference will be given to candidates in the following fields: bioinformatics and biological computation; embedded systems and sensor networks; scientific computing and simulation; human-computer interaction and social computing; large scale data handling and mining; physics and computing; or game theory and economics.

For more information refer to full job ad at: <http://www.cs.unm.edu/jobs/>

Candidates must have a doctorate in CS or a relevant area, should have a demonstrated commitment to undergraduate and graduate education, should have an active and nationally visible research program, have a research profile in the general CS areas enumerated above and a demonstrated interest in the preferred areas specified above.

For best consideration, complete applications must be received by February 15, 2008. The position will remain open until filled. This position is available as early as August 2008. Each application must include a cover letter, curriculum vita, copies of 1-3 representative research papers, research statement, teaching statement, and the names and email addresses of three or more individuals that have agreed to provide letters of reference.

The cover letter should summarize the applicant's experience, indicate the level of the appointment sought and the anticipated starting date, refer to JR#6317, and must include an original signature (handwritten on paper). A hard-copy cover letter is required, but the rest of the application materials may be submitted electronically via:

<https://www.cs.unm.edu/faculty-search>

Cover letters and printed applications should be sent to:
Professor Terran Lane
Chair, Faculty Search Committee
Department of Computer Science, MSC 01 1130
1 University of New Mexico
Albuquerque, NM 87131-1386

Inquiries should be sent to: faculty_search@cs.unm.edu

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



School of Electrical Engineering and Computer Science

The School of Electrical Engineering and Computer Science at Oregon State University invites applications for up to three tenure-track positions in Computer Science. The School of EECS strongly encourages teamwork and collaboration within the School, and with other departments and universities. We are particularly interested in candidates who can contribute richness and depth to our Graphics/Visualization, End-User Software Engineering and Machine Learning groups. The following areas are strong possibilities for collaboration with these groups: Computer Vision; Human Computer Interaction; Natural Language Processing; Parallel and Distributed Computing (including multi-core and data center computing); Programming Languages; Software Engineering; and Theoretical Computer Science (including algorithms and optimization).

Applicants should have an earned doctorate in Computer Science/Computer Engineering and demonstrate a strong commitment to high-quality undergraduate and graduate teaching and the development of a vibrant research program.

OSU is one of only two American universities to hold the Land Grant, Sea Grant, Sun Grant, and Space Grant designation and is the only Oregon institution recognized for its "very high research activity" (RU/VH) by the Carnegie Foundation for the Advancement of Teaching. With a faculty of 45, the School of EECS enrolls 1300 undergraduate and 300 MS/PhD students.

For more information, including instructions for application, visit <http://www.eecs.oregonstate.edu>. OSU is an AA/EOE.

Computer Science at TTI-Chicago Faculty Positions at All Levels

Toyota Technological Institute at Chicago (TTI-C) is a recently established institute of computer science located on The University of Chicago campus. Applications are being accepted for faculty positions at all ranks. In addition to traditional faculty positions, TTI-C is also seeking limited term faculty positions. The Institute is expected to grow to a steady-state of 12 traditional faculty (tenure and tenure track), and 18 limited term faculty by 2010.

TTI-Chicago is supported by the earnings on a fund of \$105 million. We are dedicated to education of Doctoral students and to basic research in fundamental areas of computer science. Faculty members are expected to receive continuing research grants and will have a teaching load of one course per year in a quarter system. TTI-C has close ties with the Computer Science Dept. of The University of Chicago.

Faculty is particularly sought with research programs in computer vision, theoretical computer science, computational linguistics, computational biology, electronic commerce and scientific computing.

For all positions we require a Ph.D. Degree or Ph.D. candidacy, with the degree conferred prior to date of hire. Submit your application electronically at:

<http://ttic.uchicago.edu/facapp>



Toyota Technological Institute at Chicago is an Equal Opportunity Employer.



www.careers.ualberta.ca

Assistant or Associate Professor, Database-Data Mining

The Department of Computing Science at the University of Alberta is seeking a qualified individual to fill a tenure track position at the level of Assistant Professor or junior Associate Professor in the areas of databases and/or data mining. Candidates must have a PhD in Computing Science or Electrical Engineering, with specialization in one of the above areas. The candidate is expected to establish their own research program, supervise graduate students, and teach at both the graduate and undergraduate level. The Department highly values curiosity-driven research.

The Department is well known for its collegial atmosphere, dynamic and well-funded research environment, and excellent teaching infrastructure. Its faculty are internationally recognized in many areas of computing science, and enjoy collaborative research partnerships with local, national, and international industries. The University of Alberta, located in the provincial capital of Edmonton, is one of Canada's largest and finest teaching and research institutions, with a strong commitment to undergraduate teaching, community involvement, and research excellence. As a population center of over one million people, Edmonton offers a high-quality, affordable lifestyle that includes a wide range of cultural events and activities, in a natural setting close to the Canadian Rockies. Alberta's innovative funding initiatives for supporting and sustaining leading-edge IT research have attracted world-class researchers and outstanding graduate students to our department and to the campus. Further information about the Department and University can be found at <http://www.cs.ualberta.ca/>.

The competition will remain open until a suitable candidate is found. Candidates should submit a curriculum vitae, a one-page summary of research plans, a statement of teaching interests and reprints of their three most significant publications.

Interested applicants may apply to:

Iris Everitt, Administrative Assistant
Department of Computing Science
University of Alberta
Edmonton, Alberta, Canada T6G 2E8
Email: everitt@cs.ualberta.ca

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. The University of Alberta hires on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.