

# COMPUTING RESEARCH NEWS

Computing Research Association, Celebrating 40 Years of Service to the Computing Research Community

January 2012

Vol. 24/No. 1

## Computing Researchers Get ‘Schooled’ on Science Policy at CCC Workshop

By Peter Harsha and Fred Schneider

As part of its mission to develop a next generation of leaders in the computing research community, the Computing Research Association’s Computing Community Consortium recently held its inaugural Leadership in Science Policy Institute (LiSPI).

This one-day workshop was intended to educate a small cadre of computing researchers on how science policy in the U.S. is formulated and how our government works. Participants heard candid and “off-the-record” views from people who do it or have done it. Thirty-four computer scientists and engineers from twenty-five different universities and research organizations attended the November 7, 2011 workshop.

The workshop offered sessions on: interacting with Federal science agencies, how new initiatives are created within agencies, the role of Federal advisory committees, the Federal budget process, the arguments for supporting research in computing, how to talk to policymakers, and a rather candid discussion from two staffers on

the House Science, Space and Technology committee. LiSPI participants were required to complete both pre- and post-workshop homework assignments.

LiSPI co-organizer Fred Schneider started the day by outlining the goals of the workshop. Participants then heard from representatives of three key science agencies: Jeannette Wing, former Assistant Director for Computer and Information Science and Engineering at the National Science Foundation; Milton Corn, from the National Institutes of Health; and Henry Kelly, from the Department of Energy. This panel explained that influencing policy decisions at a Federal agency involves a somewhat different skill set and approach than influencing faculty peers, the Congress, or the White House.

The panelists also discussed how agencies provide opportunities for researchers to shape Federal policy in their fields—by serving on advisory committees and by taking rotations as program managers,

division directors or office directors. The three panelists also discussed how new agency initiatives get started, focusing on the culture and traditions that create the lens through which agencies view themselves and are viewed by others.

In the next session, Edward Lazowska, Chair of CCC, and Herb Lin, from the Computer Science and Telecommunications Board of the National Research Council, described the role and dynamics of advisory committees that are found at nearly every level of the Federal government. The speakers discussed how those committees work (in theory and practice), why they sometimes do not work, how members are chosen, and who they are intended to influence (as well as who they actually influence). Lazowska has served on a multitude of Federal committees, and Lin has run dozens of studies for CSTB, so these speakers were particularly well qualified to discuss how issues get raised and vetted, how outcomes get finalized and disseminated, how committees do their jobs, and how members of the community can be effective when serving on these committees.

LiSPI participants then heard two tutorials: one on the Federal budget process by R&D budget “guru” (and Assistant Director for Federal

Research and Development for the White House’s Office of Science and Technology Policy) Kei Koizumi; and one on “Making a Federal Case for Computing” from CRA Director of Government Affairs (and LiSPI co-organizer) Peter Harsha. Koizumi walked the audience through the mechanics of the Federal budget process, including key milestones and inflection points in the process. He also explained impacts of the congressional debt relief “supercommittee” (still in session then) on Federal science budgets in the future. Harsha focused on the case that the computing community makes to justify taxpayer dollars in support of research.

Practical advice on “Having the Conversation” with policymakers was offered by a former congressional staffer and current member of the Microsoft Technology Policy Group, Elizabeth Grossman. Grossman described how policymakers approach meetings with researchers and how researchers might be best prepared to provide useful input. She also had participants work in small groups to craft statements about their own research area; a few volunteers then presented their

Computing Researchers Get ‘Schooled’ - Continued on Page 4

### Inside CRN

Expanding the Pipeline..... 2	Professional Opportunities..... 5
Undergraduate Award Winners ..... 3	Snowbird Preliminary Program ..... 24

## NSF, NIST Do Surprisingly Well in FY 2012 Appropriations

By Peter Harsha

Despite relatively meager marks from the House and Senate for FY12 science budgets, a few key science agencies received a bit of a surprise in November when congressional appropriators provided final funding levels that exceeded those previously approved levels. The National Science Foundation and National Institute of Standards and Technology both will see increases in FY12 compared to FY11, and NASA, which had been slated for large cuts, will see those cuts mitigated somewhat. In the bill, NSF will see an increase of 2.5 percent versus its FY11 level, NIST will see an increase of \$33 million, and NASA will see a decrease of \$648 million—though markedly better than the \$1.6 billion cut originally proposed.

The increases were provided in the so-called “minibus” FY 2012 appropriations bill—a package containing three relatively uncontroversial appropriations bills: Agriculture; Commerce, Justice, Science; and Transportation, Housing and Urban Development. In an effort to make some progress on the stalled appropriations process, the Congressional leadership elected to

package in one bill the three measures that were relatively easy to pass, work out the differences between the Senate and House versions, then bring it quickly to the floor for a vote.

The science community had been somewhat pleased earlier this summer when the House appropriators approved their version of the Commerce, Justice, Science bill and managed to hold NSF’s funding flat for FY12. In a bill where essentially every other account was cut, this was seen as a win. The community was less pleased when the Senate released its version of the CJS bill, however, which included a cut of 2.4 percent to the agency, a reduction of \$162 million vs. FY11. Going into the conference for the minibus, those figured to be the MAX and MIN case for NSF in the negotiations.

But, in a bit of a surprise, NSF received an increase in the conference agreement of \$172 million in FY12 compared to FY11. Of that \$172 million increase, \$155 million is slated for the agency’s Research and Related Activities directorate “to enhance basic research critical innovation and U.S. economic

competitiveness.” Also faring well is NIST, which will receive an additional \$33 million over FY11 “to support core NIST scientific research programs that help advance U.S. competitiveness, innovation, and economic growth.”

NASA will see a decrease of about \$648 million, which is not quite as bad as first thought. NASA will also be able to continue work on the James Webb Space Telescope, but funding for cost overruns in the program will have to come out of other existing programs at the agency.

In the minds of many in the science community, this result is very positive, especially considering the alternatives thought to be on the table. It’s clear that the argument that basic research is a necessary piece of the chain of innovation still has currency in Congress, and that is very important in this overall atmosphere of belt-tightening. Both parties still recognize that federal support for basic research is an investment with real payoff for the country’s future.

NSF, NIST Do Surprisingly Well - Continued on Page 23

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

CRA  
1828 L Street, NW  
Suite 800  
Washington, DC 20036

## Expanding the Pipeline

# Collaborative Research Experience for Undergraduates: The CREU Program

By Andrea Danyluk

### Computing Research Association

#### Board Officers

Eric Grimson  
*Chair*  
Massachusetts Institute of Technology  
Laura Haas  
*Vice Chair*  
IBM Almaden Research Center  
Martha E. Pollack  
*Secretary*  
University of Michigan  
Ronald Brachman  
*Treasurer*  
Yahoo!

#### Board Members

Sarita Adve  
University of Illinois, Urbana-Champaign  
Annie I. Antón  
North Carolina State University  
William Aspray  
University of Texas at Austin  
Carla Brodley  
Tufts University  
Alva Couch  
Tufts University  
Mary Czerwinski  
Microsoft Research  
Susan B. Davidson  
University of Pennsylvania  
Mary Fernández  
AT&T Labs Research  
Limor Fix  
Intel  
Edward Fox  
Virginia Tech  
Jean-Luc Gaudiot  
University of California, Irvine  
Brent T. Hailpern  
IBM Almaden Research Center  
Mary Jean Harrold  
Georgia Institute of Technology  
H.V. Jagadish  
University of Michigan  
Norman Jouppi  
Hewlett Packard  
Rangachar Kasturi  
University of South Florida  
James Kurose  
University of Massachusetts  
Margaret Martonosi  
Princeton University  
J Strother Moore  
University of Texas at Austin  
Peter Norvig  
Google  
David Notkin  
University of Washington  
M. Tamer Özsu  
University of Waterloo  
Fred B. Schneider  
Cornell University  
Robert Schreiber  
Hewlett Packard  
Valerie Taylor  
Texas A&M University  
Jonathan Turner  
Washington University in St. Louis  
Jeannette M. Wing  
Carnegie Mellon University  
Ellen W. Zegura  
Georgia Institute of Technology

#### Executive Director

Andrew Bernat

#### CRN Editor

Jean Smith

The Collaborative Research Experience for Undergraduates (CREU) program encourages and supports undergraduate women and minorities in computing research. It was started by CRA-W under the name “CREW” in 1998, and since 2004 has been administered collaboratively by CRA-W and the Coalition to Diversify Computing (CDC).

The goal of CREU is to increase the number of women and minorities who continue on to graduate school in computer science and computer engineering. Teams of undergraduates work with faculty member sponsors at their home institutions on research projects during the academic year and optionally the following summer. Acknowledging the significant and wide-ranging impact that computing has on virtually all disciplines, the CREU program includes not only computing research, but also multidisciplinary research. In the case of multidisciplinary projects, a team consists of faculty from both the computing and non-computing fields as well as students from these respective fields.

Research shows that peer support can have a significant impact on persistence in computer science education and that women, in particular, benefit from having a critical mass of female colleagues. Thus, in providing students with research support, the CREU program emphasizes collaboration and cohort. The CREU program also implements, either directly or indirectly, several recommendations for recruiting and retaining women in computing research, which have been put forth by Cuny and Aspray ([http://www.cra.org/uploads/documents/resources/workforce\\_history\\_reports/rrwomen.pdf](http://www.cra.org/uploads/documents/resources/workforce_history_reports/rrwomen.pdf)), as well as others. These include: providing a vehicle by which students can learn about the opportunities and rewards of a research career, as well as the preparation required; giving individual encouragement to undergraduates from underrepresented groups; and providing a natural environment for actively and diligently mentoring students.

### Building Positive Research Experiences: Becoming a Member of a Research Team

Students in CREU projects tend to already know their advisors and each other. This level of familiarity from the start, together with regular meetings, collaboration, and an overall shared sense of purpose, makes it possible for the students to build strong relationships with each other and to have a strong sense of belonging to a research community. The ability to work on the project through an entire academic year and into the next summer provides a complete research experience that can be more difficult to achieve in a shorter period of time.

CREU students receive stipends for their work, both during the academic year and during the summer. This acknowledges the research as an important contribution to computer science and, of course, the students themselves.

### Becoming a Member of the Wider Research Community

Students participating in CREU are strongly encouraged to submit papers to journals and to present papers or posters at national or regional conferences. The program provides travel funds to support such participation, and CREU participants over the years have found this to be extremely valuable. They are able to meet researchers from outside their home institutions and receive feedback and advice on their work from a broad audience. More generally, having the opportunity to participate in the wider research community is both exciting and empowering.

Beginning in 2009-10, the CREU co-directors have designated one conference each year as the “CREU cohort conference.” For the 2009-10 cohort the meeting place was the Grace Hopper Celebration of Women in Computing 2010 in Atlanta. And for the 2010-11 cohort it was the Tapia Celebration of Diversity in Computing, held in San Francisco. Many CREU groups attended these meetings, presented posters on their research, and gathered for social events together with student and faculty participants in DREU, the Distributed Research Experiences for Undergraduates program (also a CRA-W and CDC collaboration).

The next official CREU cohort meeting place will be the Grace Hopper Celebration of Women in Computing 2012.

### Preparation for Graduate School and Other Programs

CREU participants work closely with their faculty mentors and, in some cases, also have the opportunity to interact with post-docs and graduate students. As a result, in addition to “trying out” research for themselves, students can begin to get a sense of what they might expect from graduate

school and a career in research. Their interactions with mentors can naturally lead to conversations about graduate school and the application process, and if the collaboration works well, the advisor will be in a good position to write strong letters of recommendation that speak directly to a student’s independence, creativity, and enthusiasm. In general, the student becomes more competitive for graduate admissions, fellowships, and other programs. All of these are especially important, given the evidence that women and underrepresented minorities are subject to stereotype threat and that they do not promote themselves the way their majority male counterparts do.

### CREU Project Successes

CREU teams have addressed a wide range of topic areas over the years, and many of those teams have been quite successful. Given space constraints, we cannot cover all of the success stories here, but instead we provide a sample of some recent projects.

In 2009-10, a group of students at the South Dakota School of Mines and Technology, together with their advisor, embarked on a project to study frameworks for developing multi-touch applications to enhance K-12 education. Their goals were to determine the type of interface that would allow teachers to devise interactive multi-touch applications effectively, to determine the effect that the multi-touch platform would have on student learning, and to determine whether multi-touch platforms could be made affordable enough to be accessible to low-income schools. Based on this work, the team placed third at the National Finals of the Microsoft ImagineCup in Washington, D.C. and had several other opportunities to present their work. Through their work, the students not only gained experience and confidence themselves, but they served as role models through their outreach activities to K-12 students.

In 2010-11, a group from the University of Puerto Rico, Mayaguez studied body-area networks for bio-

Expanding the Pipeline -  
Continued on Page 4

### Discipline-Specific Mentoring Workshops Call for Proposals due January 15, 2012

CRA-W and CDC are jointly soliciting proposals for discipline-specific mentoring workshops within computing sub-fields. The goal of these workshops is to increase the participation of members of underrepresented groups within a specific research area by providing career-mentoring advice and discipline-specific overviews of past accomplishments and future research directions.

[www.cra-w.org/discipline](http://www.cra-w.org/discipline)

#### Affiliate Societies



# CRA Announces Outstanding Undergraduate Researcher Award Winners

The Computing Research Association honors the recipients of its 2012 Outstanding Undergraduate Researcher Awards, sponsored this year by Mitsubishi Electric Research Labs (MERL). Microsoft Research and MERL sponsor the awards in alternate years.

## Sarah Cannon – Female Awardee



**Sarah Cannon** is a Senior at Tufts University majoring in Mathematics with a Computer Science minor.

Sarah has contributed to an impressive variety of research projects, working with a broad range of researchers. Most recently, she has been looking into spontaneous self-assembly of nanoscale devices. The process can be viewed as a tiling problem with constraints, but several different abstract models have been proposed. Sarah has proved new results comparing these models and their ability to simulate one another.

In separate work, she has devised algorithms and complexity results for the problem of orienting undirected graphs, and made contributions to minimal surface theory.

Sarah works as an academic tutor and taught a robotics workshop for kindergarten and elementary school students. She is also a dedicated field hockey player, and has been recognized by the NCAA as an outstanding scholar-athlete.

## Justin Cheng – Male Awardee



**Justin Cheng** is a Senior at Cornell University majoring in Computer Science.

Social networks support both one-way communication (e.g., broadcasts by a celebrity) and two-way communication (e.g., discussions). Justin has analyzed communication patterns to automatically classify relationships as reciprocal or non-reciprocal, paving the way for improved recommendation systems.

In other work, Justin has investigated ways that computer interfaces can motivate behavior, leading to papers on fun interfaces that encourage users to provide tags for images, and contemplative interfaces that promote slowness and self-reflection.

As a teaching assistant, Justin has mentored students from a large range of backgrounds.

## Karthik Narayan – Male Awardee

**Karthik Narayan** is a Senior at the Georgia Institute of Technology majoring in Computer Science and Discrete Mathematics.



Games and other modern applications require computers to create natural language text dynamically. One method is to combine pre-

constructed templates, but when the collection of possible templates becomes large, managing their interactions can be difficult. Karthik has applied machine-learning techniques to templates, using controlled user studies to show that his work reduces the effort required to construct and maintain large collections.

Between this and other research projects, including algorithms for multi-agent reinforcement learning, Karthik has co-authored four publications as an undergraduate.

Beyond his own work, Karthik has helped freshman and sophomore students get involved in computer science research at Georgia Tech.

## Peter Chapman – Male Runner Up



**Peter Chapman** is a Senior at the University of Virginia majoring in Computer Science and Cognitive Science.

Computer security and privacy is a critical concern, especially when medical issues are involved. Peter developed a method for automatically searching web applications to find side-channel vulnerabilities in web applications. He applied new statistical tools to better describe these vulnerabilities. In the end, he determined that 88% of queries to Google Health could be recovered by an eavesdropping adversary.

Peter has also worked on secure computation, where parties collaborate on computing a function of two inputs without exposing the inputs to each other. He has proposed novel applications of secure computation in smartphones, and is working on an improved approach to mobile secure computation, relying on the network carrier to provide suitable streams of randomness.

## Svilen Kanev – Male Runner Up



**Svilen Kanev** is a Senior at Harvard University majoring in Computer Science.

Energy-efficient hardware can produce unwanted power fluctuations due to subsystems powering down and powering up. Svilen showed that this voltage noise can be mitigated in multicore systems by intelligently scheduling threads and by controlling compiler optimization levels. A very strong experimentalist, he has also built detailed performance

simulations of the Atom CPU microarchitecture, including power modeling, and validated them against real hardware.

Additionally, Svilen is the lead contributor to the AI system used in competition by the Harvard-MIT Robot Soccer Club, working on everything from the high-level strategy language down to low-level embedded controls.

## Sarah Chasins – Female Runner Up



**Sarah Chasins** is a Senior at Swarthmore College majoring in Computer Science and Behavioral Economics.

Although we expect programs to run quickly, novel language features can make efficient implementations difficult. Sarah designed and produced a new way of compiling the Plaid language, whose support for typestate abstractions permits objects to change their fields and methods on the fly, in well-structured ways. Compared to a previous Java-based implementation, Sarah's JavaScript-based implementation produces code that is 47 times faster.

In an earlier project, Sarah worked on using embedded sensors in smartphones to draw conclusions about the user and the environment.

Sarah works as a teaching assistant and, as a head TA, trains new teaching assistants in the CS Department.

## Lavanya Jose – Female Runner-Up



**Lavanya Jose** is a Senior at Princeton University majoring in Computer Science.

Lavanya's research has focused on efficient online algorithms for measuring Internet traffic, studying the tradeoffs between accuracy and overhead for problems such as finding Hierarchical Heavy Hitters. Based on this work she developed OpenSketch, a configurable three-stage pipeline designed to run on network switches; it permits many different building blocks that can be combined to do interesting traffic-measurement tasks.

As a separate project, Lavanya has worked to improve WordNet, a lexical database of English widely used in computational linguistics and natural language processing.

## Finalists, Female Award

**Rebecca Pottenger**, Princeton University; **Dorsa Sadigh**, UC Berkeley.

## Finalists, Male Award

**Jacob Andreas**, Columbia University; **Matthew Bryan**, University of Washington; **Forrest Iandola**,

University of Illinois at Urbana-Champaign; **Kyle Murray**, University of Rochester; and **Rohan Sharma**, University of Illinois at Urbana-Champaign.

## Honorable Mentions, Female Award

**Jiamin Chen**, University of Virginia; **Eunsol Choi**, Cornell University; **Camille Cobb**, Washington and Lee University; **Stephanie Dietzel**, University of Washington; **Fraida Fund**, Polytechnic Institute of New York University; **Brittany Nicholls**, McDaniel College; **Halley Orshan**, University of Rochester; **Kaitlin Pollock**, University of Pennsylvania; **Adina Rubinoff**, University of Rochester; **Cecilia Schudel**, Columbia University; **Virginia Smith**, University of Virginia; **Emily Tsang**, McGill University; **Julia Warnke**, University of Nebraska at Omaha; and **Hilary Worden**, University of Washington.

## Honorable Mentions, Male Award

**Grant Ayers**, University of Utah; **Constantin Berzan**, Tufts University; **Kevin Black**, Harvey Mudd College; **Adam Blank**, Carnegie Mellon University; **Ben Braun**, University of Texas at Austin; **Kyle Brogle**, Boston University; **Elliott Brossard**, University of Washington; **George Brova**, Boston University; **Tyler Denniston**, Northeastern University; **Thomas Dodson**, University of Kentucky; **Corey Engelman**, Rochester Institute of Technology; **David Gagne**, University of Southern Maine; **Connor Gramazio**, Tufts University; **Daniel Grier**, University of South Carolina; **Jonathan Harper**, Mississippi State University; **Marc Khoury**, Ohio State University; **Nathan Malkin**, Brown University; **Matthew Manley**, University of Virginia; **Jimmy Li**, McGill University; **John Monaco**, Pace University; **Stefan Muller**, Harvey Mudd College; **Stuart Pernsteiner**, Harvey Mudd College; **Eeshan Shah**, Virginia Tech; **Vinay Shah**, University of Massachusetts, Amherst; **Antal Spector-Zabusky**, Williams College; **Malcolm Stagg**, Louisiana State University; **Alec Story**, Cornell University; **Sameep Tandon**, UC Berkeley; **Faez Ul Haq**, Princeton University; **Grant Van Horn**, UC San Diego; **Victor Vu**, University of Texas at Austin; **Zhihong Xu**, Princeton University; and **John Zhuang**, Columbia University

*This year's Selection Committee included Chris Stone (Harvey Mudd College) Chair; Amy Dalal (Carleton College); Richard Korf (UCLA); Michael Loui (University of Illinois at Urbana-Champaign); and Jon Turner (Washington University in St. Louis).*

*The Outstanding Undergraduate Researcher Award competition is announced each year in mid-August; nominations are due in mid-October; and the results are announced by December 1. For details, see: <http://www.cra.org/awards/undergrad/>*

Computing Researchers Get ‘Schooled’ from Page 1

statements which led to discussion and feedback.

Current congressional staff members Dan Byers, from the House Science, Space and Technology committee majority, and Dahlia Sokolov, from the committee’s minority staff, took to the podium to describe the unique difficulties of communicating the value of research to our elected officials and the difficulties of prioritizing science investments in the current political and fiscal climate. Both Byers and Sokolov spoke candidly about challenges they face in an increasingly polarized Congress, noting that the Science committee is not immune from the increasing partisanship.

Schneider concluded the workshop with a session about serving as a witness at a congressional hearing. He played video-taped highlights from a recent hearing on the Federal Networking and Information Technology R&D (NITRD) program. To start, participants viewed the opening five-minute statements from CCC’s Lazowska and Bob Sproull (formerly director of research at Oracle Labs)—each presenting a “case for funding computing research.” Schneider then played two questions that Members of Congress put to the witnesses during the hearing. Chairman Mo

Brooks (R-AL) asked how to justify increased NITRD funding given today’s budget climate, and Rep. Roscoe Bartlett (R-MD) asked how to justify increased IT investment given its small effect on balance of trade. Participants were asked to craft 30-second answers to both questions as their “final exam” for the day.

The feedback from all of the participants was quite positive (see box with comments from two participants). For CRN readers interested in details about what was presented, slides from the speakers are posted on the web ([http://cra.org/ccc/spi\\_agenda.php](http://cra.org/ccc/spi_agenda.php)). Moreover, chances are quite good that CRA will seek to put on similar programs in the future, since there is an acute need to develop a community of computer scientists who can participate in science policy. If you would like to be considered for participation in those programs, keep an eye on the Computing Research Policy Blog (<http://cra.org/blog>) and the CCC Blog (<http://cccblog.org>) for an announcement. ■

In Their Own Words



Beki Grinter, Associate Professor, Georgia Tech School of Interactive Computing

*“In Washington the national is local. As various speakers talked about opportunities and challenges, I was struck by how, in Washington, the nation is the focus.”*

*“It’s not always about research dollars . . . To make the case, our arguments need to be grounded in examples and evidence that the outputs of computing research can continue to positively influence the nation.”*

*“It’s not that anyone needs to spend a lot of time in Washington, but in order to be effective, spending the right time in Washington is crucial.”*

*“To work with staff means to respect and value not just their autonomy and ability to move legislation forward, but also their time. Most meetings in DC with staff will at best be 15 minutes long . . .”*



Peter Stone, Associate Professor of Computer Science, UT-Austin

*“I believe the benefits [of participating in policy-making] are personal—in networking and in enjoying the process itself.”*

*“. . . computing affects how we conduct commerce, how we learn, our employment, our health care, how we manufacture, how government functions, how we preserve national security, how we communicate, and how we’re entertained. It also enables changes in science and engineering.”*

*“Timing is important. The best argument will have no impact if it’s not made at the time in the annual cycle when the topic in question is on peoples’ minds.”*

*“The process is slow. Budgets need to be set 1.5 to 2 years before the start of a given fiscal year.”*

Expanding the Pipeline from Page 2

telemetric applications. Focusing on monitoring vital signs of firefighters, their goals were to determine the appropriate parameters for monitoring a firefighter’s health, to develop routing protocols to optimize communication, and to develop hardware to withstand the harsh environment in which it would be used. The students gave several presentations on their work, including a poster presentation at the CAHSI Conference in San Juan, Puerto Rico. At the CAHSI conference, one of the students also led an undergraduate student panel about research experiences for undergraduates. Like the group above, these students not only developed their own skills and confidence, but actively sought out opportunities to be role models for others.

Feedback on CREU

Over 540 underrepresented students have participated in 223 CREU projects over the years. Students report that they learn a great deal through their CREU experience and that they develop stronger research and leadership skills. Many are inspired to apply to graduate school and find that CREU helps them to clarify their career choices. More generally, students develop a better sense of themselves as computer scientists. As one participant said,

*“My advisor pushes my team hard in a good way, where I am no longer proving my worth as a female but as a scientist.”*

How to Propose a CREU Project

Applications to the CREU program are in the form of research proposals. Students should be actively involved in writing the proposal, with the guidance and support of their faculty mentors. The proposal should contain a project description, the specific questions to be addressed or hypotheses to be investigated, the plan and methods for carrying out the research, and a summary of related work on the topic along with appropriate citations. In addition, the proposal should describe the student and faculty responsibilities and the timeline.

The proposal is also the means by which the CREU program gets to know the students who would be involved in the project. Thus the proposal should include relevant information about the students, such as their transcripts and explanations of the ways in which the CREU project would provide a meaningful experience for them. For more information on CREU, please go to: <http://cra-w.org/collaborative-research-experience-for-undergraduates-creu>

CREU reviews project proposals once a year. The proposal deadline is typically in early May. ■

*Andrea Danyluk is a professor in the Computer Science Department at Williams College. She is a member of CRA-W and co-directs the CREU program with Jamika Burge, a member of the Coalition to Diversify Computing. CREU is funded by a grant from the NSF Broadening Participation in Computing (BPC) program.*

**CRA-W  
Anita Borg  
Early Career  
Award**

**Nomination  
Deadline:  
February 15, 2012**

**Details:  
<http://www.cra-w.org/borg>**

**DREU: Distributed Research Experiences  
for Undergraduates**

*(formerly the DMP, Distributed Mentor Project)*

**Application Deadline:  
February 15, 2012**

**Details: <http://parasol.tamu.edu/dreu/Application.php>**

## Professional Opportunities

### Accenture

#### *Technology Labs Software Architect*

Accenture is a global management consulting, technology services and outsourcing company with offices and operations in more than 200 cities in 52 countries. Our clients span the full range of industries around the world and include 96 of the Fortune Global 100 and three-quarters of the Fortune Global 500.

Accenture Technology Labs, which investigates how advances in technology will shape the future of Accenture and its clients, is a great place for researchers interested in working at the intersection of technology and business. We investigate fundamental problems in areas such as software engineering; hardware, software, and system architecture; large-scale data management; human-computer interaction; machine learning; cyber security. We conduct research in these and other areas, and apply the results to important business problems, such as:

- Architecting, migrating to, and operating next-generation, large-scale business systems.
- Rethinking the way enterprise software systems will be designed to maximize resilience and business agility in a cost-effective way.
- Improving the efficiency of the development, testing, deployment, and management of large-scale software systems.
- Transforming the way companies gain insight about - and interact with - their customers.
- Transforming the way companies manage and support their employees. We currently have multiple openings.

To Apply:

Cyber Security Researcher: <http://careers.accenture.com/us-en/jobs/Pages/jobdetails.aspx?lang=en&job=00132966>

Digital Experiences Researcher: <http://careers.accenture.com/us-en/jobs/Pages/jobdetails.aspx?lang=en&job=00134103>

Data and Platforms Researcher: <http://careers.accenture.com/us-en/jobs/Pages/jobdetails.aspx?lang=en&job=00141574>

Software Engineer: <http://careers.accenture.com/us-en/jobs/Pages/jobdetails.aspx?lang=en&job=00139114>

Software Platform Architect: <http://careers.accenture.com/us-en/jobs/Pages/jobdetails.aspx?lang=en&job=00139112>

Software Architecture Researcher: <http://careers.accenture.com/us-en/jobs/Pages/jobdetails.aspx?lang=en&job=00132050>

### Advanced Digital Sciences Center / University of Illinois Urbana-Champaign

#### *Research Positions for Integrative Security Assessment of Smart Grid Cyber Infrastructure Project*

The University of Illinois' Advanced Digital Sciences Center (ADSC) in Singapore seeks post-doctoral fellows and research scientists for an exciting new project in "Integrative Assessment of Smart Grid Cyber Security Infrastructure." The project will develop methodologies for expressing and integrating disparate types of security evidence (e.g., formal proofs, results of penetration experiments on test-beds, results of simulation experiments) into an integrative security assessment. We seek candidates with expertise in one or more of the following areas: computer and network security, system modeling (formal and/or stochastic), or modeling and simulation of computer and communication systems.

Successful applicants will possess a PhD in electrical engineering, computer engineering, computer science, or a closely related field. Further information is available at <http://adsc.illinois.edu/employment.html>.

### Arizona State University

#### *Faculty Positions*

Arizona State University (ASU) seeks applicants for tenure track faculty positions. Areas of interest include but are not limited to:

- Cyber Security – Multiple positions are available in the area of resilience, security, privacy and interoperability in cyber systems within the Faculty of Computer Science and Engineering and the Faculty of Electrical Engineering.
- Secure Computer Architecture – One position in the area of secure computer architecture for emerging technologies within the Faculty of Computer Science and Engineering.
- Personalized Learning and Language Processing – One position in the area of natural language processing, intelligent tutors and other personalized learning applications within the Faculty of Computer Science and Engineering.

Current information regarding these positions and instructions for applying are available at <http://engineering.asu.edu/hiring/>.

Arizona State is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply. ASU's complete non-discrimination statement can be found at: [www.asu.edu/titleIX](http://www.asu.edu/titleIX)

### Ball State University Department of Computer Science Assistant Professor

Tenure-track faculty position available August 17, 2012, with specialty in software engineering, computer architecture operating systems, networking, or security. Responsibilities: teaching courses for computer science majors with primary interest in one of the previously listed specialties; supervising graduate students; scholarship, including publications and presentations.

Minimum qualification: earned doctorate in computer science or closely related field by August 17, 2012. Preferred qualifications: Ph.D. in computer science; demonstrated teaching ability; publications and/or evidence of other scholarly contributions.

Send cover letter, curriculum vitae, official transcripts, and the names and contact information for three references to: Dr. Paul Buis, Chairperson, Department of Computer Science, Ball State University, Muncie, IN 47306. Review of applications will begin immediately and will continue until the position is filled. ([www.bsu.edu](http://www.bsu.edu))

Ball State University is an equal opportunity, affirmative action employer and is strongly and actively committed to diversity within its community.

### Brown University Department of Computer Science Faculty Positions Available

The Department of Computer Science at Brown University invites applications for multiple faculty positions starting on September 1, 2012. The search is open to all ranks with a preference for junior applicants. All areas of Computer Science will be considered with preference given to those candidates who best meet the teaching and research needs of the department. All applicants should have a demonstrated potential for excellence in research and teaching.

The department has 24 tenured and tenure-track faculty members as well as several adjunct, research, and visiting faculty members. Department members frequently take advantage of Brown's interdisciplinary culture via collaborations with numerous other departments and centers, including Africana Studies, Applied Mathematics, Art, Biology,

Brain Science, Cognitive Linguistic and Psychological Sciences, Computational Molecular Biology, Computer Vision, Economics, Engineering, Mathematics, Medicine, the Physical Sciences, and Psychology.

Brown University is located in Providence, RI, close to Narragansett Bay, an hour from Boston and about three hours from New York City. Providence has been consistently rated as among the Northeast's most livable cities and is home to diverse intellectual, artistic, and business communities.

Junior applicants must have completed all requirements for the doctoral degree by September 1, 2012. The initial appointment as assistant professor is for four years and is renewable. Applicants for a junior position must submit 3 letters of reference, and senior candidates should submit 5 names of references whom the committee may contact.

These should be submitted online through the Computer Science Department's website (<http://cs.brown.edu>) which became active in November, 2011. Applications will be considered until the position is filled.

Inquiries may be addressed to [faculty\\_search\\_2012@cs.brown.edu](mailto:faculty_search_2012@cs.brown.edu).

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

### Bryn Mawr College Computer Science Department Postdoctoral Research Fellow: Machine Learning

The Bryn Mawr College computer science department invites applications for a Postdoctoral Fellow in machine learning. The Fellow will conduct research on lifelong learning and knowledge transfer, focusing on the development of methods for continually learning and refining knowledge over multiple successive learning tasks in problem domains (including image recognition, and agent control/coordination in USARSim). Depending on individual and departmental interests, the Fellow may also have opportunities to teach.

The position will begin in early 2012 and will be renewable for up to 2.5 years. A Ph.D. in computer science (or a related field) is required. The position will report to Professor Eric Eaton. The compensation package includes a competitive salary, benefits, career mentoring, and conference travel support.

For further details, visit <http://cs.brynmawr.edu/opening.html>

To apply, e-mail a single PDF file to [postdocsearch@cs.brynmawr.edu](mailto:postdocsearch@cs.brynmawr.edu) that includes: a cover letter indicating your starting availability, curriculum vitae, research statement, hyperlinks to three representative publications, and contact information for at least two references. Applications will be accepted until the position is filled; preference will be given to applications received by December 1, 2011.

Bryn Mawr College is an affirmative action/equal-opportunity employer. Minority candidates and women are especially encouraged to apply.

### Bucknell University Assistant Professor of Computer Science

Applications are invited for a tenure track assistant professor position in computer science, preferably at the entry-level (four or fewer years of full-time teaching experience with a recent Ph.D.), beginning mid-August 2012. Outstanding candidates in all areas will be considered. We are particularly interested in candidates whose research area is compatible with teaching a theory of computation course. Background in the area of programming languages would

be a plus. Candidates are expected to have completed their Ph.D. requirements in computer science or a closely related field by August 15th, 2012. A strong commitment to excellence in teaching and scholarship is required. The successful candidate must be able to participate in the teaching of required core courses and be able to develop elective courses in the candidate's area of expertise.

Bucknell is a highly selective private university emphasizing quality undergraduate education in engineering and in liberal arts and sciences. The B.S. programs in computer science are ABET accredited. The computing environment is Linux/Unix-based. More information about the department can be found at: <http://www.bucknell.edu/ComputerScience/>

Applications will be considered as received and recruiting will continue until the position is filled. Candidates are asked to submit a cover letter, CV, a statement of teaching philosophy and research interests, and the contact information for three references. Please submit your application to <http://jobs.bucknell.edu/> by searching for the "Computer Science Faculty Position".

Please direct any questions to Professor Stephen Guattery of the Computer Science Department at [guattery@bucknell.edu](mailto:guattery@bucknell.edu).

Bucknell University values a diverse college community and is committed to excellence through diversity in its faculty, staff and students. An Equal Opportunity/Affirmative Action Employer, Bucknell University especially welcomes applications from women and minority candidates.

### Carnegie Mellon University H. John Heinz III College Tenure-Track Faculty Position in Societal-Scale Data Analysis

The H.J. Heinz III College of Carnegie Mellon University is seeking tenure-track candidates at the assistant professor level with strong training in statistical machine learning and data mining and a demonstrated commitment to addressing challenging applications in important societal or management contexts. Applications should include CV, research and teaching interests, 2-3 representative papers, and three letters of reference. Review of applications will begin December 1st.

Please see the full position announcement at [www.heinz.cmu.edu/ssda-faculty-search](http://www.heinz.cmu.edu/ssda-faculty-search).

Carnegie Mellon University is an AA/EO employer.

### Clemson University School of Computing Multiple Tenure-Track Faculty Positions

The Divisions of Computer Science and Visual Computing in the School of Computing at Clemson University invite applicants for multiple tenure-track faculty positions at the rank of Assistant Professor. Applicants with exceptional qualifications may be considered at a higher rank. We are especially interested in persons specializing in data analytics, network systems, scientific computing, software engineering, visualization, and wireless sensor networks. Highly qualified candidates in all computing areas that meet our goals of growing collaborative and multi-disciplinary research will also be considered.

Clemson University is entering a period of exciting change and anticipates growing the faculty significantly over the next five years through a series of cluster hires. As part of this initiative, we also seek candidates with demonstrated interests and background for collaborative research in one or more strategic growth areas, including applied ecology, environmental,

## Professional Opportunities

and geosciences; applications of medicine and health IT; or with industrial partners in South Carolina's manufacturing industry, including the automotive industry. The School of Computing is located in a new building, has 38 faculty members, about 350 undergraduate majors, and over 200 graduate students. The School offers B.A., B.S., M.S., and Ph.D. degrees in Computer Science, a Ph.D. degree in Human Centered Computing, an M.F.A. degree in Digital Production Arts, a B.S. degree in Computer and Information Science, and an interdisciplinary program in Systems Engineering. The School is designated by NVIDIA as a CUDA Research Center.

Clemson is the land grant university of South Carolina and has an enrollment of approximately 19,000. U.S. News & World Report has ranked Clemson in the Top 25 nationally among public universities for the past three years, and Clemson ranks number 8 among U.S. public universities in supercomputing. Clemson is connected via the C-Light fiber-optic research network to NLR, Internet2, and other research sites by 16 individual 10-Gigabit connections. Clemson University is located in Clemson, South Carolina, a small college town on beautiful Lake Hartwell at the foothills of the Blue Ridge Mountains, conveniently situated within a two hour drive from both Atlanta and Charlotte. For additional details, please see: <http://www.clemson.edu/computing/>

Applicants should have a Ph.D. in Computer Science or a related discipline. Electronic applications, including names of three references, a teaching statement, and a research statement explaining relevance to the search focus, should be sent to [soc\\_search@lists.clemson.edu](mailto:soc_search@lists.clemson.edu) as a single PDF attachment. Links to papers and demonstration videos are encouraged. We will begin accepting and reviewing applications immediately. Applications received by January 15, 2012, will receive full consideration. The search will continue until the positions are filled.

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

### Colgate University Department of Computer Science Assistant Professor

The Department of Computer Science invites applications for a tenure stream position in computer science at the rank of Assistant Professor, beginning fall semester 2012. Completion of a Ph.D. in computer science is expected prior to or shortly after the date of hire. A strong interest in both teaching and research is also expected. Preference will be given to applicants with expertise in either Data Mining or Graphics though applicants in other areas will also be considered. The successful applicant will help staff department courses and will also be expected to participate in all-university programs, including the Liberal Arts Core Curriculum. Colgate University is a highly selective liberal arts college of 2800 students situated in a picturesque village in central New York. The department offers excellent teaching and research facilities, and the university is committed to promoting excellence in both teaching and research.

A letter of application, curriculum vitae and three letters of recommendation should be submitted through <https://academicjobsonline.org/ajo/jobs/1132>. Review of applications will begin January

10, 2012, and continue until the position is filled. For more information about the department, please browse our web site <http://cs.colgate.edu>. Applicants with dual-career considerations can find postings of other employment opportunities at Colgate and at other institutions of higher education in upstate New York at <http://www.upstatenyherc.org>.

Developing and sustaining a diverse faculty, staff, and student body further the University's educational mission. Colgate University is an Equal Opportunity/Affirmative Action Employer; women and minorities are especially encouraged to apply.

### The College of Idaho Mathematics and Physical Sciences Assistant Professor of CS and Mathematics

The Department of Mathematics and Physical Sciences at the College of Idaho invites applications for a tenure-track position as an Assistant Professor of CS and mathematics beginning August 2012. (Candidates with extensive prior experience may be considered for appointment at a higher rank.) The successful applicant must demonstrate commitment to excellence in teaching undergraduates in a liberal arts context.

For more information go to: <http://www.collegeofidaho.edu/jobs>

Review of completed applications will begin November 15, 2011 and continue until otherwise noted. EO/AEE

### The College of William and Mary, Virginia Department of Computer Science Assistant Professor

We invite applications for a tenure-track assistant professor position in Computer Science for Fall 2012. We are interested in individuals with research expertise in software engineering, operating systems, or data mining and machine learning, but exceptional applicants from other areas of computer science will be considered. Applicants must hold a Ph.D. in computer science or a related field at the time of appointment and must have a strong research record and an interest in teaching.

The College of William & 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 and, as a consequence, the department has been the home of multiple NSF and DOE Career Awards. Teaching loads are competitive with top research computer science departments in support of the department's research expectations for faculty. The department currently consists of fifteen 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, and the names of at least three references. Applicants must apply using William & Mary's online recruitment system at: <http://jobs.wm.edu>.

### Colorado School of Mines Department of Electrical Engineering and Computer Science Assistant Professor

Applications are invited for an anticipated tenure-track faculty position in data mining, data management, machine learning, or high performance computing, beginning August 2012.

The successful candidate will be expected to teach at both the undergraduate and graduate levels, direct graduate research, and develop a strong externally funded research program.

An earned Ph.D. in Computer Science or a closely related field by the time of appointment is required. Candidates must provide evidence of teaching competence in computer science and should demonstrate the potential to develop a self-sustaining research program.

For the complete job announcement and directions on how to apply, visit: <http://inside.mines.edu/HR-Academic-Faculty>

### Columbia University Department of Computer Science Open-rank Faculty Position in Computer Science

Columbia Engineering's Department of Computer Science at Columbia University in New York City invites applications for tenured or tenure-track faculty positions. One or more appointments at the assistant professor, associate professor and full professor, will be considered.

Columbia Engineering's strategic theme areas are Health, Information and Sustainability, and the successful candidate should contribute to the advancement of the department in these areas by developing an externally funded research program, being a thought leader in the profession, contributing to the undergraduate and graduate educational mission of the Department and providing active service to professional societies. The successful candidate is expected to establish multidisciplinary research and educational collaborations with academic departments and units across Columbia University. The Department is especially interested in qualified candidates who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community.

Applications are specifically sought in any of the areas that fall under the umbrella of Computer Systems, Software, Artificial Intelligence, Theory, and Computational Biology, with particular emphasis on, but not limited to: Computer Graphics, Human-Computer Interaction, Simulation, and Animation. Applicants whose work contributes to CyberBioPhysical Systems, where the biological, physical, and digital worlds fuse, are also encouraged to apply.

Candidates must have a Ph.D. or its professional equivalent by the starting date of the appointment. Applicants for this position at the Assistant Professor and Associate Professors without tenure must have the potential to do pioneering research and to teach effectively. Applicants for this position at the tenured level (Associate or Full Professor) must have a demonstrated record of outstanding research accomplishments, excellent teaching credentials and established leadership in the field.

Candidates should apply online at: [academicjobs.columbia.edu/applicants/Central?quickFind=55402](http://academicjobs.columbia.edu/applicants/Central?quickFind=55402) and should submit electronically the following: curriculum-vitae including a publication list, a description of research accomplishments, a statement of research/teaching interests and plans, contact information for three people who can provide letters of recommendation, and up to three pre/reprints of scholarly work. The position will close no sooner than 12/31/2011, and will remain open until filled. Applicants can consult [www.cs.columbia.edu](http://www.cs.columbia.edu) for more information about the department.

Columbia is an affirmative action/equal opportunity employer with a strong commitment to the quality of faculty life.

### Cornell University The School of Electrical and Computer Engineering Tenure-Track Faculty Positions

The School of Electrical and Computer Engineering at Cornell University, Ithaca, New York invites applications for tenure-track faculty positions for three specific areas of electrical and computer engineering:

(1) Human health and medical practice: bio-electrical sensing and actuating

(2) Data: computation, information processing, and storage for large-scale data

(3) Energy: generation and conversion, power and energy systems

Individuals that have demonstrated intellectual breadth and depth, through either individual effort and/or interdisciplinary group research are likely to be strong candidates. Applicants must hold a doctorate in an appropriate field, must have demonstrated an ability to conduct outstanding research, and show promise for excellent teaching. We anticipate hiring at the Assistant Professor level, but applications at all levels will be considered; salary and rank are commensurate with qualifications and experience.

Applicants should submit a curriculum vita, a research statement, a teaching statement, three recent publications, and complete contact information for at least three references. Personal statements summarizing teaching experience and interests, leadership efforts and contributions to diversity are encouraged.

Applications must be made on-line at <https://academicjobsonline.org/ajo/jobs/1279>. Applications received by January 31, 2011 will receive full consideration. Applications will be evaluated on an ongoing basis until the positions are filled.

The School of Electrical and Computer Engineering, 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 seeks to meet the needs of dual career couples, has a Dual Career program, and is a member of the Upstate New York Higher Education Recruitment Consortium to assist with dual career searches.

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

### Dartmouth College Department of Computer Science Inaugural Roth Family Distinguished Professorship

The Department of Computer Science at Dartmouth College invites applications for the inaugural Roth Family Distinguished Professorship. We seek candidates with a strong academic or industry track record in the general area of Digital Arts (including, but not limited to, Computer Graphics, Computer Vision, Visualization, Human-Computer Interaction, Design & Media Arts). Candidates at the level of full professor or senior-level associate professor will be considered.

Dartmouth is home to a growing program in the Digital Arts with affiliated faculty and students in Computer Science, English, Film & Media Studies, Mathematics, Music, Psychology, Studio Art, and Theater. In the coming years we expect continued investment in the Digital Arts. The Roth Family Distinguished Professor will help shape what is expected to be a leading undergraduate and graduate program in Digital Arts.

The Computer Science department ([www.cs.dartmouth.edu](http://www.cs.dartmouth.edu)) is home to 17

## Professional Opportunities

tenured and tenure-track faculty members whose research encompasses the areas of digital arts, graphics, vision, algorithms, theory, systems, security, robotics, and computational biology. The Computer Science department is in the School of Arts and Sciences, and it has strong Ph.D. and M.S. programs and outstanding undergraduate majors. The department is affiliated with Dartmouth's M.D.-Ph.D. program and has strong collaborations with the Tuck School of Business and Dartmouth Medical School.

Dartmouth College is located in Hanover, New Hampshire. Dartmouth has a beautiful, historic campus, located in a scenic area on the Connecticut River. Recreational opportunities abound in all four seasons. Dartmouth hosts an annual film festival, as well as renowned musical and theatrical performers. Convenient public transportation to Boston and New York is available. Airports with commercial service are located 15 minutes away (Lebanon, New Hampshire) and 75 minutes away (Manchester-Boston Regional Airport).

Applicants are invited to send their CV, research statement, teaching statement, and names of at least four references. All material and inquiries should be sent to roth2012@cs.dartmouth.edu. Application review will start on January 15, 2011.

Applicants should arrange to have letters of recommendation sent directly by the recommender, either by email or physical mail, to:

Roth Family Professorship Search  
Department of Computer Science  
Dartmouth College  
6211 Sudikoff Laboratory  
Hanover, NH 03755  
roth2012@cs.dartmouth.edu

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

### Florida International University School of Computing and Information Sciences Multiple Tenure-Track and Tenured Faculty Positions

FIU is a multi-campus public research university located in Miami, a vibrant, international city. FIU offers more than 180 baccalaureate, masters, professional and doctoral degree programs to over 42,000 students. As one of South Florida's anchor institutions, FIU is worlds ahead in its local and global engagement and is committed to finding solutions to the most challenging problems of our times.

The School of Computing and Information Sciences seeks exceptionally qualified candidates for multiple tenure-track and tenured faculty positions at all levels. Outstanding candidates are sought in areas of bio/medical/health informatics, computer architecture, computer graphics, large-scale data management, search, and visualization, human-computer interaction (HCI), networking, programming languages, robotics and game theory, and telecommunication. Exceptional candidates in other areas will be considered as well. Preference will be given to candidates who will enhance or complement our existing research.

Ideal candidates for junior positions should have a record of exceptional research in their early careers. Candidates for senior positions must have an active and proven record of excellence in funded research, publications, and professional service, as well as a demonstrated ability to develop and lead collaborative research projects. In addition to developing or expanding a high-quality research program, all successful applicants must be committed to excellence in teaching at both graduate and undergraduate levels.

An earned Ph.D. in Computer Science or related disciplines is required.

Florida International University (FIU), the state university of Florida in Miami, is ranked by the Carnegie Foundation as a comprehensive doctoral research university with high research activity. The School of Computing and Information Sciences (SCIS) is a rapidly growing program of excellence at the University, with 31 faculty members and 1,400 students, including 65 Ph.D. students. SCIS offers B.S., M.S., and Ph.D. degrees in Computer Science, an M.S. degree in Telecommunications and Networking, and B.S., B.A., and M.S. degrees in Information Technology. SCIS has received approximately \$12.6M in the last three years in external research funding, has six research centers/clusters with first-class computing infrastructure and support, and enjoys broad and dynamic industry and international partnerships.

How to Apply:

Applications, including a letter of interest, contact information, curriculum vitae, and the names of at least three references, should be submitted directly to the FIU J.O.B.S Link website at <https://www.fiujobs.org>; refer to Position # 33334.

The application review process will begin on January 16, 2012, and will continue until the position is filled.

Further information can be obtained from the School website <http://www.cis.fiu.edu>, or by e-mail to [recruit@cis.fiu.edu](mailto:recruit@cis.fiu.edu).

FIU is a member of the State University System of Florida and is an Equal Opportunity, Equal Access Affirmative Action Employer.

### Florida State University Department of Computer Science Tenure-Track Assistant Professor Positions

The Department of Computer Science at the Florida State University invites applications for multiple tenure-track Assistant Professor positions to begin August 15, 2012. Positions are 9-mo, full-time, tenure-track, and benefits eligible. We encourage strong applicants in all areas of Computer Science to apply. Preference may be given to applicants with research experience in the areas of Databases and Security. Applicants should hold a PhD in Computer Science or closely related field, and have excellent research and teaching accomplishments/potential. The department offers degrees at the BS, MS, and PhD levels. The department is an NSA Center of Academic Excellence in Information Assurance Education (CAE/IAE) and Research (CAER).

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. The department has experienced rapid growth in the major and new degree programs. Further information can be found at:

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

Screening will begin January 1, 2012 and will continue until the positions are filled. Please apply online with curriculum vitae, statements of teaching and research philosophy, and the names of five references, at:

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

Questions can be e-mailed to Prof. Mike Burmester, Chair Search Committee, [recruitment@cs.fsu.edu](mailto:recruitment@cs.fsu.edu) or to Prof. Robert van Engelen, Department Chair, [chair@cs.fsu.edu](mailto:chair@cs.fsu.edu).

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

### George Mason University Department of Computer Science Term Assistant Professor

The George Mason University, Department of Computer Science within the Volgenau School of Engineering invites applications for a renewable, non-tenure-track Assistant Professor position in computer science beginning Fall 2012.

Responsibilities include teaching undergraduate computer science courses as well as service duties associated with the department's undergraduate degree programs. For information on the department, visit our Web site: <http://cs.gmu.edu/>.

Minimum qualifications include a graduate degree, preferably a Ph.D. in computer science, software engineering or related field, and a strong commitment and demonstrated excellence in teaching.

For full consideration please submit a faculty application and application materials online at <http://jobs.gmu.edu> for position number F9550Z. To apply, you will need a statement of professional goals including your perspective on teaching, a complete C.V. with publications and teaching history, and the names of three references.

The review of applications will begin on February 13, 2012, and will continue until the position is filled.

GMU is an equal opportunity/affirmative action employer. Women and minorities strongly encouraged.

### Georgia Institute of Technology Literature, Communication, and Culture Chair

The School of Literature, Communication, and Culture (LCC) in the Ivan Allen College of Liberal Arts (IAC) at the Georgia Institute of Technology invites applications for the position of School Chair. This appointment will be made at the rank of Full Professor, with a compensation package commensurate with a School Chair's administrative responsibilities. The School is strongly committed to advancing its research and academic programs and is interested in recruiting an individual with an established record of scholarly research, administrative experience, and academic leadership.

The School is an internationally recognized home for humanities-centered design and discourse in media, technology, and culture, including leading-edge research in digital media, cinema, literature and the cultural history of science and technology, rhetoric, technical communication, and multimodal communication. LCC faculty members also contribute to scholarship and campus initiatives in drama, graphics and visualization, human-computer interaction, performance studies, poetry, science fiction, and the study of women, science, and technology. The School currently includes 33 tenure-track faculty members and 36 postdoctoral fellows, and it offers degree programs at all levels (Undergraduate, Master's, and Doctoral).

The ideal candidate for Chair will work with LCC colleagues to develop and implement a new interdisciplinary model of humanistic inquiry that brings diverse scholarly perspectives to bear on technological invention and innovation. This candidate will facilitate communication with colleagues in the wide range of disciplines represented in LCC, the Ivan Allen College, and the greater Georgia Tech community.

Applicants should submit a letter of interest, along with a statement of administrative philosophy (which should address the roles of teaching and research in faculty development), a curriculum vitae, and the names and contact information of three references. Electronic

submissions are preferred. Please email all materials, labeled "LCC Chair position," to [hiring@lcc.gatech.edu](mailto:hiring@lcc.gatech.edu). If necessary, mailed applications should be sent to:

Kenya Devalia, Administrative Manager  
School of Literature, Communication, and Culture  
Georgia Institute of Technology  
Atlanta, GA 30332-0165

Review of applications will begin December 1, 2011, and will continue until an appropriate candidate has been identified.

The Georgia Institute of Technology is a nationally ranked research university that provides significant opportunities for collaborative research and teaching across complementary disciplines. It is also an Equal Opportunity/Affirmative Action Employer that welcomes candidates from underrepresented groups.

### Gonzaga University Department of Computer Science Assistant Professor and Lecturer

We invite applications for two faculty positions: a tenure-track position at the rank of Assistant Professor and a fixed-term position at the rank of lecturer. Both begin in fall 2012. Required qualifications for the Assistant Professor position include a Ph.D. in computer science and ongoing, successful research in systems, security, or architecture. Required qualifications for the Lecturer position include an M.S. in computer science. Both positions require an enthusiasm for teaching at the undergraduate level. Both successful candidates will teach and advise undergraduates, assist with ABET accreditation, and contribute to the life of the University. The successful Assistant Professor candidate will also conduct research.

Gonzaga is in the center of Spokane, Washington along the Spokane River. Pacific Northwest National Laboratory, Washington State University, and a thriving computer industry are nearby. Spokane, the health care center for the inland Northwest, has a metropolitan area population of 500,000. The city offers excellent schools, affordable housing, music and arts venues, a lively restaurant scene, and independent bookstores. Five ski resorts, sixty lakes, and several national forests are all nearby. Five national parks, along with Canadian national and provincial parks, are within a day's drive.

Gonzaga, with 7874 students, ranks third among comprehensive universities in the western United States. Gonzaga's engineering programs rank in the top 30 among universities without doctoral programs in engineering. The Department of Computer Science, housed in the School of Engineering and Applied Science, offers a B.S. in computer science. Gonzaga University is a Jesuit, Catholic, humanistic institution, and is therefore interested in candidates who will contribute to its distinctive mission.

To apply, please visit our website at [www.gonzaga.edu/employment](http://www.gonzaga.edu/employment). For assistance with your online application, call 509-313-5996. Applications must include: 1) a cover letter describing how you can contribute to our mission; 2) a curriculum vita; 3) a statement of your teaching philosophy; 4) a description of your research (for the Assistant Professor position only); 5) names and contact information for three professional references. Deadline for application is February 17, 2012 at 4:00 pm. Send email inquiries to Dr. Paul De Palma, Chair, Department of Computer Science at [depalma@gonzaga.edu](mailto:depalma@gonzaga.edu).

Gonzaga University is an EE/AA employer committed to diversity.

## Professional Opportunities

### The Hong Kong University of Science and Technology, Hong Kong

Department of Computer Science and Engineering  
Assistant Professor/Associate Professor/  
Professor

The Department of Computer Science and Engineering will have at least two tenure-track faculty openings at the Assistant Professor/Associate Professor/Professor levels for the 2012-2013 academic year.

Details of the positions can be found in the URL:

<http://www.cse.ust.hk/admin/recruitment/faculty/>

Information about our department can be found at <http://www.cse.ust.hk/>.

### IBM Watson Research Center Cloud Application Management Research Staff Member

IBM Research is looking for a Research Staff Member in the general fields of Cloud Computing, including but not limited to virtualization, performance management, monitoring, Cloud analytics, large-scale data processing, and mining systems data. This position will not only conduct basic research and publish, but also directly contribute to IBM's major Cloud Computing initiatives. Interview starts immediately on October 24, 2011.

For more information, please see [https://researcher.ibm.com/researcher/view\\_project.php?id=2527](https://researcher.ibm.com/researcher/view_project.php?id=2527)

### Indiana University Purdue University Indianapolis Computer, Information & Leadership Technology

Assistant Professor of Computer & Information Technology

Applications for a tenure-track position are sought for a start date of August 1, 2012. Position includes undergrad and graduate teaching, research leading to publication, procuring external funding, and civic engagement in the discipline. Must have a Ph.D. in technology, computer science, or a closely related discipline with expertise in the field of information assurance and security.

Application review begins January 16, 2012 and remains open until filled. Upload a CV, statement of research & teaching philosophy, and contact information for at least three references at: <https://www.et.iupui.edu/apply/index.asp?pos=00006191>

For more information, contact Sheila Walter at [skwalter@iupui.edu](mailto:skwalter@iupui.edu).

IUPUI is an Affirmative Action/Equal Opportunity employer.

### Johns Hopkins University Human Language Technology Center of Excellence-Baltimore, Maryland Research Scientists, Post-Docs, Sabbaticals

The Human Language Technology Center of Excellence (COE) at Johns Hopkins University seeks to hire outstanding junior and senior researchers in all areas of speech and language processing. The COE, located near Johns Hopkins University's beautiful Homewood campus in Baltimore, Maryland, conducts long-term research on fundamental challenges that are critical for real-world problems. Its researchers publish widely. Applicants must hold a Ph.D in computer science, linguistics, electrical engineering, or a closely related field.

Candidates should have a strong background in one or more of these areas:

- Natural Language Processing and Understanding: Information extraction, knowledge distillation, semantics, sentiment, parsing, morphology
- Machine Translation: Low-resource languages, large-scale training, phrase-based and syntax-based approaches

- Speech Processing: Robust speech recognition and speaker identification (multiple languages, genres, and channels, limited resources), speech retrieval, language identification
- Machine Learning: Large-scale learning, transfer learning, semi-supervised learning, data mining

Research Scientists are charged with setting the agenda for a research program, working with other members of the HLT/COE research team to pursue the organization's cutting edge research goals, publishing research results in academic conferences, and advising students. They may have cross-appointments in academic departments.

Senior Applicants: A senior applicant should be an experienced researcher with a track record of high quality publications, a demonstrated ability in building HLT systems, and experience equivalent to or above the level of associate professor. Applications will be considered on a rolling basis.

Junior Applicants: Junior applicants should have a strong record of publication, demonstrated research experience, and experience equivalent to those applying to assistant professor positions. Submit applications by January 2, 2012 for full consideration; however, applications will be accepted until positions have been filled.

#### Post-Docs

Recent PhD graduates may apply for postdoctoral positions, which last for up to two years.

#### Sabbaticals

The center welcomes faculty on sabbatical looking for new research opportunities. Positions range from three to twelve months. Email for details.

#### How to Apply

Applications should be submitted here: <https://academicjobsonline.org/ajo/jobs/918>

Email: [hltcoe-hiring@jhu.edu](mailto:hltcoe-hiring@jhu.edu)  
WWW: [www.hltcoe.jhu.edu](http://www.hltcoe.jhu.edu)

Note: U.S. Citizenship and security clearance are required for most positions; the COE will seek a clearance for those who do not already have one.

### Kansas State University College of Engineering Senior Faculty Position

The College of Engineering at Kansas State University invites applicants for the position of Full Professor in the area of engineering applied to human or animal health care, starting in the Fall of 2012. The candidate will be expected to leverage existing expertise and provide leadership to establish cross-department collaborations that promote the College as a national leader in the biomedical arena. College of Engineering faculty already work in the following related areas:

- Biomedical Sensing and Device Development: Sensor design, instrumentation, wearable/ingestible/implanted medical devices, and signal processing
- System Integration: plug-n-play medical systems, device integration frameworks, middleware for health monitoring, and high-assurance software
- Health System Operations and Analyses: Facility planning, economic assessment, and modeling/analysis to improve health care effectiveness
- Crosscutting Areas: Human factors, bioinformatics, and data mining
- Application Scenarios: Telemedicine, home care, health prediction, pervasive care environments, epidemic modeling, space & military medicine, human performance analysis, gerontechnology, and veterinary applications

This work has been funded by various federal agencies (e.g., NSF, FDA, NIH, NASA, DHS, and USDA), national laboratories, and industry partners. Considerable intra- and inter-college collaborative research in human and animal health care is ongoing at KSU. Given the anticipated arrival of the National Bio and Agro-Defense Facility (NBAF) and ongoing research at the KSU Biosecurity Research Institute (BRI), significant potential also exists for interdisciplinary work related to disease and its epidemiological spread.

The candidate must be a recognized leader in a technical area related to human or animal health care and should have demonstrated commitment to both research and teaching. She or he should have an earned doctorate or equivalent in engineering, science, or a health-related field and offer credentials to support appointment as a Full Professor.

Applicants should submit the following, in PDF format, to [biomedSearch@eng.ksu.edu](mailto:biomedSearch@eng.ksu.edu): a cover letter, curriculum vitae, a statement of research vision, a statement of teaching interests and philosophy, contact information for three references, and copies of representative publications. Application review will begin January 30, 2012 and will continue until the position is filled.

Kansas State University is an Affirmative Action Equal Opportunity Employer. The KSU College of Engineering is committed to diversity, and women and minority candidates are encouraged to apply. Background check will be required

### KAUST (King Abdullah University of Science and Technology)

Postdoctoral Position Available in Computational Biology

A postdoctoral position in computational biology is available for a joint project between Texas A&M University in US and King Abdullah University of Science and Technology (KAUST) in Saudi Arabia. This project is led jointly by Dr. Jianhua Huang at TAMU and Dr. Xin Gao at KAUST.

The funding is available for two years. The candidates should hold a PhD in computer science, statistics, or a related field, with expertise in bioinformatics, and strong programming skills. Candidates with expertise in one of the following areas are strongly encouraged to apply: protein structure sampling/prediction, biological sequence analysis, biomedical imaging processing, and machine learning. This position will offer plenty of opportunity to work with interdisciplinary groups at TAMU and KAUST. Regular communications/travels between TAMU and KAUST are a part of the duty.

We offer a very competitive compensation package, as well as free housing in both US and Saudi, plus health benefits. Applications should include a CV and contact information of at least two references.

For further information, or to submit an application, please email [Tamu.kaust@gmail.com](mailto:Tamu.kaust@gmail.com).

### Lehigh University INE Cluster (CSE, ECE, ISE, Mathematics, MEM) Real Time Computation, Modeling & System Design for Smart Grid Systems Two Positions

Lehigh University invites applications to fill two tenure-track assistant or associate professor positions whose research focuses on quantitative methods for making decisions within and about advanced electricity systems. These faculty members will be part of a new university-sanctioned research cluster consisting of a multi-disciplinary team of engineering, computer science, economics,

and mathematics faculty. The cluster is developing a focus on smart grids as part of a broader research agenda on "Integrated Networks for Electrical, Information, and Financial Flows." The faculty members will be appointed to an appropriate department—for example, Computer Science and Engineering, Electrical and Computer Engineering, Industrial and Systems Engineering, Mathematics, or Mechanical Engineering and Mechanics.

The candidate must have a proven research interest in applications related to smart grids, including, but not limited to, topics such as: real time computational systems, survivable networks, modeling and visualization of electricity networks, sensor networks, dynamic control of large-scale power and information networks, real-time scheduling and resource management, and real-time operating, embedded systems design.

Applicants must possess (1) an earned doctorate, outstanding academic credentials, and a demonstrated record of success, (2) excellent potential for interdisciplinary research and scholarship, and (3) the ability and commitment to teach courses at both undergraduate and graduate levels. The position will require developing an externally funded research program, supervising M.S. and Ph.D. students, and contributing to the smart grid cluster of Lehigh University through innovative research and teaching.

More information about the research cluster is available at <http://www.lehigh.edu/grid>.

Applications received by January 1, 2012 will receive full consideration. Applications should be submitted on-line at:

<https://academicjobsonline.org/ajo/jobs/1182>.

Applications should include a statement of interest, curriculum vita, list of publications, research and teaching statements, and the names and contact information for at least three references. In addition, applicants should specify a preferred home department. Inquiries may be addressed to Profs. Larry Snyder ([larry.snyder@lehigh.edu](mailto:larry.snyder@lehigh.edu) <<mailto:larry.snyder@lehigh.edu>>) or Garth Isaak ([gisaak@lehigh.edu](mailto:gisaak@lehigh.edu) <<mailto:gisaak@lehigh.edu>>).

### Louisiana State University Center for Computation and Technology Assistant/Associate/Full Professor (Core Computational Expertise Faculty)

The Center for Computation & Technology (CCT) at Louisiana State University (LSU) is an innovative and interdisciplinary research environment that advances computational sciences, technologies, and the disciplines they touch.

Responsibilities: The CCT is especially seeking faculty candidates with expertise in core areas that underpin and are critical to the advancement of high performance computing and networking (HPCN) and to the numerous fields that rely on HPCN technologies. Example core areas include, but are not limited to: the physics and engineering of next-generation devices; exascale systems; the design and development of next-generation algorithms; massively parallel linear algebra; data-intensive and data-centric computing.

Required Qualifications: Candidates must possess a terminal degree or equivalent within the candidate's primary discipline, as well as a strong reputation as an interdisciplinary researcher or, in the case of emerging scholars, the capacity to build the same; a distinguished record of research accomplishments; and an established publication record and history of attracting extramural funding,

## Professional Opportunities

consistent with rank. Candidates will be expected to provide leadership in a vigorous research area of interdisciplinary computational science, such as the core areas enumerated above. A.B.D candidates will be considered, but must have a Ph.D. by January 2012.

Application deadline is January 13, 2012 or until candidates are selected. Apply online and view a more detailed ad at: [www.lssystemcareers.lsu.edu](http://www.lssystemcareers.lsu.edu). Position #031128/031286/032337

LSU is an equal opportunity/equal access employer

Quick link at ad URL: <https://lssystemcareers.lsu.edu/applicants/Central?quickFind=53869>

### Marquette University Mathematics, Statistics and Computer Science Department Assistant Professor in Computational Statistics and Bioinformatics

The Department of Mathematics, Statistics and Computer Science (MSCS) at Marquette University invites applications for a tenure-track faculty position in computational statistics and bioinformatics to begin in Fall 2012. The Department seeks outstanding individuals with solid training in statistics, research experience with computational methods in bioinformatics, and the ability to teach at both the undergraduate and graduate levels. Preference will be shown to those with a strong research record that demonstrates potential for establishing an externally funded research program. The ideal candidate would

- have a Ph.D. in statistics or a related field;
- contribute to the Computational Sciences doctoral program and the Bioinformatics masters program;

- seek grant funding to support collaborative, interdisciplinary research;
- contribute to the overall Departmental and University mission, which includes undergraduate education.

Currently, the Department comprises 28 full-time faculty in pure and applied mathematics and statistics, computer science, and mathematics education. The Department places emphasis on basic, applied and collaborative research, teaching, and interdisciplinary programs. Our faculty maintain close ties with the Medical College of Wisconsin, Zablocki VA Medical Center, other Milwaukee area hospitals, University of Wisconsin-Milwaukee, and other regional institutions and industrial partners, as well as Marquette science and engineering departments. For more information about the Department and its programs see <http://www.mscs.mu.edu>.

Marquette is a Catholic, Jesuit university that offers undergraduates a vigorous liberal arts core combined with a choice of 116 majors and 65 minors. The Graduate School offers 37 master's and 21 doctoral degrees across Marquette's colleges and schools. The University offers to all members of its community the educational, professional and cultural advantages of its location in the heart of Milwaukee. More information is available at <http://www.mu.edu>.

All applications for this position must be received through Marquette University's electronic recruiting system, which can be accessed at: <https://careers.marquette.edu/applicants/Central?quickFind=53496>.

- Applicants should submit:
- a cover letter
  - a current curriculum vitae

- a statement of research interests and any relevant collaborative experience and interests
  - a statement of teaching philosophy
- Additionally, applicants should arrange for three letters of reference to be sent to the Department, either by email to [hire@mscs.mu.edu](mailto:hire@mscs.mu.edu), or by mail to:

Hiring Committee,  
Department of Mathematics, Statistics and Computer Science,  
Marquette University,  
P.O. Box 1881,  
Milwaukee WI 53201-1881 USA

Formal review of applicants will begin on November 21, 2011 and will continue until the position is filled with an outstanding candidate. Candidates from underrepresented groups are particularly welcome.

### Max Planck Institute for Software Systems (MPI-SWS)

#### Tenure-Track Openings

Applications are invited for tenure-track and tenured faculty positions in all areas related to the study, design, and engineering of software systems. These areas include, but are not limited to, data and information management, programming systems, software verification, parallel, distributed and networked systems, and embedded systems, as well as cross-cutting areas like security, machine learning, usability, and social aspects of software systems.

A doctoral degree in computer science or related areas and an outstanding research record are required. Successful candidates are expected to build a team and pursue a highly visible research agenda, both independently and in collaboration with other groups.

Senior candidates must have demonstrated leadership abilities and recognized international stature.

MPI-SWS, founded in 2005, is part of a network of eighty Max Planck Institutes, Germany's premier basic research facilities. MPIs have an established record of world-class, foundational research in the fields of medicine, biology, chemistry, physics, technology and humanities.

Since 1948, MPI researchers have won 17 Nobel prizes. MPI-SWS aspires to meet the highest standards of excellence and international recognition with its research in software systems.

To this end, the institute offers a unique environment that combines the best aspects of a university department and a research laboratory:

- Faculty receive generous base funding to build and lead a team of graduate students and post-docs. They have full academic freedom and publish their research results freely.
- Faculty supervise doctoral theses, and have the opportunity to teach graduate and undergraduate courses.
- Faculty are provided with outstanding technical and administrative support facilities as well as internationally competitive compensation packages.

MPI-SWS currently has 11 tenured and tenure-track faculty, and is funded to support 17 faculty and about 100 doctoral and post-doctoral positions. Additional growth through outside funding is possible. We maintain an open, international and diverse work environment and seek applications from outstanding researchers regardless of national origin or citizenship. The working language is English; knowledge of the German language is not required for a successful career at the institute.

The institute is located in Kaiserslautern and Saarbruecken, in the tri-border area of Germany, France and Luxembourg. The area offers a high standard of living, beautiful surroundings

and easy access to major metropolitan areas in the center of Europe, as well as a stimulating, competitive and collaborative work environment. In immediate proximity are the MPI for Informatics, Saarland University, the Technical University of Kaiserslautern, the German Center for Artificial Intelligence (DFKI), and the Fraunhofer Institutes for Experimental Software Engineering and for Industrial Mathematics.

Qualified candidates should apply online at <http://www.mpi-sws.org/> application. The review of applications will begin on January 3, 2012, and applicants are strongly encouraged to apply by that date; however, applications will continue to be accepted through January 2012.

The institute is committed to increasing the representation of minorities, women and individuals with physical disabilities in Computer Science. We particularly encourage such individuals to apply.

### Miami University Computer Science and Software Engineering

#### Tenure-track Assistant or Associate Professor

The Miami University Computer Science and Software Engineering department is seeking a tenure-track Assistant or Associate Professor to teach undergraduate and graduate courses; develop high quality, independent research programs; enhance curriculum; advise students; supervise undergraduate and graduate research; participate in departmental, divisional, university and professional service activities.

Required: an earned doctorate in computer science, computer engineering or software engineering or related field (PhD candidates will be considered, but the doctorate must be completed by the time of appointment); the ability to teach courses in computer science. For appointment at the level of associate professor, we require an established record of research and scholarly activity, excellence in teaching, and service. Desired: research experience in computer systems, distributed computing, and operating systems. Research expertise in any area of computer science, computer engineering or software engineering will be considered.

Send cover letter, curriculum vitae, teaching philosophy, research statement, description of other experiences appropriate to the position, and three letters of reference to Dr. Gerald C. Gannod, ([csesearch@muohio.edu](mailto:csesearch@muohio.edu), 513-529-0340). For more information, visit <http://csesearch.csi.muohio.edu>.

Review of applications begins December 1, 2011 and continues until the position is filled.

Miami University is an EEO/AA employer with smoke-free campuses. Right to Know - Consumer Information at <http://www.miami.muohio.edu/about-miami/publications-and-policies/student-consumer-info/index.html>

### Mississippi State University Faculty Position in Computer Science and Engineering

The Department of Computer Science and Engineering (<http://www.cse.msstate.edu>) is seeking to fill an open position for a tenure-track faculty member at the Assistant/Associate Professor levels. Evidence of strong potential for excellence in research (including attracting external funding) and teaching at the graduate and undergraduate levels is required. The primary research areas of interest are artificial intelligence, bioinformatics, and computer security. Other areas will also be considered.



### Tenure-Track Faculty Position

The Department of Computing and Software at McMaster University seeks outstanding candidates for a tenure-track faculty position. The appointment is intended to be at the Assistant or Associate Professor level. Applicants with a doctorate in Computer Science or Software Engineering (or a related area) at the time of appointment are encouraged to apply. The Department is primarily interested in hiring a researcher in Systems — particularly in Databases, High-Performance Computing, Networking, Operating Systems, or System Security — but exceptionally strong applicants in other areas will be considered seriously. Interest in medical applications would be a plus.

Potential to develop a strong research program and become an excellent teacher is crucial. Successful candidates will be expected to attract external research funding, pursue industrial collaboration if appropriate, actively recruit and supervise graduate students, and teach at both the undergraduate and graduate levels. Registration or eligibility for registration by the Professional Engineers of Ontario will be considered an asset.

Salary and rank are commensurate with experience and qualifications. Applications, including a CV, a statement detailing teaching and research interests, and the names of at least three referees should be sent electronically to Laurie LeBlanc at [leblanl@mcmaster.ca](mailto:leblanl@mcmaster.ca) or in hard copy to:

Dr. William M. Farmer, Chair  
Department of Computing and Software, ITB 202  
McMaster University  
1280 Main Street West  
Hamilton, ON L8S 4K1

Applications review will begin immediately and the appointment will ideally commence July 1, 2012. However, applications will be accepted until the position is filled.

Note: All qualified candidates are encouraged to apply. However, Canadian citizens and permanent residents will be considered first for these positions. McMaster University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates, including women, members of visible minorities, Aboriginal peoples, members of sexual minorities and persons with disabilities.

## Professional Opportunities

Mississippi State University has approximately 1300 faculty and 20,000 students. The Department of Computer Science and Engineering has 17 tenure-track faculty positions and offers academic programs leading to the bachelor's, master's and doctoral degrees in computer science and bachelor's degrees in software engineering and computer engineering. Faculty members and graduate students work with a number of on-campus research centers including the Critical Infrastructure Protection Center, the High Performance Computing Collaboratory, the Institute for Imaging and Analytical Technologies, the Institute for Genomics, Biocomputing, and Biotechnology, the Center for Advanced Vehicular Systems, and the Geosystems Research Institute. Department research expenditures total around 5.2 million dollars per year.

Candidates for this position are expected to hold a PhD in computer science or closely related field (ABDs may be considered). Level of appointment is commensurate with qualifications and experience.

Applicants should submit a letter of application, curriculum vita, teaching statement, research statement, and names and contact information of at least three references online at <http://www.jobs.msstate.edu/>. Review of applications will begin not earlier than December 2011 and continue until the position is filled.

MSU is an Affirmative Action/Equal Opportunity Employer.

### Montclair State University Department of Computer Science Tenure-Track Faculty Position

The Department of Computer Science at Montclair State University is seeking an assistant/associate professor in information technology or computer science to contribute to the teaching and research mission of the department and Montclair State University. The successful applicant will have the ability to teach a variety of information technology or computer science subjects, and have a strong commitment to both the undergraduate mission of the department in the context of a liberal arts education, and the ability to undertake research and contribute to the graduate teaching within the department. Specifically, the department is seeking an individual with expertise in one or more of the following areas:

- Computer Gaming, Modeling and/or Computer Simulation
- Operating Systems, Computer Security or Networking
- Distributed and Parallel Systems
- Information Technology

A full job description can be found at [www.cs.montclair.edu](http://www.cs.montclair.edu).

Applications including a CV, statement of teaching philosophy, statement of research and 3 letters of reference are to be sent via E-mail to [cs-search@montclair.edu](mailto:cs-search@montclair.edu) (PDF or MS Word format). The position will remain open until filled. The start date is September 1, 2012.

For further information, contact Michael Oudshoorn at (973) 655-4166 or [cs-chair@montclair.edu](mailto:cs-chair@montclair.edu)

### NICTA (National ICT Australia) Researchers (Optimisation)

- Up to 7 positions available.
- Competitive Salary: 85K-110K Australian, incl. superannuation.
- Duration: Up to 3 years in the first instance.

NICTA (National ICT Australia) is Australia's Information and Communications Technology (ICT) Research Centre of Excellence. Our primary goal is to conduct world-class research generating fundamental scientific results with an impact on society. NICTA

aspires to be one of the world's top ten ICT research centres by 2020.

Applications are invited for researcher positions within the Optimisation Research Group, to work with Sylvie Thiebaut and Pascal Van Hentenryck. The majority of the positions are based in Canberra and the rest in Melbourne.

We seek outstanding researchers who have recently received their PhD to be part of a large, world-class optimisation group. The researchers will join significant projects in infrastructure resilience (including disaster management and infrastructure security) and smart energy systems (including smart electricity grids and smart buildings).

Candidates should have a PhD in computer science, operations research, or related areas, a strong background in artificial intelligence, constraint programming, or operations research, and good modelling and programming skills.

It is expected that all researchers will continue to build upon their international reputation by publishing papers and attending top conferences, while participating to the design and implementation of optimisation systems for infrastructure resilience and smart energy management.

The full text of the advertising can be seen here: [https://nicta.silkroad.com/epostings/index.cfm?fuseaction=app.jobinfo&jobid=93&company\\_id=16182&version=1&source=ONLINE&JobOwner=993266&startflag=1](https://nicta.silkroad.com/epostings/index.cfm?fuseaction=app.jobinfo&jobid=93&company_id=16182&version=1&source=ONLINE&JobOwner=993266&startflag=1)

#### Application Instructions

NICTA reserves the right to fill some or all of these positions prior to the closing date, or by invitation, or to not make any appointments. Applicants are thus encouraged to apply early.

Please email resume, motivation letter, short research statement, and names of 3 referees to:

Sylvie Thiebaut ([Sylvie.Thiebaut@nicta.com.au](mailto:Sylvie.Thiebaut@nicta.com.au))

Pascal Van Hentenryck ([pvh@nicta.com.au](mailto:pvh@nicta.com.au))

Closing date: February 15, 2012.

### Northeastern University College of Computer and Information Science

Five Tenure-Track Faculty Positions

The College of Computer and Information Science invites applications for five tenure-track faculty positions, beginning in Fall 2012. Applicants at all ranks will be considered. Candidates are expected to have or to develop an independently funded research program of international caliber and participate in undergraduate and graduate teaching.

#### Qualifications

A PhD in Computer Science, Information Science or a related field is required.

Candidates will be considered from all major areas in Computer and Information Science. We particularly welcome candidates with research interests in data-intensive computing, networking, security, or systems.

#### Additional Information

The College maintains a strong research program with significant funding from major federal research agencies and private industry. The College has a diverse full-time faculty of 36, and offers a broad array of educational opportunities to students. In addition to Bachelor's, Master's, and PhD programs in the computing discipline, the College offers several innovative undergraduate and graduate degree programs that combine computing with an important application domain. Ten faculty members have joint appointments with other academic departments, including Electrical and Computer Engineering, Art and Design,

Health Sciences, Physics, and Political Science. The College has approximately 560 undergraduates, 530 Masters, and 84 Ph.D. students.

Northeastern University is located on the Avenue of the Arts in Boston's historic Back Bay. The College occupies a state of the art building opposite Boston's Museum of Fine Arts.

#### Equal Employment Opportunity

Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University. Northeastern University particularly welcomes applications from minorities, women and persons with disabilities. Northeastern University is an E-Verify Employer.

#### How To Apply

Please go to [www.ccs.neu.edu](http://www.ccs.neu.edu) and click on Faculty positions. A complete application should include a Curriculum Vita; a statement of research interests and plans; a statement describing the applicant's teaching experience, interests and philosophy.

### Northeastern University College of Computer and Information Sciences and College of Arts, Media and Design Tenure Track Assistant/Associate/Full Professor

Tenure Track Faculty Position in Game Design and Interactive Media Joint between College of Arts, Media and Design and College of Computer and Information Science at Northeastern University

Northeastern University is seeking one or more tenure track faculty for interdisciplinary positions in Game Design joint within the College of Computer and Information Science and the College of Arts, Media and Design starting September 1, 2012. Positions will be filled at the assistant, associate or full professor rank depending on the qualifications of the candidate.

Northeastern University is in the heart of Boston and world leader in experiential learning. In the past few years, Northeastern University has made a major commitment to interdisciplinary education and research in select fields with the goal of achieving international leadership in these fields. The Game Design and Interactive Media program is one of the areas selected for growth and is being developed as a joint effort between the colleges of Arts, Media and Design and Computer and Information Science.

We seek tenure track faculty members who can play a major role in shaping the research, academic goals for our programmatic efforts in Game Design and Interactive Media. Building on the foundation of interdisciplinary undergraduate degrees in game design and interactive media, the successful candidate will play a central role in creating innovative programmatic efforts that combine a deep knowledge of the artistic and computing disciplines, and will advance our research and educational agenda.

#### Qualifications

We expect successful candidates to demonstrate a strong commitment to teaching and an excellent record in research/scholarship in any of the core areas of game design research, including (but not limited to) artificial intelligence and games, interactive or real-time 3D graphics, game development, networking, physics and simulation, interface design, human computer interaction and games, or game animation. Experience with applications in areas, such as interactive narratives, social games, health games, mobile games, or educational games, is desirable. Applicants must have a terminal degree of either a PhD in computer science

or related areas, or an MFA in game design or related areas.

#### Equal Employment Opportunity

Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University. Northeastern University particularly welcoming applications from minorities, women and persons with disabilities. Northeastern University is an E-Verify Employer.

#### How To Apply

To apply, visit the College of Arts, Media and Design website at: <http://www.northeastern.edu/camd/> or the College of Computer and Information Science website at: <http://www.ccs.neu.edu/> and click on the Faculty Positions button.

Applications should include:

- Cover letter expressing interest
- Applicant's CV
- Research statement
- Teaching statement

Names and addresses of 3-6 references  
Full consideration will be given to applications received by December 30, 2011.

For questions about the search or to submit external references, please call the search committee chair at: 617-373-3928.

### Northeastern University Bouvé College of Health Sciences, College of Computer and Information Science Full, Associate or Assistant Professor – Personal Health Informatics

The College of Computer and Information Science and the Bouvé College of Health Sciences at Northeastern University invite applications for faculty positions in Personal Health Informatics at the rank of Assistant or Associate (tenure-track or tenured) or Full Professor (tenured), depending upon qualifications. A Ph.D. level degree in Health or Medical Informatics, Computer Science, Information Science, or a health-related discipline, together with a proven ability to secure grant funding for research using advanced technology in the health domain, is required.

Building upon our successful joint Master of Science degree program in Health Informatics, and our graduate and undergraduate degree programs in health sciences, nursing, pharmacy, computer science, and information science, we are interested in growing our faculty in the general area of Personal Health Informatics, which includes health technologies that patients interact with directly, health informatics, assistive technologies, and technology design for health and wellness systems. Candidates would play a key role in launching Northeastern's new transdisciplinary doctoral program in Personal Health Informatics, which will admit the first cohort of students in September, 2012 (see <http://phi.neu.edu>).

Faculty members in our colleges are currently working on multiple NIH and NSF funded research projects in consumer informatics, clinical informatics, behavioral informatics, and assistive technologies and we are particularly interested in faculty candidates who can expand or complement our work in these areas. Topics of interest include the use of mobile technologies to monitor and manage health, the use of virtual agents for physical exercise and health management, the development of assistive communication aids, the use of artificial intelligence to study mental and physical health behavior, and the development and evaluation of other novel technologies to study health behavior and improve health outcomes. We are interested in candidates who create new tools and candidates who specialize in evaluation of new technologies in field research. Northeastern University is

## Professional Opportunities

on an exciting trajectory of growth and innovation and making a major investment in interdisciplinary health research, with several recent hires and additional open interdisciplinary faculty searches in complimentary areas such as Health Systems, Health Policy, Health Law, Urban Environment, Health and Administration, and Game Design. Northeastern will consider a multidisciplinary 'cluster hire,' led by outstanding senior faculty, where several candidates propose an innovative and translational research direction.

The College of Computer and Information Science has a diverse, full-time faculty of 36, and offers a broad array of educational opportunities to students. In addition to Bachelor's, Master's, and PhD programs in the computing discipline, the College offers several innovative undergraduate and graduate degree programs that combine computing with an important application domain. Ten faculty members have joint appointments with other academic departments, including Electrical and Computer Engineering, Art and Design, Health Sciences, Physics, and Political Science. The College has approximately 560 undergraduates, 530 Masters, and 75 Ph.D. students.

Bouvé College of Health Sciences has a faculty of 276, with approximately 2,100 undergraduate and 1,500 graduate students. It is the leading national model for education and research in the health, psychosocial and biomedical sciences and supports the University's mission of educating students for a life of fulfillment and accomplishment and creating and translating knowledge to meet global and societal needs.

Northeastern University is located on the Avenue of the Arts in Boston's historic Back Bay, four blocks from the Longwood Medical Area, encompassing Harvard Medical School, Children's Hospital Boston, Brigham & Women's Hospital, and Beth Israel Deaconess Medical Center, and eight blocks from the Boston Medical Center. Northeastern is home to 20,000 students and to the nation's premier cooperative education program. The past decade has witnessed a dramatic increase in Northeastern's international reputation for research and innovative educational programs. The University is a leader in interdisciplinary research, urban engagement, experiential learning, and the integration of classroom learning with real-world experience. A heightened focus on interdisciplinary research and scholarship is driving a faculty hiring initiative at Northeastern, advancing its position amongst the nation's top research universities.

**How to Apply.** Applicants should submit a letter of interest, curriculum vitae, and the contact information of at least five references. Submission is online via <http://www.northeastern.edu/hrm/> (select "Careers at Northeastern"). Screening of applications begins November 30, 2011 and will continue until the position is filled. Questions should be addressed to Prof. Stephen Intille ([s.intille@neu.edu](mailto:s.intille@neu.edu)), chair of the search committee.

Northeastern University Equal Employment Opportunity Policy. Northeastern University is an Equal Opportunity/Affirmative Action, Title IX, and an ADVANCE institution. Minorities, women, and persons with disabilities are strongly encouraged to apply. Northeastern University embraces the wealth of diversity represented in our community and seeks to enhance it at all levels.

**Northeastern University**  
College of Social Sciences and Humanities  
*Assistant/Associate/Full Professor in Digital Humanities*

The College of Social Sciences and Humanities at Northeastern University invites applications and nominations for an open rank position (assistant/associate/full professor) in the field of Digital Humanities to begin fall 2012. The successful candidate will have expertise in new computational approaches that help distill meaning from texts and artifacts, and in new modes of presenting these in electronic formats. Examples include but are not limited to text-mining, geographic information systems, natural language processing, visualization, or complex network analysis. He or she will be familiar with the theoretical challenges implicit in this emerging field, will have an interest in translating knowledge within and between disciplines and for a broader public, and will help to build new expertise in Digital Humanities at Northeastern. The position will complement existing University strengths in the related areas of network science and computational social science. Applications are invited from any discipline that contributes to the Digital Humanities. The appointment will be made in an appropriate department in the College of Social Sciences and Humanities and a cross-departmental or cross-college appointment (such as with the College of Computer and Information Science) is also possible. Candidates must have a PhD at the beginning of the appointment and a record of scholarship and teaching commensurate with rank.

Northeastern University in Boston is a nationally-ranked research university with a strong urban mission, a global

perspective, and an emphasis on interdisciplinary scholarship. Its signature Cooperative Education Program and study-abroad opportunities such as Dialogues of Civilization provide experiential learning opportunities for its 19,000 undergraduate and graduate students. The newly founded College of Social Sciences and Humanities incorporates the departments of African-American Studies; Economics; English; History; Languages, Literatures and Cultures; Philosophy and Religion; Political Science; and Sociology and Anthropology. The College is home to the School of Criminology and Criminal Justice and the School of Public Policy and Urban Affairs. Its eight interdisciplinary programs include International Affairs; Law and Public Policy; East Asian Studies; Women, Gender and Sexuality Studies; and Jewish Studies.

Applications will only be accepted through the College of Social Sciences and Humanities website. To apply, please go to <http://www.northeastern.edu/cssh/>, and click on the Faculty Positions link. Applicants already holding tenure should upload a letter of application, CV, a statement of current and future research interests, a writing sample of no more than 50 pages, and the names of three referees. Untenured applicants should upload a letter of application, CV, a statement of current and future research interests, a writing sample of no more than fifty pages, and should have three references submitted via the Faculty Positions site. Review of applications will begin October 20, 2011 and will continue until the position is filled. Questions about the position may be directed to the Chair of the Search Committee, David Lazer, or to Co-Chair, Elizabeth Maddock Dillon at [dighumsearch@neu.edu](mailto:dighumsearch@neu.edu).

Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University. Northeastern University particularly welcomes applications from minorities, women, and persons with disabilities.

**Northern Michigan University**  
Mathematics and Computer Science  
*Assistant Professor*

The Mathematics and Computer Science Department at Northern Michigan University, Marquette, Michigan, invites applications for a tenure-earning position in Computer Science at the rank of Assistant Professor beginning with the 2012-2013 academic year. Salary is competitive.

For full description/requirements visit <https://employMe.nmu.edu> or <http://cs.nmu.edu> Application deadline is January 16, 2012; application review will begin at that time.

NMU is an EOE

**Oakland University**  
The Department of Electrical and Computer Engineering  
*Assistant Professor Position*

The Department of Electrical and Computer Engineering at Oakland University invites applicants for an Assistant Professor tenure-track faculty position in Computer Engineering starting Fall 2012. Applicants must have a Ph.D. in Electrical and/or Computer Engineering or related fields. Preference will be given to applicants with expertise in digital design, microprocessors, computer architecture, distributed computing, and wireless systems. The successful candidates will be expected to teach and develop undergraduate and graduate courses and laboratories, initiate and integrate strong research programs, direct graduate students, and attract external research funding.

OU is a Ph.D. offering public institution located in southeastern Michigan at the intellectual center of the Automotive Industry and within the Oakland County Automation Alley. OU offers an exemplary fringe benefit package. The ECE Department has 17 faculty and offers BSE, MS, and Ph.D. programs.

Interested applicants should submit a cover letter with a detailed curriculum vita, and the name, address, telephone number and email address of three references using our online application system at:

<http://academicjobs.oakland.edu/postings/130>

For full consideration applications should be submitted by February 15, 2012. Review will continue until the position is filled.

Oakland University is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.

**Oakland University**  
Computer Science and Engineering Department  
*Tenure-track Faculty Positions*

The Department of Computer Science and Engineering need to fill two tenure-track positions to begin on August 15, 2012 - one in computer science and one in information technology. Desired areas of interest include high performance computing, software systems, algorithms, security and privacy, human computer interface, complex networks, networking and cloud computing.

More details about these positions can be found at our application site at:

<http://academicjobs.oakland.edu/postings/100>

The department is currently offering BSc. Degrees in Computer Science and in Information Technology, MSc. degrees

### Researcher in Distributed Computing and Large-scale Data Analysis

#### Project Description:

The Computational Data Analytics Group (CDA) in the Computational Sciences & Engineering Division at Oak Ridge National Laboratory is seeking applicants for a post-masters or post-doctoral researcher within the field of distributed computing and distributed storage technologies. At ORNL, we are interested in large-scale, distributed computing and storage systems. We routinely store and analyze spatiotemporal datasets, health data, unstructured text, and computer log data.

The successful candidate will have an opportunity to pursue basic research in systems development and data analysis, develop real-world systems that serve vital roles in production environments, and consult as specialists in one or more domain-specific projects. The appointment is expected to last for 2 years (contingent upon funding).

#### Responsibilities will include:

- Regularly publishing and presenting research
- Contributing to the design, implementation, and evaluation of distributed storage and processing systems
- Conducting independent research that furthers project goals

#### Qualifications:

Ideal applicants will have: A Masters or Ph.D. degree in Computer Science (or closely related field) with experience working on real-world systems and software. The ideal candidate should have strong programming and analytical skills, including experience with next-generation storage systems (e.g. Apache Cassandra, HBase, etc.), and distributed processing tools (e.g. Hadoop).

Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment.

#### How to Apply:

Qualified applicants must apply online at [https://www3.orau.gov/ORNL\\_TOppS/Account/LogOn](https://www3.orau.gov/ORNL_TOppS/Account/LogOn). All applicants will need to register before they can begin the online application.

This appointment is offered through the ORNL Postgraduate Research Participation Program and is administered by the Oak Ridge Institute for Science and Education (ORISE). The program is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.



## Professional Opportunities

in Computer Science and in Software Engineering and Information Technology, and a Ph.D. in Computer Science and Informatics.

Oakland University is an equal opportunity employer.

### Oklahoma State University, Stillwater

#### Computer Science

##### Tenure-track Assistant Professor

Applications are invited for an anticipated full-time, tenure-track Assistant Professor position. The term of initial appointment will begin in September, 2012.

The Oklahoma State University (OSU) Computer Science Department is seeking applications from qualified candidates with teaching and research experience in any area of Computer Science. A Ph.D. or D.Sc. in Computer Science or a closely related area is required. The position being sought is for the Stillwater campus and duties may be assigned to either Stillwater or Tulsa campuses or both.

The OSU Computer Science Department is a growing department that is committed strongly to the goal of excellence in research, teaching, and extension. It offers a full range of undergraduate and graduate courses leading to B.S., M.S., and Ph.D. degrees in Computer Science. The department also offers courses to students at remote sites using interactive video and the World-Wide Web. There are currently more than 140 undergraduate students and more than 120 graduate students enrolled in the department.

Oklahoma State University encourages applications from qualified women, minorities, and persons with disabilities. Please send curriculum vita, a statement on teaching and research experience, and names of three references (PDF mail preferred) to:

Chair, Faculty Search Committee  
Computer Science Department  
219 MSCS

Oklahoma State University  
Stillwater, OK 74078-1053  
Telephone: (405) 744-5668  
FAX: (405) 744-9097

E-mail: [faculty-search@cs.okstate.edu](mailto:faculty-search@cs.okstate.edu)  
<http://www.cs.okstate.edu/search>

For full consideration applications should be received by December 20, 2011, but applications will be accepted until the position has been filled. Oklahoma State University is an Affirmative Action/Equal Opportunity/E-Verify Employer committed to diversity. Effective July 1, 2008, OSU-Stillwater is a tobacco-free campus.

### Oregon Health and Sciences University

#### Department of Biomedical Engineering, School of Medicine

##### Neuroengineering / Ubiquitous Computing Faculty Position

The Department of Biomedical Engineering in the School of Medicine at Oregon Health & Science University invites applications at all ranks for a faculty position in neuroengineering. Our aim is to extend our existing program in developing technologies that enable early detection and remediation of cognitive decline, functional disability, and chronic disease through unobtrusive, continuous, in-home technologies. OHSU is at the forefront of research in the application of technology to understand aging and neurological diseases. We seek a researcher with a well-developed program in computational behavioral and predictive modeling, and optionally with experience with ubiquitous technologies, to collaborate with our group in Biomedical Engineering and with clinicians throughout OHSU. A secondary interest is applications of speech technologies to health care.

OHSU offers broad opportunities for clinical collaborations, including neurology, the Layton Aging & Alzheimer's Disease Center, the Oregon Center for Aging & Technology, the Center for Spoken Language Understanding, and the new Center for Spatial Systems Biomedicine. We provide competitive startup and compensation packages. The appointee will be expected to maintain an independent, extramurally funded research program and teach courses supporting the research program and appropriate background areas such as biomedical signal processing and statistical modeling. Senior applicants must have demonstrated research excellence and a strong extramural funding portfolio. Junior applicants must show strong evidence of potential success in building a well-funded program, including participation in grant writing and experience at the postdoctoral level.

The position will start September 2012. Interested individuals should submit a CV; up to three recent reprints; statements of research interests, and teaching and mentoring experience and philosophy; and the names and contact information for three references by 1/31/2012 at [www.ohsjobs.com](http://www.ohsjobs.com) reference IRC35204.

OHSU is an Affirmative Action, Equal Opportunity Employer. Women, minorities, disabled persons, Vietnam era and disabled veterans are encouraged to apply. OHSU is a smoke-free workplace.

### Oregon State University School of Electrical Engineering and Computer Science

#### Assistant/Associate/Full Professor tenure-track Position in Computer Science

The School of Electrical Engineering and Computer Science at Oregon State University invites applications for up to four tenure-track positions in Computer Science. We seek strong candidates with a commitment to quality teaching and with research strengths in the areas of programming languages, algorithms with a focus on optimization or probabilistic reasoning, systems-focused HCI, databases with a focus on very large data systems (excluding data mining), and computer security and privacy. Exceptionally strong candidates in other areas of computer science will also be considered. Applicants should demonstrate a strong commitment to collaboration with other research groups in the School of EECS, with other departments at Oregon State, and with other universities.

The School of EECS supports a culture of energetic collaboration, and the faculty are committed to excellence in both education and research. With 40 tenure/tenure-track faculty, we enroll 185 Ph.D., 125 MS and 1200 undergraduate students. OSU is recognized for its "very high research activity" by the Carnegie Foundation for the Advancement of Teaching. The School of EECS is housed in the Kelley Engineering Center, a green building designed to support collaboration among faculty and students across campus.

Corvallis is a college town renowned for its high quality of life.

[jobs.oregonstate.edu/applicants/Central?quickFind=59535](http://jobs.oregonstate.edu/applicants/Central?quickFind=59535)

### Peking University

#### The School of EECS

##### Tenure-track Faculty Positions -- Center for Energy-Efficient Computing and Applications

The School of EECS at Peking University invites applications for tenure-track positions in the areas of energy efficient computing (including but not limited to energy-efficient architectures, compilation, communication, and system software) and applications (such as mobile computing, wireless health, and cloud computing). These positions are associated with the Center for Energy-Efficient

Computing and Applications (<http://ceca.pku.edu.cn>), which offers a new level of startup and compensation packages.

Applications from distinguished candidates at senior levels are also encouraged. To apply, please email the resume, statements of research and teaching, and at least three names for references to Dr. Tao Wang ([ceca\\_recruiting@pku.edu.cn](mailto:ceca_recruiting@pku.edu.cn)).

Applications received by January 20, 2012 will be given full consideration.

### Portland State University

#### Computer Science Department

##### Faculty Position

The Computer Science Department at Portland State University (PSU) invites applications for a junior tenure-track faculty position to begin Fall 2012. Specific areas of computer science under consideration include: data-intensive systems; trustworthy computing; machine learning; and computer architecture. Applications to cloud computing and sustainability are of particular interest. Exceptional applicants in other areas or at other ranks will also be considered.

The department currently has twenty-three tenure-track faculty, including four NSF CAREER Award winners and two ACM Fellows. The department offers an ABET-accredited B.S., both a thesis and a non-thesis M.S., and a Ph.D. in Computer Science. Our teaching loads give faculty time to maintain funded research programs and to be active in professional organizations. The department currently serves approximately 400 undergraduates and 140 graduate students. Further information about the department is available at <http://cs.pdx.edu>.

PSU is the largest university in Oregon and is known nationally for its community engagement and sustainability initiatives. Its campus in downtown Portland is well served by public transit (both bus and rail), and near a variety of restaurants, cultural venues and outdoor activities. PSU's urban setting provides a living laboratory for research and easy access to collaborations in industry, academia and government. (Current faculty collaborations include Intel, Oregon Health & Science University, and Oregon Department of Transportation.) The Portland metro area has long been a leader in open-source development.

Applicants are expected to hold or be near completion of a Ph.D. degree in Computer Science or a closely related field. All applicants are expected to show great potential for future external research support and a demonstrated record of research excellence.

The faculty member will maintain scholarly activity in funded research and publications; teach undergraduate and graduate classes; provide professionally related public service; advise students, and support University activities through committee service.

For more information and application procedure, please visit <http://cs.pdx.edu>. For inquiries about this position, please contact [cssearch@cs.pdx.edu](mailto:cssearch@cs.pdx.edu). Review of applications will begin immediately and will continue until finalists are identified.

Portland State University is an Affirmative Action, Equal Opportunity Institution and welcomes applications from diverse candidates and candidates who support diversity.

### Princeton University Computer Science Department

#### Simons Foundation Postdoctoral Research Position in Theoretical Computer Science

Princeton University's Department of Computer Science is seeking applications for a postdoctoral position in theoretical computer science. This is a 1-year position with the possibility

of renewal for a second year pending satisfactory performance, funded by the Simons Foundation. Candidates should have obtained a PhD in the past year in Computer Science or a related field, and must not have held a prior postdoctoral appointment. Applicants should submit a CV and research statement, and provide the names and contact information for three references who will be contacted electronically. Candidates who have applied for other postdoc positions in theoretical CS at Princeton University or the Center for Computational Intractability can also apply for this position.

You may apply online at <http://jobs.princeton.edu/>.

Princeton University is an equal opportunity employer and complies with applicable EEO and affirmative action regulations.

### Purdue University Department of Computer Science Assistant Professor Position

The Department of Computer Science at Purdue University invites applications for a tenure-track position at the assistant professor level beginning August 2012. Outstanding candidates in all areas of Computer

Science and with a multi-disciplinary focus are encouraged to apply. Specific needs that have been identified include theory and software engineering.

The Department of Computer Science offers a stimulating and nurturing academic environment.

Forty-eight 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. Information about the department and a detailed description of the open position are available at <http://www.cs.purdue.edu>.

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. The successful candidate will be expected to teach courses in computer science, conduct research in field of expertise and participate in other department and university activities. Salary and benefits are highly competitive.

Applicants are strongly encouraged to apply online at <https://hiring.science.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

Review of applications will begin on November 10, 2011, and will continue until the position is filled. A background check will be required for employment in this position. Purdue University is an Equal Opportunity/Equal Access/Affirmative Action employer fully committed to achieving a diverse workforce.

### Purdue University

#### Head, Department of Computer Science

Applications are invited for the position of Head of the Department of Computer Science at Purdue University from dynamic individuals with creative vision. The department has 48 faculty members, with active research programs in algorithms, bioinformatics, databases, distributed and parallel computing, graphics and visualization, information

## Professional Opportunities

security, machine learning, networking, programming languages and compilers, scientific computing, and software engineering. Department faculty are also heavily involved in University-wide multidisciplinary research. The department has implemented a strategic plan for excellence supported by the higher administration, and has state-of-the-art physical facilities and equipment.

Further information about the department can be found at <http://www.cs.purdue.edu>. Information about the College of Science can be found at <http://www.science.purdue.edu>

The successful candidate will have an exemplary record of scholarly achievement, a history of funded research, and outstanding leadership qualities and administrative abilities. It is expected that candidates for this position will have an earned doctorate and experiences sufficient to merit appointment with tenure at the rank of Full Professor. The Head will work with the faculty towards further advancement of the Department towards excellence in research, teaching, and engagement. Qualified persons should submit a letter of application, a statement of research and teaching, and a complete curriculum vitae with addresses and email addresses of four references. Review of applications will begin December 1, 2011 and will continue until the position is filled. Send electronic applications, nominations and inquiries to:

[h-apply@cs.purdue.edu](mailto:h-apply@cs.purdue.edu)

Hard copy applications can be sent to: Martin M. Baker, Vice President Baker and Associates LLC 4799 Olde Towne Parkway - Suite 202, Marietta, GA 30068

A background check will be required for employment in this position.

Purdue University is an Equal Opportunity/Equal Access/Affirmative Action Employer fully committed to achieving a diverse work force.

### Rose-Hulman Institute of Technology

*Faculty Positions in Computer Science and Software Engineering*

The Department of Computer Science and Software Engineering invites applications for tenure-track and visiting faculty positions beginning August 2012. Rank and salary will be commensurate with qualifications. The department offers B.S. degrees in software engineering and computer science, as well as an M.S. in software engineering. Both undergraduate programs are ABET accredited and the graduate program is based on the new Graduate Software Engineering Reference Curriculum.

Ranked #1 among undergraduate engineering colleges by US News and World Report for the 13th year running, Rose-Hulman is a highly selective, coeducational, primarily undergraduate college of engineering, science and mathematics ([www.rose-hulman.edu](http://www.rose-hulman.edu)). Rose-Hulman professors are outstanding teachers.

Detailed information is available from Cary Laxer, Head of Computer Science and Software Engineering. [laxer@rose-hulman.edu](mailto:laxer@rose-hulman.edu) (812) 877-8429 [www.csse.rose-hulman.edu/faqs](http://www.csse.rose-hulman.edu/faqs). Applicants should submit a cover letter, a resume, a statement on their teaching philosophy, and a statement on their professional development goals to <https://jobs.rose-hulman.edu>. Three recommendation letters should be submitted by the applicant's references through the same website. Applications will be accepted until the positions are filled.

EEO/AA

### Rutgers University

*Research Assistant Professor Position in Computational Biomedicine, Imaging and Modeling*

The Rutgers University Center for Computational Biomedicine, Imaging and Modeling <<http://www.cbim.rutgers.edu/>> (CBIM) seek applicants with computer vision and/or medical image analysis expertise in

- Shape prior and based medical image segmentation,
- Cardiac modeling, and strain analysis from tMRI and CT,
- Image retrieval and image annotation, and
- Sparse representation and its applications to computer vision and medical image analysis.

This position is scheduled to start on or around April 1, 2012. Rutgers University offers an exciting and multidisciplinary research environment and encourages collaborations between Computer Science and other disciplines.

Education and Skills Required:

Applicants for this research position should have a PhD but must, at minimum, be in the process of completing a dissertation in Computer Science or a closely related field, and should show evidence of exceptional research promise and potential for developing an externally funded research program. The position may teach a computer science course so a commitment to quality advising and teaching at the graduate and undergraduate levels is necessary. The position will advise graduate and undergraduate students in related research projects.

Applicants should send their curriculum vitae, a research statement

addressing both past work and future plans, and arrange for three letters of recommendation to be sent on their behalf to [hirng.cbim@cs.rutgers.edu](mailto:hirng.cbim@cs.rutgers.edu). If electronic submission is not possible, hard copies of the application materials may be sent to:

CBIM Search, c/o Maryann Holtsclaw  
Computer Science Department  
Rutgers University  
110 Frelinghuysen Road  
Piscataway, NJ 08854

Applications should be received by January 6, 2012, for full consideration.

Rutgers University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply.

### Rutgers University DIMACS

*Postdoctoral Fellowships*

DIMACS, the Center for Discrete Mathematics and Theoretical Computer Science, invites applications for postdoctoral fellowships for 2012-13. Applicants should be recent Ph.D.'s with interest in DIMACS areas, such as discrete mathematics, theoretical computer science, statistics, operations research, their applications, and related areas. Current areas of emphasis include Algorithmic Foundations of the Internet, Algorithmic Decision Theory, Energy and Algorithms, Cybersecurity, Information Sharing and Data Analysis, and applications of mathematics and computation to Homeland Security and to Sustainability. One of these awards is expected to be joint with our partner the Institute for Advanced Study. Some awards might be joint with a partner institution such as AT&T Labs, Bell Labs, NEC Laboratories America, or Telcordia Technologies. See <http://dimacs.rutgers.edu/Applications> for application information.

Applications are due December 1, 2011 for full consideration.

DIMACS Center, Rutgers University, 96 Frelinghuysen Road, Piscataway, NJ 08854-8018; Tel: 732-445-5928; Email: [postdoc@dimacs.rutgers.edu](mailto:postdoc@dimacs.rutgers.edu).

DIMACS is an EO/AA employer.

### Saint Louis University Department of Mathematics and Computer Science

*Instructor or Assistant Professor (non-tenure track)*

Saint Louis University, a Catholic, Jesuit institution dedicated to student learning, research, health, and service, is seeking applicants for a renewable, non-tenure track position in Computer Science at the rank of either Instructor or Assistant Professor, within the Department of Mathematics and Computer Science, beginning August 2012. The primary responsibilities for this position will be split, with 50% dedicated to teaching undergraduate classes in computer science, and 50% to providing instructional support by configuring and maintaining our teaching lab and computer systems.

Minimum qualifications include an M.S. in Computer Science or closely related field, and knowledge of Unix/Linux-based systems; Ph.D. is required to be considered for the rank of Assistant Professor. Demonstrated experience in teaching and/or system administration is preferred.

Applications must be made online at <http://jobs.slu.edu>, including a cover letter, CV, teaching statement, and contact information for at least three individuals who can provide letters of recommendation regarding the candidate's qualifications for this position. Applications received by 1/15/2012 are assured full consideration. Additional information can be found at <http://>

[mathcs.slu.edu](http://mathcs.slu.edu) and questions addressed to [mathcs@slu.edu](mailto:mathcs@slu.edu).

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

### Samsung

*Software Development Engineer*

Technical professionals are defined by what they create. Samsung has the risk taking corporate culture, strategic R&D investments, and global know-how to imagine, develop, and market products that lead the industry. Samsung's Digital Media Solutions Lab located in Irvine, California is currently recruiting world-class engineers who share our "Innovation through passion" philosophy and thrive in a fast-paced, results-driven environment. Are you ready to re-imagine yourself? Imagine who you can become at Samsung. Responsibilities will include:

- Develop world-class software for the digital-TVs, Handhelds, Blu-ray players and other devices
- Create requirements specification, design software, implement, test and debug
- Work with internal and external customers to explore product requirements and resolve challenging issues
- Effectively communicate with global engineering teams

Basic Requirements

- BS in Computer Science/Engineering
- 3-7 years (after BS) of related industry experience
- Demonstrated ability to learn on the job
- Development experience in C/C++
- Development experience in Java or C#
- Development experience with Android and/or iPhone
- Understanding of various software development tools and utilities: IDE, debugger, source control, bug tracking, etc.
- Ability to multi-task effectively under considerable pressure of deadlines and easily adapt within a fast-paced environment

Preferred

- Working experience of web application frontend including HTML, CSS, JavaScript and Flash
- Working experience with dynamic web technologies Ajax, JQuery, Prototype, etc...
- Solid knowledge of XML and JSON data formats
- Web server development experience with one of the following: PHP, ASP, ASP.NET
- Industry knowledge of new technology and standards: HTML5, WebKit, Streaming, Content and Rights management

Samsung Information Systems America is an Equal Opportunity Employer

Interested applicants please contact: [sanchita.g@sisa.samsung.com](mailto:sanchita.g@sisa.samsung.com)

### Samsung R&D (San Jose, CA) Research and Development Principal Engineer, Convergence Standardization

Duties

Lead and participate in high-level standardization activities for Samsung Electronics

- Participate in the high-level standardization activities of key standards bodies and attend a range of standardization for coordination and issue resolution
- Follow standardization activities in teleconferences and face-to-face meetings
- Work with business groups inside Samsung to formulate company

**Chester F. Carlson Center for Imaging Science**  
**Associate or Full Professor Level**

The Wiedman II endowed chair is a senior tenure-track/tenured endowed professorship in the Chester F. Carlson Center for Imaging Science (CIS). We are seeking candidates that have a background and experience in developing instrumentation and/or analysis techniques for imaging living systems related to one or more current areas of interest in the Center, which include biological and biomedical imaging, optics and microscopy, astronomy and planetary science, remote sensing, and visual perception. We are seeking individuals who are committed to the CIS culture and contributing to RIT's core values, honor code, and statement of diversity.

**APPLICATION INSTRUCTIONS FOR IRC53697:**  
Apply online at <http://apptrk.com/217759>. Upload via this website application material as one PDF file that includes your cover letter; a summary of education and professional background; list of publications and research grants; summary of teaching and research experience; a list of three professional references; a brief personal statement on expected future research and teaching activities; and statement of your experience with and interest in cultural diversity. Materials should be addressed to Search Committee Chair, Center for Imaging Science.

You can contact the search committee with questions on the position at: [biofacultysearch@cis.rit.edu](mailto:biofacultysearch@cis.rit.edu). Candidates should visit [www.cis.rit.edu](http://www.cis.rit.edu) for more information and to view the detailed job postings.

Review of applications will begin January 14, 2012 and will continue until an acceptable candidate is found.

The Rochester Institute of Technology is an equal opportunity/affirmative action employer.

## Professional Opportunities

positions on standardization activities and monitor a number of standardization efforts

### Experience and Requirements

- Possess strong leadership skills, past experience in influencing standards and should have a view of the business perspective of the consumer devices from either AV, mobile or service markets
  - Convergence technologies between consumer devices and services
  - History of leadership/influence in standardization environments
  - An understanding of the business/technical perspectives of convergence in devices
  - BS in Computer Science
  - A minimum of 3-5 years experience in convergence, upcoming internet technologies and working with product groups or with product strategy groups
  - Experience in R&D or proof of concept project environments
  - Experience with managing multiple initiatives simultaneously
  - Experience with common convergence standards such as Web services, HTTP, UPNP, DLNA
  - Experience with representing companies on Board of Directors style of activities
  - Experience working with multi-cultural and distributed teams to define direction and lead initiatives
- Samsung Information Systems of America is an Equal Opportunity Employer  
Email: b.gilmore@sisa.samsung.com

### Samsung R&D

#### Operating Systems Researcher

Technical professionals are defined by what they create. Samsung has the risk taking corporate culture, strategic R&D investments and global know-how to imagine, develop and market products that lead the industry. Samsung's Computer Science Laboratory (CSL), located in the heart of Silicon Valley, San Jose, CA, is currently recruiting world-class researchers who share our "Innovation through Passion" philosophy and thrive in a fast-paced, results-driven environment. Get the best of both worlds - at Samsung's CSL you will have the freedom and creative environment of corporate research support, coupled with the potential to see your inventions and technology translate to real products and real business needs.

Samsung R&D is recruiting full-time researchers in the area of Operating Systems (OS) for future cyber-physical systems. We are looking for individuals with a passion for systems research, and the desire to follow through from concept to pre-transition prototype.

Position: Full-time Researcher for the Omni-OS Project

#### Summary:

The Systems Research Group is developing new OS designs that can meet the needs of future computing platforms based on multicore, manycore and cloud technologies. We are currently developing a solution based on L4 microkernel technology that will readily scale from sensors-to-servers, whilst providing advanced support for transparent distributed processing, Quality-of-Service (QoS) guarantees for co-located real-time and best-effort applications, and the "first-class" integration of parallel programming technologies.

We are looking for highly motivated and creative individuals to join the San Jose research team and to augment existing system research expertise. This is an excellent opportunity to join a new team advancing state-of-the-art software technologies for Samsung's current and future business.

Duties and Responsibilities:

- Research and develop micro-kernel based solutions for next generation products.
- Research and develop innovative technologies to directly address scalability limitations of existing solutions.
- Research and develop ideas around the single-system image concept.
- Research and develop new ideas in OS-level and language-level support for heterogeneous processor platforms.
- Develop ideas around the support of fine-grained resource management and QoS monitoring, policing and adaptation in the context of real-time cyber-physical applications.
- Build proof-of-concept prototypes.
- Write research papers and technical articles publishing work and results in top-tier conferences and journals.

#### Necessary Skills/Attributes:

- Ph.D. in Computer Science or related area with 0-5 years practical experience.
- A track record in OS research pertaining to the above areas of interest with high-quality publications in the field.
- Hands-on experience with low-level systems prototyping and development.
- Proficiency with C/C++ and Linux-based development including multi-threaded programming.
- Excellent communication and team working skills are required with a willingness to work with an international team to deliver an integrated solution.
- A willingness to learn new things and take on new challenges.

#### Desirable Skills/Attributes:

- Experience with L4 or other similar microkernel technology (e.g., QNX, Integrity)
  - Experience with embedded systems development.
  - Experience building OS sub-systems such as memory managers, and task schedulers.
  - Experience with implementation of machine-learning algorithms (e.g., GA, simulated annealing, differential evolution) that drive system optimizations.
  - Experience with distributed and parallel computing.
  - Experience developing on TILE processors and programming with TILE assembly.
  - Experience developing on ARM processors and programming with ARM assembly.
- Samsung Information Systems America is an Equal Opportunity Employer  
Email: b.gilmore@sisa.samsung.com

### Samsung R&D (San Jose, CA) Research and Development Privacy Team Lead

Technical professionals are defined by what they create. Samsung has the risk-taking corporate culture, strategic R&D investments, and global know-how to imagine, develop and market products that lead the industry. Samsung's Advanced Technology Lab (ATL), located in San Jose, is currently recruiting world-class engineers and research scientists who share our "Innovation Through Passion" philosophy and thrive in a fast-paced, results-driven environment.

#### Duties

The candidate will lead an R&D team focusing on data privacy and security for mobile devices and associated services. The ideal candidate will have over ten years of industry experience in the area of security and privacy, with prior experience in leading security projects or teams. The successful candidate should have a keen interest and deep understanding of privacy and security issues and requirements,

and prior experience in architecting and designing security products. The ideal applicant should be familiar with the formal foundations of privacy and security, and how security and privacy issues and requirements pertain to mobile device ecosystem. The candidate should have a strong desire to work on problems with real-world potential and impact. Implementation skills and the ability to create early-stage prototypes are also desirable. The candidate will be part of a research lab located in San Jose, CA.

Provide technical and managerial leadership for the establishment of a highly skilled team focused on addressing security and privacy needs for end to end security services and solutions, and aligning the research with Samsung corporate research and product focus.

- Prior managerial experience in leading security projects or teams, in the areas of security and privacy.
- Over ten years of expertise in the area of system security, network security and applied cryptography.
- Prior experience with architecting and designing products for privacy requirements.
- Ability to apply security policies to system design, for end-to-end security services and solutions.
- Formulate research problems based on real-world needs and independently conduct high-quality research.
- Work with existing research and development staff on a broad range of research topics

#### Requires

- Cryptographic theory and algorithms, and their application to cloud computing and mobile computing.
  - Design and development of intrusion detection systems.
  - Design and development of trusted computing systems.
  - Excellent communication skills and willingness to work with an international team to deliver rapid prototypes.
- Samsung Information Systems America is an Equal Opportunity Employer  
Email: b.gilmore@sisa.samsung.com

### Samsung Advanced Technology Lab

R&D Engineer; Convergence (Mobile/Smart Devices)

#### Duties

- Create next generation mobile device and service ideas that will help lead Samsung into the future. This includes both the evolution of convergence services as well as new types of mobile/smart devices
- Prototype hardware and software solutions using internally and externally created solutions to demonstrate ideas around the company
- Contribute to the organization's strong drive to be on the cutting edge of technology through the generation of patentable ideas
- Research new paradigms put into use by our futuristic devices and services and analyze applicability in our space.

#### Requirements

- MS in Computer Science/Engineering or Electrical Engineering; PhD preferred
- Minimum of 4 years' related experience in mobile devices/services or software technologies. Mobile or web platform (e.g., Android, iOS, WebOS, etc.) related experience desirable.
- Past experience in creating novel concepts particularly in the mobile area
- Past experience with prototyping new ideas primarily in software but also mockup of hardware to support those ideas

• Past experience as a 'futurist' in creating concepts 'ahead of their time' is a plus

- Solid understanding in social sciences (e.g., social network, life log, eHealth), internet technologies (e.g., Cloud computing, mobile Internet, etc.), and user experience is key to this position. Also the ability to combine those into novel solutions.
- Expertise in java, C++, or high-level programming languages; additional expertise in scripting languages and Flash is preferred.
- Solid Understanding of web technologies (Javascript/HTML/CSS/Ajax/HTTP, PHP, Apache, SQL/MySQL) and familiarity with Linux/Unix.
- Solid understanding of development processes, including: rapid prototyping, design, development of reuse, and documentation
- Experience developing software for clients (embedded systems) or servers (internet) is highly desirable. Experience in socket programming is required.
- Ability to work independently as a self starter as well as with a team
- Excellent organizational and project management skills with attention to detail and follow through.
- Ability to deal with partially defined problems and unknowns and well as an ability to be adaptable/flexible within a fast-paced environment

Samsung Information Systems

America is an equal opportunity

employer.

Email: b.gilmore@sisa.samsung.com

### Samsung

Research Scientist: "Big Data" Distributed Data-intensive Systems Architecture

Samsung is the world's largest manufacturer of memory chips such as DRAM and NAND (FLASH). Samsung R&D's new research group, working on Intelligent Storage Architecture is currently recruiting world-class scientists, who can inspire the world and create a better future.

Scope of this new department includes (but is not limited to):

- Publish/prototype/patent innovative software architectures (through hardware-software co-research) that can be used in future data centers and personal computing environments
- Publish/prototype/patent distributed programming models that can be used along with existing open source software to take advantage of new devices including but not limited to non-volatile memory and low-power processors.

The qualified candidate MUST

possess the following qualifications/skills:

- Ph.D. or equivalent research experience in Computer Science or Electrical Engineering
- Academic/research experience and knowledge to serve as the "go-to" subject-matter expert in one or more focus areas of the group including but not limited to: Distributed Systems, Big-data programming models/paradigms used in open source systems, compiler-hardware interactions and non-volatile memory systems for storage appliances.
- Ability to participate actively in group discussions and clearly articulate your technical understanding of your area of expertise.
- Ability to perform independent and collaborative research. Good communication skills to collaborate with academic partners and other research teams distributed around the world

## Professional Opportunities

- Publications that demonstrate your research and writing skills
  - Stimulate creation of ideas in the team and to constructively encourage or criticize each other's ideas.
- Email: b.gilmore@sisa.samsung.com

### Samsung's Advanced Technology Lab (ATL)

Researcher/Developer – Mobile Social Middleware

Samsung's Advanced Technology Lab (ATL) located in San Jose, California is recruiting world-class engineers and researchers who thrive in a fast-paced, results-driven environment. At Samsung's ATL you will have the freedom and creative environment of the research world with the rewards of seeing your vision deployed in actual products.

Next Generation Mobile Platforms

The smartphone and other mobile devices are emerging as versatile platforms for a new generation of consumer-oriented applications. Samsung's San Jose Advanced Technology Lab (ATL) is researching core software technologies allowing developers to leverage the capabilities of future mobile devices. The ideal candidate for this position will have a keen interest and proven track record in designing and developing novel social middleware technologies and applications for future mobile devices. The candidate will be expected to combine expertise in social media and data analysis, with knowledge of mobile software and hardware. Duties include the design of architectures, tools and frameworks to support new mobile application models and services, and the development of prototypes which embody your ideas.

Required Skills:

- Experience using APIs to retrieve and integrate multi-faceted social data from varied sources, such as social networking services, websites and applications.
- Experience with text analysis techniques, such as natural language processing, semantic analysis, feature extraction and sentiment analysis.
- Familiarity with JavaScript, HTML5 & C++.
- Excellent communication skills and a willingness to work with an international team to deliver rapid prototypes.

Desired skills:

- Extensive knowledge of current and emerging social media platforms, and their growing influence on mobile devices.
- Experience with developing middleware technologies and applications for mobile devices.

Qualifications

- PhD in computer science or engineering, or Masters in computer science with 3-5 years of relevant experience.
- Track record of delivering tangible results from research projects.

Samsung Information Systems of America is an Equal Opportunity Employer  
Email: b.gilmore@sisa.samsung.com

### Samsung R&D (San Jose, CA) Research and Development Sensor Framework Team Leader

Technical professionals are defined by what they create. Samsung has the risk-taking corporate culture, strategic R&D investments, and global know-how to imagine, develop and market products that lead the industry. Samsung's Advanced Technology Lab (ATL), located in San Jose, is currently recruiting world-class engineers and research scientists who share our "Innovation Through Passion" philosophy and thrive in a fast-paced, results-driven environment.

The candidate will lead an innovative R&D team focusing on sensor processing and human activity recognition using smartphones and other mobile devices that are emerging as versatile platforms for a new generation of consumer-oriented applications.

Duties

- Provide technical and managerial leadership for the establishment of a highly skilled team focused on technologies that leverage smartphone sensor and social signals to perform activity recognition.
- Lead the implementation of complete end-to-end prototype systems.
- Devise and design user-facing applications that fit within the Samsung ecosystem.

Requires

- Ph.D. in Computer Science, Electrical Engineering, or related field
- Strong research publication record in sensor-based recognition of activities, motions, gestures, or the environment
- Strong track record of delivering tangible end-to-end results from research projects
- Experience with machine learning topics such as HMM
- Familiarity with digital signal processing

Knowledgeable of Java, Objective-C, C++, JavaScript or other languages for mobile computing.

Samsung Information Systems

America is an Equal Opportunity

Employer

Email: b.gilmore@sisa.samsung.com

### Samsung Advanced Technology Lab

Sr. Network/MAC Engineer

The successful candidate will be responsible for R&D and standardization in MAC protocol and AV transport for next generation high-speed video interfaces and networks. The candidate should possess strong knowledge in networking theory and MAC design, and be familiar with various network/interface standards (such as 802.3, 802.3ba, HMDI, and MHL) and transport mechanisms (such as RTSP, UDP, TCP/IP). Good knowledge in optical networking is a plus. In addition, the candidate must have strong communication skills, comfortable to debate in an open forum, a problem solver, and be able to work internally as well as in alliance with industry leaders.

Duties

- Design architecture, MAC protocol and AV transport mechanism for high-speed video interface and network
- Develop, analyze and simulate MAC algorithms
- Participate in standardization activities by aligning company interests in high-speed video interface and network
- Develop, coordinate and present technical contributions in standard bodies
- Conduct open innovation with leading companies and research institutes

Requires

- MS (or equivalent), preferably PhD in EE or CS, specialized in communication networks
- At least 3 years of relevant experience in architecture design, MAC protocol, and AV packet transport for video interface
- History of design, analysis and simulation of MAC/network algorithms using OPNET
- History of participation and influence in standardization environment
- Strong knowledge in networking standards (incl. 802.3, 802.3ba, HMDI, and MHL)

- Good knowledge in AV transport mechanisms (e.g., RTSP, UDP, TCP/IP) and video codec (such as H.264, MPEG4)
  - Good knowledge in optical communications/networking
  - Self motivated, proactive and team-player
  - Excellent analytical skills
  - Excellent communications skills and documentation/writing skills
- Samsung Information Systems of America is an Equal Opportunity Employer  
Email: b.gilmore@sisa.samsung.com

### Samsung Advanced Technology Lab

Senior Staff Engineer - Wireless LAN Technology & Standard

Samsung has the risk taking corporate culture, strategic R&D investments and global know-how to imagine, develop and market products that lead the industry. Samsung's Advanced Technology Lab, located in San Jose, California is currently recruiting world-class talent who share our "Innovation through Passion" philosophy and thrive in a fast-paced, results-driven environment. Ready to re-imagine yourself? Imagine who you can become at Samsung.

The candidate will be responsible for standardization and technology leadership by driving and aligning Company's strategies in standard bodies. The candidate must have strong communication skills, comfortable to debate in an open forum, a problem solver, and be able to work internally and in alliance with industry leaders. He/she needs to conduct in-depth research and analysis on wireless baseband technologies for healthcare solutions. In depth understanding of the PHY layer of IEEE 802.11 and 802.15 is a must. Understanding of RF and wireless sensor networking will be added values.

Duties

- Lead standardization activities by driving and aligning company interests
- Develop, coordinate and present technical contributions and specifications in standard bodies
- Act as Company's external interface for wireless healthcare standard and technology collaboration
- Design architecture for low-power wireless healthcare solutions
- Develop, analyze and simulate physical layer (baseband) algorithms
- Conduct open innovation with leading companies and research institutes
- Enable Company's technology in connected healthcare

Requires

- MS (or equivalent), preferably PhD in EE, specialized in wireless communications
  - Minimum of 4 years' experience in standard leadership and 2 years of wireless connectivity experience
  - Experienced in wireless standard developments e.g., in IEEE 802.11, 802.15 or Wi-Fi Alliance
  - Experienced with low-power wireless PHY (baseband) design
  - Excellent understanding of IEEE 802.11 and 802.15 systems, and RF, etc.
  - Strong knowledge in wireless MAC and sensor networking
  - Excellent analytical skills
  - Self motivated and proactive
  - Excellent communications skills and documentation/writing skills
- Samsung Information Systems of America is an Equal Opportunity Employer  
Email: b.gilmore@sisa.samsung.com

### Samsung R&D

SSD Researcher (NAND Flash)

Samsung is in a path of inventing new and revolutionary technologies and it is investing heavily in strategic R&D in Korea as well as in United States. Samsung's Storage Lab located in San Jose, CA is currently recruiting researchers, PhD candidates or world-class engineers with academia background and contacts that can be the liaison between universities research programs, university post-graduate professors/students and Samsung R&D engineers to develop leading edge technologies.

Duties

- Developing university contacts in several well known research universities
- Working with Samsung and university professors to sponsorship research projects to be executed by post-graduate students
- Working with firmware, hardware groups to develop future technology map
- Working customers and committees to create a futuristic map of realistic features
- Working as part of a worldwide team focused on quality, reliability and performance
- Identifying future trends in flash technology and embedded firmware
- Working with universities to develop Samsung IP

Requirements

- 10+ years experience in academia research background
  - 5+ years of experience working as a liaison between university research centers and technical corporations
  - Knowledge of large scale ASIC development and high performance interface protocols
  - Demonstrated ability to work as a team player, as part of a local and globally distributed team
  - Good oral and written skills for communication and documentation
  - Open to domestic and/or international travel for technical consultation/presentation
  - MS in EE or CS required; PhD in EE or CS preferred
- Samsung Information System America is an Equal Opportunity Employer  
Email: b.gilmore@sisa.samsung.com

### Samsung US R&D Center, San Jose

Systems Researcher/Scientist

Samsung US R&D Center, San Jose is recruiting systems researchers for a new R&D group. Qualified candidates would have research publications in one or more of the following areas:

- Big data analytics
- Data-intensive computing
- Non-volatile memory
- Database Architectures
- Distributed Systems

You will have the opportunity to:

- Publish/prototype/patent innovative software architectures that can be used in data centers and personal computing environments to take advantage of the new memory hierarchy.
- Publish/prototype/patent new algorithms and methodologies that can take advantage of new devices such as non-volatile memory and low-power processors.

Candidates must have Ph.D. in Computer Science or equivalent research experience with publications that demonstrate their research interests. Candidates who will complete their PhD in 2012, but can join us in early 2012 are also encouraged to apply.

## Professional Opportunities

Samsung Information Systems is an Equal Opportunity Employer  
Email: [b.gilmore@sisa.samsung.com](mailto:b.gilmore@sisa.samsung.com)

### Samsung Information Systems America

*Software Development Engineer - Video Streaming*

Technical professionals are defined by what they create. Samsung has the risk taking corporate culture, strategic R&D investments, and global know-how to imagine, develop, and market products that lead the industry. Samsung's Digital Media Solutions Lab located in Irvine, California is currently recruiting world-class engineers who share our "Innovation through passion" philosophy and thrive in a fast-paced, results-driven environment. Are ready to re-imagine yourself? Imagine who you can become at Samsung.

Responsibilities:

- Develop world-class software for the digital-TVs, Handhelds, Blu-ray players and other devices
- Create requirements specification, design software, implement, test and debug
- Work with internal and external customers to explore product requirements and resolve challenging issues
- Effectively communicate with global engineering teams

Skills:

Required:

- BS in Computer Science/Engineering
- 3-7 years (after BS) of related industry experience
- Demonstrated ability to learn on the job
- Development experience in C/C++ is required
- Understanding of real time audio/video streaming protocols and their implementation: RTP, RTSP, RTMP, HTTP Live streaming (HLS), Flash and MS Smooth Streaming.
- Understanding of various software development tools and utilities: IDE, debugger, source control, bug tracking, etc.
- Ability to multi-task effectively under considerable pressure of deadlines and easily adapt within a fast-paced environment

Preferred:

- Development experience in Java and Android or iPhone.
- Understanding of video encoding and compression standards such as MPEG-4, H.264, 3GPP.
- Industry knowledge of new technology and standards: HTML5, WebKit, Content and Rights management

Samsung Information Systems America is an Equal Opportunity Employer

Interested applicants: [Charles.jo@sisa.samsung.com](mailto:Charles.jo@sisa.samsung.com)

### Southern Methodist University Department of Computer Science and Engineering

*Faculty Position in Computer Science and Engineering*

The Department of Computer Science and Engineering in the Lyle School of Engineering at Southern Methodist University invites applications for a faculty position in computer science and engineering beginning Fall 2012. Individuals with experience and research interests in all areas of computer science and engineering are encouraged to apply. Priority will be given to individuals with expertise and research interest in algorithms, data mining, informatics, and related areas. The search is focused at the tenure-track assistant professor level. The successful candidates must have or expect to have a Ph.D. in computer science, computer engineering, or a closely related area by date of hire. Successful applicants

will demonstrate a deep commitment to research activity in computer science and engineering and a strong potential for excellence in teaching.

The Dallas/Fort Worth area, one of the top three high-tech industrial centers in the country, has the largest concentration of telecommunications corporations in the US, providing abundant opportunities for industrial research cooperation and consulting. Dallas/Fort Worth is a multifaceted business and high-tech community, offering exceptional museums, diverse cultural attractions, and a vibrant economy.

The CSE Department resides within the Bobby B. Lyle School of Engineering and offers BS, MS, and Ph.D. degrees in Computer Engineering and Computer Science, the Doctor of Engineering in software engineering, and the MS in Security Engineering and Software Engineering. The department currently has 15 faculty members with research concentrations in security engineering, software engineering, computer networks, telecommunications, data mining, database systems, VLSI and digital systems, and computer arithmetic. Additional information may be found at: [www.lyle.smu.edu/cse](http://www.lyle.smu.edu/cse).

Interested individuals should send a complete resume and names of three references, including a one-page statement of research interests and accomplishments to:

[csesearch@lyle.smu.edu](mailto:csesearch@lyle.smu.edu)  
or  
CSE Faculty Search Position #51048  
Department of Computer Science and Engineering  
SMU  
Dallas, TX 75275-0122

The committee will begin its review of the applications on or about February 1, 2012. To ensure full consideration, applications must be time and date stamped before February 1, 2012. However, the committee will continue to accept applications until all positions are filled. Hiring is contingent upon the satisfactory completion of a background check

### Stony Brook University Department of Computer Science Assistant Professor, Computer Science (Multiple Positions)

Stony Brook University's Department of Computer Science invites applicants for multiple tenure-track faculty positions for Fall 2012. Exceptionally qualified junior candidates in all areas of Computer Science are invited to apply. Candidates in the following areas are particularly encouraged to apply: Networking, Wireless and Sensor Networks, Social Networks, Systems, Computer Architecture, Theory of Computing, Massive Data, and Web of Things.

Applicants should hold a Ph.D. in Computer Science or a closely related discipline and must demonstrate superior research potential.

The Department currently has more than 40 faculty members and is expected to recruit additional members in the next several years. There are five main research areas in the Department: computer systems, visual computing, logic programming/database, concurrency/verification, and algorithms. Detailed information on the research activities of the department can be found on the Department home page: [www.cs.stonybrook.edu](http://www.cs.stonybrook.edu). The Department is in a stage of significant expansion, including a new Computer Science building, a new Center of Excellence in Wireless and Information Technology (CEWIT) building, along with new graduate programs at SUNY Korea (Songdo) beginning in 2012. The Department is

also associated with the New York Center for Computational Sciences (NYCCS) and the New York Blue supercomputer.

Home to many highly ranked graduate research programs, Stony Brook University is located 60 miles from New York City on Long Island's scenic North Shore. Stony Brook University is a member of the prestigious Association of American Universities (AAU) and co-manager of nearby Brookhaven National Laboratory, a DOE multidisciplinary research laboratory.

Applicants should apply online at: <https://hiring.cs.stonybrook.edu> (this method is highly preferred), or submit a cover letter and CV to:

Kathryn Germana  
Computer Science Department  
2434 Computer Science Building  
Stony Brook University  
Stony Brook, NY 11794-4400

Review of applications will begin immediately and will continue until the position is filled. For a full position description and/or application procedures, visit [www.stonybrook.edu/jobs](http://www.stonybrook.edu/jobs) (Ref. #F-6062-11-10). Stony Brook University/SUNY is an equal opportunity, affirmative action employer.

### Symantec Corporation Symantec Research Labs

*Principal Research Engineer position*

This is an opportunity to become a member of Symantec Research Labs in Culver City, and be involved in developing new concepts, tools and technologies in one or more of the following areas:

- SaaS/Cloud infrastructure (e.g., machine learning, big data analytics, databases, distributed computing)
- Web technologies
- Mobile platforms
- Information Centric Security and Compliance (e.g., cryptography, authentication, access control, DLP, PCI DSS..)

Projects will include researching challenging problems, developing working prototypes, making public presentations and transferring results to business units for commercialization. For more information please contact [darren\\_shou@symantec.com](mailto:darren_shou@symantec.com)

### Texas Southern University Chair Position in Computer Science

The Department of Computer Science (CS) at Texas Southern University is seeking an outstanding scholar and administrator for the position of Chair starting Fall 2012. Applicants must meet the basic requirements for attaining tenure at the rank of Associate, or Full Professor in the Department of Computer Science.

Responsibilities: Foster and promote scholarly research, productive teaching, and high visibility of a diverse and active faculty. Serve as an advocate for the department, support efforts to secure external funding, and maintain effective liaisons with the campus and community. Perform other duties as assigned by the Dean of the College of Science and Technology.

Qualifications: Have a Ph.D. in Computer Science or a related discipline with a strong and proven record of scholarship, demonstrated leadership ability, and effective communication skills. Have an outstanding record of successful grantsmanship, a record of significant research achievement and publication, a coherent research and teaching plan showing the potential to secure external research funding, build a research program in their area of specialty, contribute to the department's graduate and undergraduate teaching mission, and evidence of sensitivity to issues impacting diversity in the campus community.

Application: Access <https://jobs.tsu.edu/> for submitting an online application. For application related questions contact Ms. Marie A. Henry, HR Employment Specialist, at [henry\\_ma@tsu.edu](mailto:henry_ma@tsu.edu) or 713-313-7225. For other questions concerning the position and programs in the Department of Computer Science, contact Dr. Lei Yu, Professor and Dean, College of Science and Technology (<http://www.cost.tsu.edu/>), at [yu-lx@tsu.edu](mailto:yu-lx@tsu.edu) or 713-313-7007.

### Toyota Technological Institute Chicago

*Faculty Positions at All Levels*

Toyota Technological Institute at Chicago (TTIC) is a philanthropically endowed degree-granting institute for computer science located on the University of Chicago campus. Applications are being accepted in all areas, but we are particularly interested in machine learning, speech processing, computational linguistics, Computer vision, computational biology and optimization. Positions are available at all ranks, and we have a large number of three year limited term positions currently available. 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

### University of Alaska Anchorage Mathematical Sciences

*Two Assistant Professor Positions*

The University of Alaska Anchorage invites applications to fill two tenure-track Assistant Professor of Computer Science positions beginning August 2012. One position in complex systems and the other is open to any area.

Application Instructions

For details visit [www.uakjobs.com/applicants/Central?quickFind=72524](http://www.uakjobs.com/applicants/Central?quickFind=72524) and [www.uakjobs.com/applicants/Central?quickFind=72549](http://www.uakjobs.com/applicants/Central?quickFind=72549)

### The University of Arkansas Computer Science and Computer Engineering Department

*Two Tenure-Track Positions*

The University of Arkansas Computer Science and Computer Engineering (CSCE) Department seeks outstanding individuals to fill two tenure-track, assistant professor positions. Successful candidates will have an earned doctorate in computer science, computer engineering, or a related field. We are seeking candidates with expertise in cyber security, data mining or machine learning, human-computer interaction, or pervasive/ubiquitous computing. Outstanding candidates in other related areas are also encouraged to apply.

The CSCE department offers BS, MS, and PhD degrees in Computer Science and Computer Engineering to approximately 250 undergraduate and 60 graduate students. The department has fourteen faculty with an annual external research funding of \$1.8 million and is located in a new 90,000 sq. ft. building. For more information concerning the department see <http://www.csce.uark.edu>

Application materials (cover letter, teaching and research statement, curriculum vitae, and the names and addresses of three references) should be submitted to the CSCE Search Committee electronically at <http://www.csce.uark.edu/search> or mailed to:

Search Committee  
CSCE Department, 504 JBHT  
Fayetteville, AR 72701  
[search@csce.uark.edu](mailto:search@csce.uark.edu)

## Professional Opportunities

Completed applications received by January 15, 2012 will be assured full consideration. Late applications will be reviewed as necessary to fill the position.

The University of Arkansas is ranked as a Carnegie Foundation RU/VH (research university, very high research activity) university and is located in Fayetteville, ranked as the 4th "Best Metro" in Forbes' 2009 list of "Best Places for Business and Careers," and recognized as one of the "Top 10 Best Cities to Live, Work and Play" by Kiplinger in 2008.

The University of Arkansas is an equal opportunity, affirmative action employer. Qualified underrepresented minority and women candidates are especially invited to apply. All applicants are subject to public disclosure under the Arkansas Freedom of Information Act and persons hired must have proof of legal authority to work in the United States.

### University of British Columbia Department of Computer Science Tenure-Track Faculty Position

The Department of Computer Science at the University of British Columbia is recruiting for a tenure-track faculty position at the Assistant Professor level for the 2012/2013 academic year.

The responsibilities of the position include effective teaching at the undergraduate and graduate levels, supervising graduate students, and developing and maintaining an active research program.

The department is seeking outstanding candidates with a research focus in the areas of Networks, Systems and Security. A PhD in Computer Science or a related area is required. The anticipated start date is July 1, 2012.

The successful candidate must have an exceptional research record, as judged by the strength of the application materials including the portfolio of publications and other research artefacts developed during his or her Ph.D. program, and post Ph.D. career, if applicable. The application materials must also demonstrate that the candidate shows promise as an excellent teacher and advisor, and has potential to become an innovative and independent researcher and a leader in his or her field. The potential of an applicant's research program to complement and extend the existing research strengths of the department will be an important factor in selection.

Applicants for the position must submit a CV, a teaching statement, a research statement, and the names of at least three references. The teaching statement should include a record of teaching interests and experience.

If you wish to apply: [https://apps.cs.ubc.ca/faculty\\_recruit/apply/](https://apps.cs.ubc.ca/faculty_recruit/apply/)

The website will remain open for submissions through the end of the day on January 31, 2012. The website may remain open past that date at the discretion of the Recruiting Committee. All applications submitted while the above website is open will be considered. UBC hires on the basis of merit and is committed to employment equity. All qualified persons are encouraged to apply. We especially welcome applications from members of visible minority groups, women, Aboriginal persons, persons with disabilities, persons of minority sexual orientations and gender identities, and others with the skills and knowledge to engage productively with diverse communities. Canadians and permanent residents of Canada will be given priority.

If you have questions about the application process, please contact the

Recruiting Committee Chair by email, at the address below.

Laks V.S. Lakshmanan  
Chair, Recruiting Committee  
Department of Computer Science  
University of British Columbia  
Vancouver BC V6T 1Z4  
Canada  
Email: [faculty-recruiting@cs.ubc.ca](mailto:faculty-recruiting@cs.ubc.ca)

### University of California, Irvine The Henry Samueli School of Engineering Department of Electrical Engineering and Computer Science

Emulex Career Development Chair for Assistant Professor

The Department of Electrical Engineering and Computer Science at the University of California, Irvine invites applications for one tenure-track faculty position at the Assistant Professor Level in all areas of Computer Engineering and Computer Systems, including but not limited to embedded systems, computer networks, distributed computing, and high-performance computing. Applicants must have a Ph.D. in a related area, have demonstrated an outstanding record of achievements in their field of research, and have a strong commitment to teaching at the undergraduate and graduate levels. The Emulex Career Development Chair is a prestigious position that provides a fixed annual scholarly allowance. The holder of the Emulex Career Development Chair will enjoy the benefits for three years, or the achievement of tenure, whichever comes earlier.

More information about the department can be found at <http://www.eng.uci.edu/dept/eecs>.

The Henry Samueli School of Engineering at UC Irvine is one of the nation's fastest growing engineering schools, attracting talented faculty and students from across the nation and abroad. Its mission is to provide outstanding education to students through a combination of classroom learning and laboratory experience distinguishing itself through an emphasis on cross-disciplinary research and education.

Applications should include a detailed statement of research and teaching interests, a current CV, and the names and addresses of three or more references. To submit your application to our on-line recruitment program, you will find the URL link at our website at: <http://www.eng.uci.edu/employment/eecs>.

Selection will begin December 1, 2011, and continue until the position is filled. More details can be found by contacting Professor Michael Green ([mgreen@uci.edu](mailto:mgreen@uci.edu)) Department Chair.

UCI is an equal opportunity employer committed to excellence through diversity and strongly encourages applications from all qualified applicants, 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 an NSF ADVANCE Award for gender equity.

### University of California, Riverside Computer Science and Engineering Tenure-Track Faculty Positions

The Department of Computer Science and Engineering, University of California, Riverside invites applications for tenure-track faculty positions beginning in the 2012/2013 academic year with research interests in Systems. Candidates in Operating/Distributed Systems, Cyber-security, Cyber-physical systems and High performance computing are especially encouraged to apply. Exceptional candidates in all areas will be considered. Positions require a Ph.D. in Computer Science (or in a closely related field) at the time of employment.

Junior candidates must show outstanding research, teaching and graduate student mentorship potential. Senior candidates with exceptional research, teaching and graduate student mentorship records may be considered. Salary level will be competitive and commensurate with qualifications and experience.

Details and application materials can be found at [www.engr.ucr.edu/facultysearch](http://www.engr.ucr.edu/facultysearch).

Full consideration will be given to applications received by January 6, 2012. Applications will continue to be received until the positions are filled.

For inquiries and questions, please contact us at [search@cs.ucr.edu](mailto:search@cs.ucr.edu).  
EEO/AA employer

### University of California, San Diego Department of Computer Science and Engineering Faculty Positions

The UCSD Department of Computer Science and Engineering invites applications at all levels (tenure-track/tenured) in all areas of computer science and engineering, with particular interest in the areas of human-computer interaction, robotics, software systems for massive parallelization, data intensive systems, quantitative and systems biology, energy-efficient computing systems, and sustainable/green computing. However, exceptional candidates in all areas will be seriously considered.

The department is looking for applicants with outstanding research credentials. Successful applicants are expected to lead a vigorous research program and to have a strong commitment to teaching. A Ph.D. in computer science or a related area is desired. Salary and rank will be commensurate with qualifications in conformance with University of California policies. The CSE Department is committed to building an excellent and diverse faculty, staff and student body. In addition to having demonstrated the highest standards of scholarship and professional activity, the preferred candidates will have experience or potential demonstrated contributions to a climate that supports equity, inclusion, and diversity. More information about and examples of contributions to diversity can be found at <http://facultyequity.ucsd.edu/Faculty-Applicant-C2D-Info.asp>

We encourage candidates to send applications as soon as possible. Faculty applications received by January 16, 2012 will be given full consideration. However, positions remain open until filled. To apply, candidates should follow instructions posted at the website <https://csefacapp.ucsd.edu/applicant>.

UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of excellence and diversity among its faculty and staff: <http://diversity.ucsd.edu>

### University of California, San Diego Department of Cognitive Science Associate or Full Professor - Human Computer Interaction (HCI)

The Department of Cognitive Science within the Division of Social Sciences at the University of California, San Diego invites applications for a new faculty position in human-computer interaction. The department has a preference for a senior researcher to be appointed at the associate or full professor level, but will also consider junior candidates.

For more information on this position please visit:

<http://www.cogsci.ucsd.edu/news/131/>

### University of Central Arkansas Computer Science Department Tenure-track Assistant Professor

The Computer Science Department at the University of Central Arkansas (UCA) invites applications to fill one tenure-track faculty position at the assistant professor level to start in Fall 2012. Applicants should have a PhD degree in computer science, computer engineering, or related discipline. All fields will be considered, however, applicants who complement current department strengths, such as mobile and embedded systems, cloud computing, big data management solutions, or web technologies and languages, are encouraged to apply. A strong commitment to excellence in teaching and research involving students is expected.

The department offers BS (accredited by ABET) and MS degree programs and enjoys strong support from local corporations. This open position is co-sponsored by the Axiom Corporation. UCA is committed to excellence in undergraduate and graduate education. It has been ranked in the top tier of universities in the south. For more information about the department and the university, visit [uca.edu/computerscience](http://uca.edu/computerscience).

Applicants should upload their cover letter, curriculum vitae, a statement of research interests, a statement of teaching, and transcripts to this website <http://sun0.cs.uca.edu/apply/>. Recommendation letters will be gathered from the individuals you specified in the website. Upon submitting your application each of your references will receive an automated email requesting that they provide a letter of recommendation. Review will begin on January 8, 2012 and continue until the position is filled.

AA/EOE

### University of Central Florida Department of Electrical Engineering and Computer Science Lecturer in Computer Science

The Computer Science Division of the department of EECS at the University of Central Florida seeks an outstanding candidate for the position of Lecturer, starting August 8, 2012. An earned Master's degree in Computer Science or a closely related discipline is required. A Ph.D. and college-level teaching experience are highly preferred. The position is not tenure earning.

The responsibilities of the Lecturer will be to teach a fulltime academic load, which consists of up to four courses per semester. The courses may include a variety of topics in our undergraduate Computer Science and Information Technology programs, including an "Introduction to Computing" course and courses on office applications.

Other responsibilities include holding office hours, conducting required academic performance assessment, and development of instructional content for course enhancement.

The Lecturer's appointment will be for nine months. A supplementary appointment for the Summer semester may be made following an assessment of the Lecturer's performance and the teaching needs of the program.

Applications must be submitted electronically at:

[www.jobswithucf.com/applicants/Central?quickFind=77122](http://www.jobswithucf.com/applicants/Central?quickFind=77122)

and should include a cover letter; a complete CV/resume; a one-page statement of teaching interests and philosophy; and a list of at least three references, with addresses, phone numbers, and email addresses.

Screening of applications will begin February 1, 2012. Applications must be

## Professional Opportunities

received by May 15 2012 in order to be considered for this position.

UCF is an Equal Opportunity/Affirmative Action employer.

### University of Colorado Boulder Department of Electrical, Computer, and Energy Engineering

*Assistant Professors (2 positions)*

University of Colorado Boulder: Department of Electrical, Computer, and Energy Engineering (ECEE) seeks outstanding candidates for two tenure-track positions in computer systems. The openings are targeted at the level of Assistant Professor, but experienced candidates with outstanding credentials may be considered for Associate or Full Professor.

Candidates interested in rigorous and innovative approaches to the design and analysis of complex computing systems (from embedded and cyberphysical to large-scale distributed systems) should apply. We seek candidates with background in programming languages, concurrency, security, formal methods, verification, or system engineering. Preference will go to researchers whose work spans multiple areas.

The positions will help shape the cooperation with the Department of Computer Science on computing systems.

Candidates must have a Ph.D. in electrical engineering, computer engineering, computer science, or related discipline; they must have the ability to develop an independent research program, and enthusiasm for working with undergraduate and graduate students.

The University of Colorado Boulder is committed to diversity and equality in education and employment. We encourage applications from women, minority candidates, people with disabilities, and veterans.

Applications will be evaluated starting December 6, 2011 and until the positions are filled.

Applications must include a letter of application specifying the desired position and area of specialization, complete curriculum vitae, statements of research and teaching interests, and names and contact information of three references. Applications must be submitted on-line at <http://www.jobsatcu.com/> using posting number #815103 (computer systems). Additional information is available at that site.

### University of Colorado, Boulder Department of Computer Science

*Assistant Professor*

The Department of Computer Science at the University of Colorado Boulder (CU) seeks outstanding candidates in human-centered computing (HCC) at the level of Assistant Professor, although senior candidates at higher ranks may be considered. The position will help shape HCC initiatives at CU. Candidates working in human-computer interaction, computer-supported cooperative work, information visualization, and/or social computing are invited to apply. Candidates should have an orientation to computer science as their primary faculty research and teaching home.

The University of Colorado Boulder is an Equal Opportunity Employer.

Applications must be submitted on-line at:

[www.jobsatcu.com/applicants/Central?quickFind=66808](http://www.jobsatcu.com/applicants/Central?quickFind=66808)

### University of Colorado, Colorado Springs Computer Science Department

*Assistant Professor*

The University of Colorado, Colorado Springs invites applications for up to three tenure-track Assistant Professor positions

in all areas of Computer Science and Software Engineering. The CS department offers Bachelor, Master and PhD degrees and is interested in candidates with a strong commitment to pursuing externally funded research and teaching at both the graduate and undergraduate levels.

Apply electronically at <http://www.JobsatCU.com>, refer to posting #815131. Review of applications will begin on January 15, 2012 and continue until the positions are filled.

The university fosters equity in employment by promoting diversity and assuring inclusiveness

### University of Connecticut Computer Science & Engineering Department

*Assistant/Associate Professor*

The University of Connecticut invites applications for a nine-month, tenure-track faculty position for teaching, research, service and outreach in the Computer Science & Engineering Department in the School of Engineering. Applicants must hold a Ph.D. in computer science or a related discipline by the time of appointment and possess an excellent record of research accomplishments. While applicants in all areas will be considered, the department seeks to strengthen its coverage of core areas of computing such as Systems, Algorithms, and High Performance Computing. It is preferred that candidates possess the ability to contribute through research, teaching and/or public engagement to the diversity and excellence of the learning experience. The department will give preference to applicants with relevant teaching experience.

For a full job description and application instructions please visit [www.jobs.uconn.edu](http://www.jobs.uconn.edu).

The University of Connecticut is an EEO/AA Employer. (Search # 2012121)

### University of Houston Department of Computer Science

*Faculty Position*

The Department of Computer Science at the University of Houston ([www.cs.uh.edu](http://www.cs.uh.edu)) invites applications for one tenure-track faculty position starting in August 2012. The Department is in a phase of significant growth in enrollments, sponsored research, and faculty size. The current search is focused on the following areas: software design/engineering, computer security, human-computer interaction, and theory. However, outstanding candidates in other areas will also be considered. Candidates at all levels are invited to apply. Applicants 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 Mining (information retrieval, large-scale data analysis, database systems, machine learning), Computational Life Sciences (biomedical image analysis, bioinformatics, biometrics) and Visual Computing (graphics, HCI, gaming). The Department's research is the epitome of innovation, mixing advances in core computer science areas with pace-setting multi-disciplinary programs in computational medicine, biology, and psychology. The combination of fundamental research and innovations has led to numerous local, national and international collaborations, the strongest of which are with the Texas Medical Center and the local energy industry.

The University of Houston, one of the largest in the nation with over 36,000 students, is located in one of the most vibrant metropolitan areas.

It was recently classified as a university with very high research activity by the Carnegie Foundation and is listed as one of the nation's best institutions for undergraduate education by the Princeton Review. Houston, the 4th largest U.S. city, is the epicenter of the energy industry, features the largest medical center in the world, and hosts the Johnson Space Center. The Department's research laboratories have joint programs with laboratories from the local medical schools and hospitals, NASA, and the local high-tech 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 five. Evaluation of applications will commence on January 15, 2012. Applications will be reviewed as they are received until the position is filled. More information and instructions are available on-line at: <http://www.cs.uh.edu/faculty-search>

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

*Faculty Position*

The Computer Science Department at the University of Illinois at Chicago invites applications for tenure-track positions at the rank of Assistant Professor (exceptional candidates at other ranks may also be considered). Candidates in the following areas are especially encouraged to apply: Computer Security, Software Engineering, Machine Learning and Computer Systems (Mobile/Ubiquitous computing and other experimental subareas).

The University of Illinois at Chicago (UIC) ranks among the nation's top 50 universities in federal research funding. It is the largest research university in the Chicago area, and is one of the most diverse universities in the country. The Computer Science department has 27 tenure-track faculty representing major areas of computer science, and offers BS, MS and PhD degrees. Two of our faculty members are ACM Fellows and eight members are recipients of NSF CAREER awards. Our annual research funding has averaged \$6.5M over the last five years and includes major funding from NSF, DARPA, DoD and NASA, including two NSF IGERT awards, nine Trustworthy Computing awards and several other research and instrumentation grants; awards from state agencies such as the Illinois Department of Transportation, and from companies such as Google, Yahoo! and Motorola. Our department is home to many pioneering and discipline-defining efforts in the areas of virtual reality (CAVE), software engineering (Petri Nets, Model Checking), Data Management and Mining, and Computational Transportation. We have growing research programs in areas such as computational biology, learning technologies, mobile and distributed systems, and security and privacy. At UIC, there are plenty of opportunities for interdisciplinary work—UIC houses the largest medical school in the country, and our faculty are engaged with several cross-departmental collaborations with faculty from health sciences, social sciences and humanities, urban planning and the business school.

Chicago is the third most populous city in the USA. Located by the shore of lake Michigan, the city offers an outstanding array of cultural and culinary experiences. As the birthplace of the modern skyscraper, Chicago boasts one

of the world's tallest and densest skylines, combined with an extensive system of parks and public transit. Its primary airport is the second busiest in the world, with frequent non-stop flights to virtually anywhere. Yet the cost of living, whether in an 85th floor condominium downtown or on a tree-lined street in one of the nation's finest school districts, is surprisingly low.

Applications must be submitted at <https://jobs.uic.edu/>. Please include a resume, teaching and research statements, and names and addresses of at least three references in the online application.

Applicants needing additional information may contact the Faculty Search Chair at [search@cs.uic.edu](mailto:search@cs.uic.edu).

Application processing will commence on November 15th. We will continue to accept and process applications after that date until all the positions are filled.

The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

### University of Maine Electrical and Computer Engineering (ECE) *Tenure-Track Faculty Position in Computer Engineering*

The Department of Electrical and Computer Engineering (ECE) at University of Maine invites applications for a tenure track faculty position at the rank of Assistant Professor to begin September, 2012. Candidates with specialization in systems, high performance computing, networking, security, embedded design and other areas of computer engineering will be considered. A Ph.D degree in Computer Engineering, Electrical Engineering or a related field is required by the date of hire. The successful candidate will be qualified and required to teach introductory courses in both Electrical Engineering and Computer Engineering. The successful candidate is required to have a strong commitment to teaching at both the undergraduate and graduate levels and develop an externally funded research program. Candidates with interdisciplinary and multidisciplinary interests that complement existing Departmental capabilities are strongly encouraged to apply.

Interested candidates should submit a cover letter, a complete curriculum vitae, a statement of teaching interests, a plan for developing his/her research program, and names, addresses, email addresses and telephone numbers of at least three references in a single PDF file to: <http://www.eece.maine.edu/hr/jobs.php>

Full Description <http://jobs.umaine.edu/>

Review of applications will begin on January 17, 2012 and continue until the position is filled. Incomplete applications cannot be considered. Appropriate background checks will be required.

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

### University of Massachusetts Amherst

*Department of Computer Science, Computational Biology or Bioinformatics  
Assistant Professor; Tenure-Track*

We invite applications from Ph.D.-level computer scientists for a Five College joint faculty position based at UMass-Amherst with research, teaching and service shared with Mount Holyoke College, providing the successful candidate with the unique opportunities of both a premier research university and an elite liberal arts college. For details on the Five College Consortium: [www.fivecolleges.edu](http://www.fivecolleges.edu). Focus areas could include proteomics, metabolomics, genomics, systems biology, statistical genetics,

## Professional Opportunities

evolutionary biology, medical informatics, or other areas at the intersection of computer science, biology, and biotechnology. The successful candidates will enjoy exciting opportunities for collaboration in research areas such as protein folding, genome sequence annotation, imaging, machine learning, and cellular biophysics. Teaching and post-doctoral experience preferred. UMass-Amherst and Mount Holyoke College are strongly committed to having a diverse faculty and student body.

For more information: [www.cs.umass.edu/bioinfosearch](http://www.cs.umass.edu/bioinfosearch). Send curriculum vitae, a description of research interests and teaching experience, and three letters of recommendation to: Chair, Bioinformatics Search Committee, Computer Science Department, 140 Governors Drive, UMass Amherst, Amherst, MA 01003-9264; electronic submissions encouraged: [bioinfosearch@cs.umass.edu](mailto:bioinfosearch@cs.umass.edu). Review of applications will begin December 15, 2011, and continue until the position is filled.

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

### University of Massachusetts Amherst Cyber-Physical Systems and Software Tenure-Track Position

Applications are invited for a tenure-track position in the Department of Electrical and Computer Engineering at the rank of Assistant Professor to start in September 2012.

Qualifications: Candidates must have an earned doctorate in ECE, Computer Science, or related field at the time of appointment and demonstrate potential for outstanding research in cyber-physical systems and software. The candidate will be expected to develop a strong externally funded research program. We are looking for candidates with enthusiasm for supervising graduate students and commitment to teaching at undergraduate and graduate levels.

The Department of Electrical and Computer Engineering at UMass counts 11 Fellows of the IEEE and 6 NSF CAREER Awardees among its 34 faculty members. The computer engineering program at UMass is internationally renowned for its strengths in computer and embedded systems, computer networks, nano- and micro-architectures, VLSI systems, and CAD. We seek a candidate who will complement our existing strengths in computer engineering in the areas of cyber-physical systems and software. For more information about the ECE Department see [www.ecs.umass.edu/ece](http://www.ecs.umass.edu/ece)

The search committee will begin reviewing applications on January 17, 2012. The search will continue until the position is filled (contingent on approval and funding). Application materials may be submitted either online or via hard copy but not both, and applicants are strongly encouraged to apply online at <http://academicjobsonline.org> or in print to Cyber-Physical Search, ECE Dept, University of Massachusetts, 100 Natural Resources Road, Amherst, MA 01003. The application should include a cover letter, CV with a list of publications, a research statement, a teaching statement and a list of at least four referees with complete contact information.

The University, College, and Department are committed to increasing diversity of the faculty, student body, and curriculum, and welcome applications from women and other underrepresented groups. UMass Amherst is an Affirmative Action/Equal Opportunity Employer.

### University of Miami College of Arts and Sciences Four Tenured and/or Tenure Track Appointments

The College of Arts and Sciences at the University of Miami seeks applicants and nominations for four tenured and/or tenure track appointments in Complexity Science, including complex networks and complex systems, from disciplines across the physical, biological, computational, mathematical, statistical, medical, economic and social sciences. Successful candidates will join a vigorous research program already underway across departments and schools within the university. Appointments may be made at any level and joint appointments are possible between different departments and schools. Candidates should have a Ph.D. in a suitable quantitative discipline, and have experience in analyzing real-world data, as well as mathematical and computational modeling. To be considered at Associate or Full Professor level the candidate must have independent teaching and research experience.

The successful candidate will be expected to teach at both undergraduate and graduate levels and to develop and maintain internationally recognized research. Applicants should forward a CV, research plan and a statement of teaching philosophy as well as arrange to have three letters of recommendation sent to the Chair of the Search Committee. All materials must be sent electronically to: [complexitystudies@miami.edu](mailto:complexitystudies@miami.edu). Review of applications will begin November 15, 2011 and continue until the positions are filled. Information about the College can be found at <http://www.as.miami.edu/>.

The University of Miami is an affirmative Action/Equal Opportunity University that values diversity and has progressive work-life policies. Women, persons with disabilities, and members of other underrepresented groups are encouraged to apply."

### University of Missouri Department of Computer Science Two Tenure-Track Positions

The Department of Computer Science at the University of Missouri-Columbia (MU) invites applications for two tenure-track positions at the ranks of Assistant Professor and Associate Professor in the areas of security and trustworthy computing, high-performance computing, databases, operating systems, software engineering, and cyberinfrastructure depending on qualifications. The University of Missouri has high standards for scholarship and faculty quality, and encourages collaboration across disciplines.

Applicants should have earned a Ph.D. in computer science or a related area. Applicants for the Assistant Professor position will be evaluated based on their teaching experience, research and publication record. Applicants for Associate Professor will be evaluated on their research and publication record, ability to attract external funding and involvement in an ongoing, externally-funded research program. Researchers at federal and industrial research labs are encouraged to apply.

The department has over 460 undergraduate students and 105 graduate students, and offers B.S., M.S., and Ph.D. degrees. Four out of the seventeen faculty members have received the prestigious NSF CAREER Awards. More information about the department can be obtained at [www.cs.missouri.edu](http://www.cs.missouri.edu).

MU is the flagship campus of the University of Missouri System, a member in the American Association of Universities, and is recognized as one of the most comprehensive schools in the United States. Columbia has consistently

been ranked by Money magazine as one of the nation's top places to live because of its excellent education system, economy, health care, housing opportunities and general quality of life.

To apply, send a cover letter, a curriculum vitae, a statement describing past and current research accomplishments and future research plans, a description of teaching experience, and contact information for three references via email to Mr. Jeffrey Blumer, [blumerj@missouri.edu](mailto:blumerj@missouri.edu). The anticipated start date is January or September 2012.

Screening will begin November 15, 2011 and continue until both positions are filled. The University of Missouri-Columbia is an equal opportunity/affirmative action employer.

### University of Missouri - Kansas City

Department of Computer Science  
Electrical Engineering  
School of Computing and Engineering  
Assistant Professor in Computer Science –  
Tenure Track

The School of Computing and Engineering (SCE – see [www.sce.umkc.edu](http://www.sce.umkc.edu)) at the University of Missouri - Kansas City (UMKC) seeks candidates for a tenure track assistant professor in computer science. A successful candidate should have a strong commitment to undergraduate and graduate education and the development of an externally-funded research program, as well as excellent communication skills. Candidates are sought with a subset of these areas of expertise: software systems and engineering, web technologies, mobile and distributed computing and related areas. See <http://www.umkc.edu/hr/career-opportunities/job-posting-search-academic.aspx> for complete details. An earned doctorate in computer science is required. Salary will be commensurate with experience.

Evaluation of applicants will commence immediately and continue until the position is filled. All final candidates will be required to successfully pass a criminal background check prior to beginning employment. Send a curriculum vitae, statement of research goals, statement of teaching interests, 3 recent publications and a list of 3-5 references to:

Ms. Jane Vogl, Assistant to the Dean  
ATTN: CS Search  
UMKC SCE, 534 FH  
5110 Rockhill Road  
Kansas City, MO 64110-2499  
or email [Voglj@umkc.edu](mailto:Voglj@umkc.edu)

UMKC is an equal access, equal opportunity, affirmative action employer that is fully committed to achieving a diverse faculty and staff.

### The University of North Texas Department of Computer Science and Engineering Assistant/Associate/Full Professors

The Department of Computer Science and Engineering at the University of North Texas (UNT) is seeking candidates for multiple tenure-track/tenured faculty positions at the Assistant, Associate or Full Professor level beginning August 15, 2012. The department plans to build on its existing strengths in 3 areas: Computer Systems, including operating systems, runtime systems for cloud and high performance or mobile and handheld devices, software engineering of net-centric, real-time and embedded systems, and energy efficient and low power circuits and systems; Intelligent Systems, including data mining, machine learning, information retrieval, scientific visualization, human-computer interaction, and computational life sciences; and Security, including information assurance, network security

and intrusion detection, and secure software systems and vulnerability analysis. Candidates should have demonstrated the potential to excel in research in one or more of these areas and in teaching at all levels of instruction. A Ph.D. in Computer Science, Computer Engineering or closely related field is required at the time of appointment. At the Assistant Professor level, the applicant's record must include high quality publications. At the Associate Professor level, the applicant must have at least 5 years of experience beyond an earned doctoral degree with a significant record of publications and extramural funding. A Full Professor would be expected to be a leader in his/her field with a record of building and maintaining a large-scale research program of international renown.

The Computer Science and Engineering department is home to 730 bachelors students, 136 masters students and 77 Ph. D. students. Additional information about the department is available at the department's website at: [www.cse.unt.edu](http://www.cse.unt.edu).

Application Procedure:

All applicants must apply online to: <https://facultyjobs.unt.edu>. Submit nominations and questions regarding the position to Dr. Philip Sweany ([sweany@cse.unt.edu](mailto:sweany@cse.unt.edu)).

Application Deadline:

The committee will begin its review of applications on December 1, 2011 and continue to accept and review applications until the positions are closed.

The University:

With about 36,000 students, UNT is the nation's 33rd largest university. As the largest, most comprehensive university in Dallas-Fort Worth, UNT drives the North Texas region. UNT offers 97 bachelor's, 88 master's and 40 doctoral degree programs, many nationally and internationally recognized. A student-focused public research university, UNT is the flagship of the UNT System. UNT is strategically located in Denton, Texas, a vibrant city with a lively arts and music culture, at the northern end of the Dallas-Fort Worth metroplex. The DFW area has more than six million people, with significant economic growth, numerous industrial establishments, and excellent school districts.

The University of North Texas is an AA/ADA/EOE committed to diversity in its educational programs.

### University of Oregon Department of Computer and Information Science Assistant Professor Position

The Department of Computer and Information Science (CIS) seeks applications for a tenure track faculty position at the rank of Assistant Professor, beginning Fall 2012. The University of Oregon is an AAU research university located in Eugene, two hours south of Portland, and within one hour's drive of both the Pacific Ocean and the snow-capped Cascade Mountains.

The CIS Department is part of the College of Arts and Sciences and is housed within the Lorry Lokey Science Complex. The department offers B.S., M.S. and Ph.D. degrees. More information about the department, its programs and faculty can be found at <http://www.cs.uoregon.edu>.

We offer a stimulating, friendly environment for collaborative research both within the department and with other departments on campus. Faculty in the department are affiliated with the Cognitive and Decision Sciences Institute, the Computational Science Institute, and the Neuro-Informatics Center.

## Professional Opportunities

The department seeks to hire faculty in the general area of systems, with specific specialization that complements existing faculty strengths in systems-related fields. The successful candidate will have strong record of accomplishments that demonstrate a highly creative approach to systems research, knowledge of state-of-the-art techniques and technology, and significant collaborative project work. In addition, the candidate should have experience creating, evaluating, and applying experimental systems artifacts. Opportunities for interactions with systems-oriented faculty include: parallel and distributed systems, networking, databases, intelligent systems, informatics, and computational science. Applicants must have a Ph.D. in computer science or closely related field, a demonstrated record of excellence in research, and a strong commitment to teaching. A successful candidate will be expected to conduct a vigorous research program and to teach at both the undergraduate and graduate levels.

Applications will be accepted electronically through the department's web site (only). Application information can be found at <http://www.cs.uoregon.edu/Employment/>. Review of applications will begin March 01, 2012 and continue until the position is filled. Please address any questions to [faculty.search@cs.uoregon.edu](mailto:faculty.search@cs.uoregon.edu).

The University of Oregon is an equal opportunity/affirmative action institution committed to cultural diversity and is compliant with the Americans with Disabilities Act. We are committed to creating a more inclusive and diverse institution and seek candidates with demonstrated potential to contribute positively to its diverse community.

### University of Pittsburgh School of Information Sciences Three Tenure-Stream Faculty Positions:

- Assistant Professor – Software engineering /systems
- Assistant/Associate/Full Professor – Library and information science
- Assistant/Associate Professor – Data-driven scholarship

The School of Information Sciences (<http://www.ischool.pitt.edu>) at the University of Pittsburgh is seeking candidates for three tenure-stream faculty positions to start in the fall term of 2012. The positions are open to both individuals seeking their first academic position at the assistant professor level as well as more senior faculty who may already hold tenure at another institution. Appointments will be made at a rank commensurate with qualifications. Open positions include:

- Assistant Professor – Software engineering /systems
- Assistant/Associate/Full Professor – Library and information science
- Assistant/Associate Professor – Data-driven scholarship

The School is a top ranked information school (iSchool) offering a wide variety of multidisciplinary opportunities, including an undergraduate program (BSIS), Master's programs in information science (MSIS), telecommunications & networking (MST), library & information science (MLIS), and Ph.D. programs. The iSchool at Pitt emphasizes the synthesis of people, information and technology, and offers opportunities for research, instruction, and service spanning the diverse needs and interests of an information-intensive, multi-cultural, and increasingly digital society. The School is seeking candidates with a strong commitment to research as well as graduate and undergraduate education.

The iSchool is particularly interested in attracting new faculty with research interests in areas such as:

- Data-intensive scientific discovery ("Big Data")
- Information security and privacy
- Mobile and pervasive computing
- Information visualization
- Digital humanities
- Digital curation
- Web science
- Software metrics

Teaching interests include, but are not limited to, the following:

- Systems analysis and design
- Knowledge representation and management
- Archival studies and records management
- Information architecture
- Information visualization
- Trust, security and privacy
- Data science

Candidates who bridge disciplinary areas are specifically encouraged to apply. Successful candidates will demonstrate a strong interest and current awareness of the technological and cultural context in which their knowledge contributes to issues of contemporary society. A record of collaboration with other scholars is highly desirable.

As the school offers online degree programs, in addition to on-campus programs, candidates with complementary expertise and experience in educational technologies are encouraged to apply.

Applicants should present a record of effective teaching, research, and related scholarly activities. Electronic applications should be sent to [sissearch@sis.pitt.edu](mailto:sissearch@sis.pitt.edu). Applications should include a cover letter, statement of research and teaching interests, curriculum vitae, and the names, addresses (with e-mail), and telephone numbers of three references. For full consideration, applications must be received by January 17, 2012. Preliminary interviews are anticipated at the ALISE conference in Texas in January 2012 and the iConference in Toronto in February 2012.

Further information regarding the School and these positions can be found at [www.ischool.pitt.edu/~faculty\\_openings](http://www.ischool.pitt.edu/~faculty_openings).

Pittsburgh's industrial past has given way to an enterprising and vibrant present. Affordable living, world-class universities, distinctive neighborhoods, growing industries, and an abundance of leisure activities create a quality of life in Pittsburgh that is virtually unmatched. Pittsburgh is consistently ranked in Rand McNally's *Top Ten Most Livable Cities in North America*.

The University of Pittsburgh is an Equal Opportunity, Affirmative Action employer and strongly encourages women and candidates from under-represented minorities to apply.

### University of Rochester Tenure Track Position in Computer Science

The University of Rochester Department of Computer Science seeks applicants for a tenure-track faculty position beginning in Fall 2012. We are particularly interested in researchers in human-computer interaction and machine learning, but will consider outstanding candidates in other areas. Candidates must have a PhD in computer science or related discipline.

The Department of Computer Science is a research-oriented department with a distinguished history of contributions in systems, theory, artificial intelligence, and HCI. We have a collaborative culture and strong ties to cognitive science, linguistics, and electrical and computer engineering. Over the past decade, a third of its PhD graduates have won tenure-track faculty

positions, and its alumni include leaders at major research laboratories such as Google, Microsoft, and IBM.

The University of Rochester is a private, Tier I research institution located in western New York State. The University of Rochester consistently ranks among the top 30 institutions, both public and private, in federal funding for research and development. Half of its undergraduates go on to post-graduate or professional education. The university includes the Eastman School of Music, a premiere music conservatory, and the University of Rochester Medical Center, a major medical school, research center, and hospital system.

Details for applying appear at <http://www.cs.rochester.edu/recruit>. Review of applications will begin on December 1st, and continue until all interview openings are filled.

The University of Rochester has a strong commitment to diversity and actively encourages applications from candidates from groups underrepresented in higher education. The University is an Equal Opportunity Employer.

### University of Saskatchewan Saskatoon, Saskatchewan, Canada

#### Department of Computer Science Assistant Professor – Computer Graphics/ Multimedia/Visualization

Applications are invited for a tenure-track position at the Assistant Professor level. Applicants should have a Ph.D. in Computer Science or equivalent. The appointment will commence July 1, 2012.

We seek an outstanding entry-level candidate in Computer Graphics/Multimedia/Visualization. This individual will have an opportunity to contribute to our multi-disciplinary initiatives in health, synchrotron science, high performance computing, and human-computer interaction.

The friendly, supportive and collegial environment, combined with our excellent research reputation, makes the Department an ideal place to launch and develop a successful academic career. Our Department offers graduate programs at the M.Sc. and Ph.D. levels and has a vibrant undergraduate program.

For further information about the position, see:

<http://www.cs.usask.ca/employment.php>.

Applications will be accepted until March 15, 2012.

### University of Texas at Austin Division of Statistics and Scientific Computation (SSC) Faculty Position

The Division of Statistics and Scientific Computation at The University of Texas at Austin invites applications for a faculty appointment at the level of Assistant, Associate, or Full Professor, to begin in Fall 2012. Preference will be given to candidates whose core research interests in statistical methodology are accompanied by evidence of well-developed collaborative interests in systems biology, human genetics, neuroscience, business, engineering, or liberal arts. Candidates with applied research interests in other areas will also be considered. Minimum qualifications are an earned Ph.D. in statistics or a related area, and evidence of excellence in teaching and research. The Division of Statistics and Scientific Computation currently has 10 regular-rank faculty in statistics and machine learning whose secondary affiliations encompass biology, computer science, mathematics, neuroscience, business, and psychology.

All applicants should submit a CV and a statement of research interests, and

should arrange for three letters of support to be provided under separate cover. All materials should be submitted via e-mail to search committee co-chairs Peter Muller and Rob McCulloch at [search@ssc.utexas.edu](mailto:search@ssc.utexas.edu). The application pool will remain open until the position is filled, but screening will begin on 1 December 2011.

For further details, including on postdoctoral positions, please visit:

<http://ssc.utexas.edu/people/employment>

### University of Texas at Austin Department of Computer Science Tenure-Track/Tenured Faculty Positions

The Department of Computer Science of the University of Texas at Austin invites applications for tenure-track positions at all levels. Excellent candidates in all areas will be seriously considered, especially in Computer Architecture and other areas of computer systems research. All tenured and tenure-track positions require a Ph.D. or equivalent degree in computer science or a related area at the time of employment.

Successful candidates are expected to pursue an active research program, to teach both graduate and undergraduate courses, and to supervise graduate students. The department is ranked among the top ten computer science departments in the country. It has 43 tenured and tenure-track faculty members across all areas of computer science. Many of these faculty participate in interdisciplinary programs and centers in the University, including those in Computational and Applied Mathematics, Computational Biology, and Neuroscience.

Austin, the capital of Texas, is located on the Colorado River, at the edge of the Texas Hill Country, and is famous for its live music and outdoor recreation. Austin is also a center for high-technology industry, including companies such as IBM, Dell, Freescale Semiconductor, Advanced Micro Devices, National Instruments, AT&T, Intel and Samsung. For more information please see the department web page: <http://www.cs.utexas.edu/>.

The department prefers to receive applications online, beginning October 17, 2011. To submit yours, please visit <http://services.cs.utexas.edu/recruit/faculty>

If you do not have internet access, please send a curriculum vita, a homepage URL, a description of research interests, and a list of selected publications to the address below. Applicants for an assistant professor position must have at least three (3) referees send letters of reference directly to the address provided. Applicants for a tenured position (associate or full professor) must have at least six (6) referees send letters of reference directly. The address for all hard copy material is:

Faculty Search Committee  
Department of Computer Science  
The University of Texas at Austin  
1616 Guadalupe Street, Suite 2.408  
Austin, Texas 78701, USA

Inquiries about your application may be directed to [faculty-search@cs.utexas.edu](mailto:faculty-search@cs.utexas.edu). For full consideration of your application, please apply by January 31, 2012. Women and minority candidates are especially encouraged to apply. The University of Texas is an Equal Opportunity Employer.

### University of Toronto Scarborough Department of Computer & Mathematical Sciences Lecturer Computer Science (Teaching- Stream)

The Department of Computer & Mathematical Sciences at the University

## Professional Opportunities

of Toronto Scarborough invites applications for a Lecturer (Teaching-Stream) in Computer Science. For more information see:

<https://www.mathjobs.org/jobs/jobs/3173>

### University of Utah School of Computing

*Tenure-Track or Tenured Faculty Position in Visualization*

The University of Utah's School of Computing is seeking to hire an outstanding tenure-track or tenured faculty member in visualization. We are particularly interested in candidates with expertise and an excellent research record in information visualization and visual analysis. These interest area reflects our strong research reputation in scientific and biomedical visualization, image analysis, and interdisciplinary scientific computing within the Scientific Computing and Imaging (SCI) Institute.

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 and our current faculty can be found at [www.cs.utah.edu](http://www.cs.utah.edu). Please send curriculum vitae, a research goals statement, a teaching goals statement, and names and addresses of at least four references.

Please go to the following link to apply:

<https://utah.peopleadmin.com/postings/10346>

Applications will be evaluated as received until the positions are filled. Applicants are encouraged to apply at their earliest convenience.

The University of Utah is fully committed to affirmative action and to its policies of nondiscrimination and equal opportunity in all programs, activities, and employment. Employment decisions are made without regard to race, color, national origin, sex, age, status as a person with a disability, religion, sexual orientation, gender identity or expression, and status as a protected veteran. The University seeks to provide equal access for people with disabilities. Reasonable prior notice is needed to arrange accommodations. Evidence of practices not consistent with these policies should be reported to: Director, Office of Equal Opportunity and Affirmative Action, (801) 581-8365 (V/TDD).

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 Washington Tacoma Institute of Technology Assistant Professor

The Institute of Technology at the University of Washington Tacoma is seeking applications for a full-time, tenure-track Assistant Professor position for the Computer Science and Systems program. A Ph.D. in Computer Science or related field is required. Applicants should have experience or promise in teaching and in externally-funded research. Our priorities for research are (in order) (1) modeling and simulation, (2) software engineering, (3) networks and security, and (4) computer gaming; other areas will also be considered, especially if they are related to needs of the other Institute of Technology programs.

The University of Washington Tacoma, one of three UW campuses,

is an urban-serving undergraduate and master's level campus that is changing the face of its region economically, culturally, and architecturally and has close ties to the Seattle and Bothell campuses with significant collaboration opportunities. The Institute of Technology was created in 2001 by a public/private partnership to address the critical industry demand for baccalaureate and master's level computing and engineering professionals. Please see <http://www.tacoma.washington.edu/tech/> for additional information.

Applications should be submitted electronically to <http://academicjobsonline.org> and include (1) a cover letter describing academic qualifications and experience for this position, (2) a statement of the candidate's research program, (3) a list of publications, (4) a description of teaching philosophy, including a list of courses the candidate is qualified to teach, (5) evidence of teaching effectiveness, (6) a curriculum vitae, and (7) at least three letters of reference. Screening of applications will begin on November 15, 2011, and will continue until the position is filled. Salary is competitive and will be commensurate with experience and qualifications. For additional information, please contact Dr. Donald Chinn at [dchinn@uw.edu](mailto:dchinn@uw.edu) or by phone at (253) 692-4660.

The University of Washington Tacoma is an affirmative action, equal opportunity employer. The University is committed to building a culturally diverse faculty and staff, and strongly encourages applications from women, minorities, individuals with disabilities, and covered veterans. University of Washington faculty engage in teaching, research, and service.

### University of Waterloo, Canada CS/ECE Postdoc Position

The Real-time Embedded Software Group at the University of Waterloo (Canada) is offering a postdoc position in the area of instrumenting and tracing of embedded software. The project includes international research partners as well as industrial collaborators. The position is funded for four years with an initial one-year appointment and the possibility of renewal for subsequent years.

Applicants should have a research background in one of the following areas: embedded system software, compilers, static/dynamic instrumentation, or real-time software.

Application instructions:

For more information and application instructions, see:

<http://esg.uwaterloo.ca/postdoc>

### University of Waterloo, Canada Electrical and Computer Engineering Faculty Position in Software Systems

The Department of Electrical and Computer Engineering, University of Waterloo, invites applications for a tenure-track/tenured faculty position at any rank (Assistant, Associate, or, in very special cases, Full Professor) in the area of software systems, including but not limited to the following areas: dependable and fault-tolerant systems, systems software (e.g., virtualization and ubiquitous computing), and energy-aware software ("green software").

Applicants should have earned a doctoral degree in Electrical/Computer/Software Engineering, Computer Science, or a closely related discipline. All applicants must have a strong commitment to research and teaching. Salaries are competitive and are determined according to the successful applicant's accomplishments, experience and qualifications.

For more information and application instructions, please see:

<http://www.engineering.uwaterloo.ca/aboutENG/positions.html>

### University of Wisconsin-Madison Computer Sciences Assistant Professor

The Computer Sciences Department of the University of Wisconsin-Madison is recruiting in all areas of Computer Science at the Assistant Professor level. Applicants must have a Ph.D. in Computer Science or in a closely related field prior to the start of the appointment.

Candidates must show potential for developing outstanding and highly visible scholarly research as well as excellence in undergraduate and graduate teaching.

Applicants should submit a curriculum vita, a statement of research objectives and sample publications, and arrange to have at least three letters of reference sent directly to the department. Please refer to Position Vacancy Listing # 72213. Applicants are encouraged to submit their applications along with supporting materials as soon as possible, but no later than January 15, 2012 to ensure full consideration. For questions, please send mail to [recruiting@cs.wisc.edu](mailto:recruiting@cs.wisc.edu)

Electronic submission of all application materials is preferred (see <http://www.cs.wisc.edu/recruiting> for details.)

Unless confidentiality is requested in writing, information regarding applicants must be released upon request. Finalists cannot be guaranteed confidentiality. UW-Madison is an equal opportunity/affirmative action employer.

### U.S. Naval Academy Computer Science Department Assistant Professor

The U.S. Naval Academy's Computer Science Department invites applications for one or more tenure track positions at the rank of Assistant Professor. These positions are anticipated to begin in the Fall of 2012. A Ph.D. in Computer Science or closely related field is required.

Applicants will be considered from all areas of Computer Science, and must have a dedication to teaching, broad teaching interests, and a strong research program. Applicants with research interests in computer security, network security, and information assurance are especially encouraged to apply.

The Computer Science Department offers majors in Computer Science and Information Technology. All faculty teach courses in both majors. We currently have 85 CS majors, 100 IT majors and a faculty of 21. The department is housed in a state of the art building overlooking the scenic Severn River. Our spaces provide outstanding office, laboratory, and research facilities for both students and faculty, including specialized labs for robotics, networking, and information assurance in addition to three micro-computing labs and two high performance computing labs. In addition to computer science and information technology courses for the majors, we also teach a course on computer security to the entire freshman class.

The Naval Academy is an undergraduate institution located in historic downtown Annapolis, Maryland on the Chesapeake Bay. Roughly half of its faculty are tenured or tenure track civilian professors with Ph.D.s who balance teaching excellence with internationally recognized research programs. The remaining faculty are active duty military officers with Masters or Doctoral degrees. Each year the academy graduates roughly 1000 undergraduate students with majors in the sciences, engineering, and humanities. More information about the department and the Academy can be

found at <http://www.usna.edu/cs/> and <http://www.usna.edu/>.

Applicants should send a cover letter, teaching and research statements, curriculum vitae, and arrange for three letters of recommendation that address both teaching and research abilities to be sent to [csearch@usna.edu](mailto:csearch@usna.edu).

Review of applications will begin in December, continuing until the position is filled.

The United States Naval Academy is an Affirmative Action/Equal Opportunity Employer. This agency provides reasonable accommodations to applicants with disabilities. This position is subject to the availability of funds.

### Utah State University Department of Computer Science, College of Engineering Full-time Tenure-Track Position

The Department of Computer Science at Utah State University ([www.cs.usu.edu](http://www.cs.usu.edu)) invites applications for a full-time tenure-track position at the assistant professor rank. Candidates should have a PhD in Computer Science (or a closely related field), expertise in a core computer science field, a publication record in their field of expertise, the ability to communicate well in English, and the ability to teach traditional computer science topics at both the graduate and undergraduate levels. Salary for suitably qualified applicants is competitive and commensurate with experience.

USU is an Equal Opportunity/Affirmative Action Institution.

Applications must be submitted online to [jobs.usu.edu](http://jobs.usu.edu). Applicant screening will continue until the position is filled. Direct inquiries to Dr. Scott Cannon; [scott.cannon@usu.edu](mailto:scott.cannon@usu.edu)

### Utah State University Head of the Computer Science Department

Utah State University invites nominations and applications for the position of Head of the Computer Science Department. The CS Department has 15 tenured and tenure-track faculty members and one full-time lecturer. The faculty is recognized for contributions to their fields of Artificial Intelligence, Software Systems, and Concurrency, with research known throughout the international academic community and global industry alike. The Department's annual research expenditure for 2010 was in excess of \$1.1 million with 10 new awards in 2011. The Computer Science Department has 15 tenured and tenure-track faculty members and one full-time lecturer. The CS faculty have active research programs in areas across the broad range of computer science topics, with research known throughout the international academic community and global industry. The Department has ABET accredited programs and offers B.S., Master's, and Ph.D. degrees in computer science to close to 350 undergraduate students and 100 graduate students. The Department has ABET accredited programs and offers B.S., Master's, and Ph.D. degrees in computer science to close to 350 undergraduate students and 100 graduate students.

We seek an individual who can provide strong, dynamic and innovative leadership to advance excellence in research, teaching and service to the professional community and who can communicate our advancements to a constituency that includes academia, government, industry, and alumni. In addition to a proven record of scholarly achievement, the candidate must also possess technical leadership, a commitment to computer science education, and effective management and interpersonal skills. The candidate should have an earned

## Professional Opportunities

doctorate in Computer Science or in a closely related field and be eligible for a tenured full professor appointment.

Letters of application should include

- a full curriculum vitae,
- a two-page statement summarizing the candidate's vision and goals for the CS Department and leadership philosophy, and
- the names and addresses of at least five references.

Applications will be accepted until the position is filled; screening will begin December 1, 2011. Applicants with demonstrated experience and qualifications noted above are encouraged to apply online at <https://jobs.usu.edu>, Requisition number 052886. For questions, please contact Todd Moon, chair of the search committee at [todd.moon@usu.edu](mailto:todd.moon@usu.edu) or (435) 797-2970.

AA/EO

### Virginia Tech Department of Computer Science Artificial Intelligence/Machine Learning Faculty Position

The Department of Computer Science at Virginia Tech ([www.cs.vt.edu](http://www.cs.vt.edu)) invites applications for a full-time tenure-track position at any rank from candidates with expertise in artificial intelligence having specific emphasis on machine learning or probabilistic reasoning. The department plans on making multiple hires over multiple years in this area. Candidates should have a record, appropriate to the desired rank, of scholarship, leadership, and collaboration in computing and interdisciplinary areas; demonstrated ability to contribute to teaching at the undergraduate and graduate levels in AI and related subjects; sensitivity to issues of diversity in the campus community; and the skills to establish and grow a multidisciplinary research group.

CS@VT has 37 tenure-track research-oriented faculty including 12 NSF CAREER award winners, PhD production among the top 30 in the USA, and annual research expenditures exceeding \$7 million. There are rich opportunities in a highly collaborative department with strengths in HCI, HPC, computational biology and bioinformatics, digital libraries, data mining, software engineering, and CS education. Active interdisciplinary research also explores CyberArts, digital government, and problem-solving environments. Outstanding opportunities exist for collaboration with the newly formed VT-Carilion Research Institute associated with the VT-Carilion School of Medicine.

CS@VT is part of the College of Engineering ([www.eng.vt.edu](http://www.eng.vt.edu)) in a comprehensive research university with more than 26,000 students. This hire is for the main campus in Blacksburg (see [http://www.vt.edu/where\\_we\\_are/blacksburg](http://www.vt.edu/where_we_are/blacksburg)), consistently ranked among the country's best places to live.

Salary for suitably qualified applicants is competitive and commensurate with experience. Virginia Tech is an Equal Opportunity/Affirmative Action Institution.

Applications must be submitted online to <https://jobs.vt.edu> for posting #0110872. Applicant screening will begin December 15, 2011 and continue until the position is filled. Inquiries should be directed to Dr. Dennis Kafura, AI/ML Search Committee Chair, [kafura@cs.vt.edu](mailto:kafura@cs.vt.edu).

### Virginia Tech Department of Computer Science Assistant Professor Computer Science (Compilers/Systems Software Engineering)

The Department of Computer Science at Virginia Tech (<http://www.cs.vt.edu>) invites applications for a full-time

tenure-track position at the Assistant Professor rank from candidates with a research focus in the area of compilers, programming languages, or software engineering. The department plans to strategically grow its research presence in these areas over the coming years. Preference is given to candidates whose research efforts lie in applied domains with relevance to computer systems software, particularly for emerging architectures such as many-core processors and GPUs.

Candidates should have a doctoral degree in Computer Science or a cognate area, a record of significant research achievement and publication, a coherent research and teaching plan showing the potential to secure research funding, build a research program in their area of specialty, and contribute to the department's graduate/undergraduate teaching mission, and sensitivity to issues of diversity in the campus community.

CS@VT has 37 tenure-track research-oriented faculty including 12 NSF CAREER award winners, PhD production among the top 30 in the USA, and annual research expenditures exceeding \$7 million. The candidate will work closely with the Center for High-End Computing Systems, whose resources include System G, a 2600 core research supercomputer and HokieSpeed, a heterogeneous supercomputer combining general purpose CPUs and GPUs funded by a \$2M NSF MRI grant. There are also rich opportunities in a highly collaborative department with strengths in HCI, computational biology and bioinformatics, digital libraries, data mining, and CS education. Active interdisciplinary research also explores CyberArts, digital government, and problem-solving environments. Outstanding opportunities exist for collaboration with the newly formed VT-Carilion Research Institute associated with the VT-Carilion School of Medicine.

The position is part of a coordinated cluster hire of a total of five positions on both the Blacksburg and National Capital Region campuses of Virginia Tech that is intended to synergistically increase research momentum in computer systems, software engineering, security, and cybersecurity by the Department of Computer Science (CS) and the Bradley Department of Electrical and Computer Engineering (ECE). The successful candidate will join the Department of Computer Science on the Blacksburg campus.

CS@VT is part of the College of Engineering ([www.eng.vt.edu](http://www.eng.vt.edu)) in a comprehensive research university with more than 26,000 students. The main campus is located in Blacksburg (see [http://www.vt.edu/where\\_we\\_are/blacksburg](http://www.vt.edu/where_we_are/blacksburg)), a small town consistently ranked among the country's best places to live.

Salary for suitably qualified applicants is competitive and commensurate with experience. Virginia Tech is an Equal Opportunity/Affirmative Action Institution.

Applications must be submitted online to <https://jobs.vt.edu> for posting #0110873. Applicant screening will begin December 15, 2011 and continue until the position is filled. Inquiries should be directed to Dr. Godmar Back, Compilers/PL/Software Engineering Search Committee Chair, [gback@cs.vt.edu](mailto:gback@cs.vt.edu).

### Virginia Tech Department of Computer Science Data-Intensive Computing Faculty Position

The Department of Computer Science at Virginia Tech ([www.cs.vt.edu](http://www.cs.vt.edu)) invites applications from candidates in

data-intensive computing for a full-time tenure-track position at any rank. Examples of research foci in the area of data-intensive computing include, but are not limited to, streaming and sensor data management, scientific databases, networked data management, query languages, workflow/provenance modeling, information integration, and database designs for modern architectures such as the cloud and pervasive appliances. The successful candidate must be able to conduct an active research program in the management and processing of massive data, such as arise in social networks, biology, GIS, astronomy, text, and/or other emerging large-scale applications. Candidates should have a record, appropriate to their rank, of scholarship, leadership, and collaboration in computing and interdisciplinary areas; demonstrated ability to contribute to teaching at the undergraduate and graduate levels in data-related subjects (e.g., database design and system architectures); sensitivity to issues of diversity in the campus community; and the skills needed to establish and grow a multidisciplinary research group.

CS@VT has 37 tenure-track research-oriented faculty including 12 NSF CAREER award winners, PhD production among the top 30 in the US, and annual research expenditures exceeding \$7 million. There are rich opportunities in a highly collaborative department with strengths in HCI, HPC, computational biology and bioinformatics, digital libraries, data mining, software engineering, and CS education. Active interdisciplinary research also explores CyberArts, digital government, and problem-solving environments.

CS@VT is part of the College of Engineering ([www.eng.vt.edu](http://www.eng.vt.edu)) in a comprehensive research university with more than 26,000 students. This hire is for the main campus, in Blacksburg, which is consistently ranked among the country's best places to live ([http://www.vt.edu/where\\_we\\_are/blacksburg](http://www.vt.edu/where_we_are/blacksburg)).

Salary for suitably qualified applicants is competitive and commensurate with experience. Virginia Tech is an Equal Opportunity/Affirmative Action Institution.

Applications must be submitted online to <https://jobs.vt.edu> for posting #0110874. Applicant screening will begin December 15, 2011 and continue until the position is filled. Inquiries should be directed to Dr. Lenwood S. Heath, Hiring Committee Chair, [heath@vt.edu](mailto:heath@vt.edu).

### Washington University in St. Louis Department of Computer Science and Engineering Professor and Department Chair

The Department Of Computer Science & Engineering at Washington University in St. Louis invites applications for the tenured position of Professor and Department Chair. The successful candidate will have a Ph.D. or equivalent in a related field, demonstrated continuing excellence in research, and a strong commitment to undergraduate teaching and postgraduate education. The chair will oversee significant growth of a department currently composed of 20 faculty and 80 doctoral students with numerous research interests including cyber-physical systems, computational biology and biomedical computing, human-centered and intelligent computing systems, networking and communications, and parallel computation (<http://www.cse.wustl.edu/>). The chair will conduct research,

publish in peer-reviewed journals and conferences, teach relevant courses, advise students, and participate in University service.

Washington University (<http://www.wustl.edu/>) is a private university with roughly 6,000 full-time undergraduates and 6,000 graduate students. It is nationally known for the high quality of its student body and attractive campus, which borders residential neighborhoods and one of the nation's largest urban parks (<http://www.forestparkforever.org/>). Faculty enjoy the advantage of a Midwest cost of living, and many walk or bike to work.

Applicants should submit their curriculum vitae, a short summary of past research accomplishments and future plans, a teaching statement, and the names of at least three references electronically as a single PDF file to [csechairsearch@seas.wustl.edu](mailto:csechairsearch@seas.wustl.edu). Washington University is an AA/EOE and is strongly committed to enhancing the diversity of its faculty; minority and women scientists are especially encouraged to apply. Employment eligibility verification will be required upon employment.

### Wayne State University Assistant Professor Position

Department of Electrical and Computer Engineering at Wayne State University is seeking candidates for a tenure-track faculty position at the rank of assistant professor in computer engineering with special emphasis on (but not limited to) data-intensive cloud computing and cyber-physical systems, preferably with experience in medical applications. Applications are particularly encouraged from candidates who have strong background in computer modeling/simulation, special interest in disruptive computing and communication technologies with applications to healthcare and medical sciences, as well as other application domains, including augmented reality, diagnostics, sensors and medical cyber models. The applicants for this position must have a Ph.D. degree from EE or CE in the above areas with established records of research excellence.

The ECE Department has strong programs in smart sensors, control and systems, computer systems, medical robotics, biotechnology, and nanotechnology. We strive to further nurture our collaborative and interdisciplinary programs in power/energy and computer/medicine areas.

Applicants must apply through the Wayne State University's electronic human resources system and only online applications through the web site will be accepted. To apply, search for ECE Department at <http://jobs.wayne.edu> and upload application materials under the posting number 038214. Review of applications will begin immediately and continue until the position is filled.

### Wright State University Department of Computer Science & Engineering Tenure Track Faculty Positions

The Department of Computer Science and Engineering (CSE) at Wright State University seeks applicants for up to two positions. The first is a for a tenure track position at the rank of assistant professor and the second is for a position at assistant, associate, or full rank with rank and tenure status appropriate to qualifications and experience. Candidates for these positions are expected to have an earned Ph.D. in computer science, computer engineering or a closely related field anticipated by the start date with outstanding academic credentials.

## Professional Opportunities

Candidates applying for a position at the rank of assistant professor must clearly demonstrate the potential to develop a vibrant funded research program that engages graduate students and produces peer reviewed publications while candidates for the rank of associate/full professor must have an outstanding record of funded research and scholarly publications. In addition, candidates must possess excellent communication skills and a commitment to engage in both undergraduate and graduate education. The focus of the current search is for faculty specializing in cyber security and intelligent systems including areas such as information assurance and security, trustworthy computing, combating malware, computer forensics, cloud computing and visualization. Outstanding applicants who can tie the area of cyber security and intelligent systems into our department's Kno.e.sis Center research topics including areas such as social Web, sensor Web, cyber-physical systems, Web of Things, Big Data and Web Science are encouraged to apply. Outstanding applicants specializing in other emerging research areas are also welcome to apply.

The Department has 26 faculty members, more than 500 undergraduate, 75 M.S. and 40 Ph.D. students and offers B.S., M.S. and Ph.D. degrees both in Computer Science and Computer Engineering. Information about the Department can be found at: <http://www.cs.wright.edu/cse/>. The Department is located in the Russ Engineering Center and Joshi Research Center which includes the Kno.e.sis Center (<http://knoesis.wright.edu>) and the Appenzeller Visualization Laboratory. The Department is one of four departments in the College of Engineering and Computing Science, which houses 4 out of 7 of Wright State's University System of Ohio Centers of Excellence (<http://webapp2.wright.edu/web1/coe/category/centers-of-excellence/>). Wright State University, an institution of nearly 19,000 students, is located on a spacious campus within a growing suburban community. A variety of affordable and pleasant living environments with schools and parks attractive to professionals are conveniently located close to campus. Wright State University is surrounded by industry leaders including Lexis-Nexis, Reynolds & Reynolds, CSC, Ball Aerospace, Northrop Grumman, Teradata, and SAIC. Wright State is also located adjacent to the Wright-Patterson Air Force Base, which houses the headquarters of the Air Force Research Laboratory. The university is committed to industrial and government partnerships for research

and economic development ventures and has a strong institutional commitment to 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 cover letter indicating the rank desired and a complete vita with the names, addresses, telephone numbers and e-mail addresses of at least four references. Applications and supporting information are completed on-line at: <https://jobs.wright.edu/postings/4570>.

Consideration of candidates begins November 8, 2011 and continues until the positions are closed or filled. Salaries and resources are competitive and based on rank. For details and additional information, you may contact Prof. Mateen Rizki, Chair, at [mateen.rizki@wright.edu](mailto:mateen.rizki@wright.edu).

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

### Yahoo! Research

Human Social Dynamics Group  
Postdoctoral Research Scientist (New York)

The Human Social Dynamics Group in Yahoo! Research is seeking highly qualified candidates for a post-doctoral research scientist position. The successful candidate will contribute to the HSD group's research agenda, and also work on applied problems of relevance to Yahoo! consumer and advertising products. Candidates must have completed (or be able to complete before starting) a PhD, preferably but not necessarily in CS/IS, statistics, or in quantitative social science.

Desired skills include but are not limited to:

- Mining web data
- Statistical analysis of large data sets
- Building 3rd party apps (Open Mail, Facebook)
- Designing, building, and running web-based "virtual lab" experiments
- Designing, building, and running web-based field experiments

Applications, including a CV and names/addresses of three referees, should be emailed to: [Duncan.Watts@djw@yahoo-inc.com](mailto:Duncan.Watts@djw@yahoo-inc.com)

For more information on HSD personnel and publications, see [http://research.yahoo.com/Duncan\\_Watts](http://research.yahoo.com/Duncan_Watts)

### Yale University Computer Science

Assistant Professor Position

The Department of Computer Science at Yale is seeking to fill a faculty position at the level of Assistant Professor (tenure track). We are interested in applicants from any of the following areas: Artificial Intelligence, Economics

and Computation, Human Computer Interaction, Machine Learning, Networking, Operating Systems, Programming Languages, Robotics, and Theory of Computing. Applicants whose research spans two or more of these areas are particularly encouraged to apply. We seek excellent researchers who are also committed to excellence in teaching.

Members of the Yale Computer Science faculty have many opportunities to collaborate. 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 members teach excellent students, both graduate and undergraduate, in relatively

computer science or a related discipline. Review of applications will begin on December 15, 2011, and candidates are encouraged to apply early. Applications from qualified women and minority candidates are especially welcome. Yale is an affirmative-action/equal-opportunity employer. The department's home page can be found at <http://www.cs.yale.edu>. Applicants should submit a curriculum vita, brief statements of research and teaching, and the contact information for three references. Applications should be submitted online at <https://academicjobsonline.org/ajo/Yale>. Questions should be directed to [faculty-recruiting@cs.yale.edu](mailto:faculty-recruiting@cs.yale.edu).

## Computing Research News

Vol. 24/No. 1

*Computing Research News*

(ISSN 1069-384X) is published five times per year in January, March, May, September, and November. Copyright 2011 by the Computing Research Association (CRA), 1828 L Street, NW, Suite 800, Washington, DC 20036; tel. 202-234-2111. All rights reserved. Material in CRN is not endorsed by CRA nor intended to reflect any official positions of CRA or its board.

**Subscriptions:** Call 202-234-2111, send e-mail to [crn@cra.org](mailto:crn@cra.org), or mail subscription inquiries to CRA, 1828 L Street, NW, Suite 800, Washington, DC 20036. A free subscription is available to qualified subscribers. One-year paid subscriptions are \$30 in the United States, \$45 (U.S.) in Canada, and \$54 (U.S.) elsewhere.

**Change of Address:** Note that a change of address must include the old and new addresses with ZIP+4. Please include a street address or PO Box number.

**Postmaster:** Send address changes to: CRA, 1828 L Street, NW, Suite 800, Washington, DC 20036. Postage paid at Washington, DC.

### Computing Research Association Staff

Andrew Bernat, Executive Director

Betsy Bizot, Director of Statistics and Evaluation

Sandra Corbett, Manager of Administrative Support

Erwin Gianchandani, Director of the Computing Community Consortium

Peter Harsha, Director of Government Affairs

Kenneth Hines, Research Analyst

Sabrina Jacob, Office Administrator

Delicia Mapp, Senior Statistician

Melissa Norr, Policy Analyst

Kapil Patnaik, IT and Web Services Manager

Erik Russell, Director of Programs

Jean Smith, Sr. Communications Associate and CRN Editor

## NSF, NIST Do Surprisingly Well in FY 2012 Appropriations from Page 1

Though Congress did make progress on the minibus, at press time it has failed to move ahead on the remaining nine appropriation bills necessary to sustain the operations of government. As a result, Congress included in the minibus an extension of the so-called "continuing resolution" that makes it possible for Federal agencies and programs to continue operating, albeit at the same funding level they received for the previous fiscal year. That extension expires on December 18, 2011, at which point Congress will either have to have enacted the remaining appropriations bills or pass yet another continuing resolution.

Complicating the appropriations calculus is the failure of the Joint Select Committee on Debt Reduction (also known as the "supercommittee") to make recommendations for cutting the Federal deficit by \$1.2 trillion over the next 10 years, as they were required to do by the Budget Control Act of 2011. That act, passed in August, established a compromise wherein Congress would agree to raise the Federal debt ceiling, preventing the U.S. from defaulting on any of its debt, in exchange for enacting a set of recommendations that would require all the U.S. to eliminate \$1.2 trillion in debt over the next 10 years. The "supercommittee"

was charged with coming up with those recommendations—either by raising revenues or cutting spending or both—by November 23, 2011. The committee failed to meet that deadline and, in fact, announced that it was deadlocked and would not be producing recommendations.

As a result, the Budget Control Act requires the activation of a series of "automatic triggers" designed to cut federal spending drastically (particularly spending at the Department of Defense). These triggers, if allowed to occur (Congress always has the option of changing its mind), could certainly impact Federal science budgets, and from the

appropriators' point of view, will have a considerable impact on programs across their jurisdiction. How these cuts will play out remains to be seen. It is very difficult to predict how the future pressures of these automatic cuts will affect the current spending in these appropriations bills. However, a safe bet is that Congress will elect to vote itself another extension to the continuing resolution so they can keep talking about this long after December 18.

Whatever the final result (or even the intermediate results), we will have them on the Computing Research Policy Blog (<http://cra.org/blog>). ■

# CRA CONFERENCE AT SNOWBIRD ♦ JULY 22 – 24, 2012 ♦ SNOWBIRD, UTAH PRELIMINARY PROGRAM

**About the Snowbird Conference:** The biennial CRA Conference at Snowbird is the flagship *invitation-only* conference for the leadership of the North American computing research community.

**Invitees:** Computer science, computer engineering, and information technology department chairs; assistant, associate, and prospective chairs; directors of graduate or undergraduate education; directors of industry or government research labs/centers; and professional society or government leaders in computing.

**The conference site:** The Snowbird Resort is located in the Wasatch Mountains about 30 miles from Salt Lake City. A top-rated ski resort in the winter, off-season at Snowbird offers hiking amidst beautiful scenery.

**This year at Snowbird:** Dr. Farnam Jahanian, Assistant Director for CISE at NSF, will be one of the featured plenary speakers. In addition to four plenary sessions, there will be a workshop for new department chairs on July 22 co-chaired by Michael Gennert (WPI) and Darrell Whitley (Colorado State University), a panel presentation on research futures led by Ed Lazowska, CCC Chair, numerous parallel workshop sessions, and the presentation of the CRA Distinguished Service and A. Nico Habermann Awards.

**New This Year:** Several hours of free time for networking, mingling, hiking, participating in games/activities crafted for your entertainment by a select committee of nerds, or just hanging out enjoying the gorgeous environment.

Below is a **preliminary program** that will continue to be updated on the CRA website (<http://www.cra.org>) as additional information becomes available. **Online registration will open on the CRA website in April.**

## Plenary Sessions

- |                                                                                                                                                             |                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <p>1. <b>The View from CISE</b><br/>Speaker: Farnam Jahanian, NSF CISE AD</p>                                                                               | <p>3. <b>The Convergence of Social and Technological Networks</b><br/>Speaker: Jon Kleinberg (Cornell)</p>                 |
| <p>2. <b>Politics 2012 and What it Might Mean for Computing Research</b><br/>Chair: Fred Schneider (Cornell University)<br/>Speaker: Peter Harsha (CRA)</p> | <p>4. <b>Evolution and Future Directions of Large-Scale Systems at Google</b><br/>Speaker: Jeffrey Dean (Google, Inc.)</p> |

## Parallel Workshop Sessions

- **Humanitarian Computing**  
Humanitarian computing refers to the use of computing to help solve society's most pressing problems. Students are eager to work on problems with real-world impact, and organizations on the ground are increasingly looking to technology to play a key role in solving long-standing problems. This session will highlight efforts in the area of humanitarian computing, as well as best practices for overcoming challenges.  
Chair: Ellen Zegura (Georgia Institute of Technology)  
Speakers: TBD
- **A New Future for K-12 CS Education: Why You Should Care. What you can do.**  
For the first time, the computing community is united in its efforts to strengthen K-12 computing education. In this session we will discuss: why K-12 CS education is important; why K-12 CS is fading from the national landscape; the community effort to reposition CS in STEM; building a national standard for CS in high schools; and why reforming K-12 CS education is important to the computing departments of CRA.  
Chair: Bobby Schnabel (Indiana University)  
Speakers (preliminary): Chris Stephenson (CSTA), Lucy Sanders (NCWIT), Jan Cuny (NSF), Cameron Wilson (ACM)
- **Reflections on a 100,000+ Student Online Classroom**  
Peter Norvig, co-author of the celebrated textbook *Artificial Intelligence: A Modern Approach*, co-taught an AI course to 140,000 students in fall 2011. In this talk he will discuss his experiences and his thoughts on the effectiveness and impact of such online courses.  
Chair: David Patterson (UC Berkeley)  
Speaker: Peter Norvig (Google)
- **The Breadth of Interdisciplinary Computing Research**  
The range of areas of collaboration for computing research is vast and increasing. This session will include panelists with experience in research that combines computing with the physical sciences, the arts, the humanities, the social sciences, and the professions. The discussion will reflect not only on the research opportunities and challenges in each of these spaces, but also on the special challenges of interdisciplinary research including blending disparate research and disciplinary cultures, finding appropriate presentation and publication venues, and appropriately judging and rewarding interdisciplinary research in academic review processes.  
Chair: Jeff MacKie-Mason (University of Michigan)
- **Information for Computing**  
Co-Chairs: Jim Kurose (UMass); Carla Brodley (Tufts)
- **Computer Science Curriculum 2013 (CS2013): Getting Feedback on CS Curricular Guidelines for the Next Decade**  
With the publication of Curriculum 68 over 40 years ago, the major professional societies in computing—ACM and IEEE-Computer Society—have sponsored efforts to establish international curricular guidelines for undergraduate programs in Computer Science on a roughly 10-year cycle. The first draft of the next volume in this series, Computer Science Curriculum 2013 (CS2013), has recently been released and is open for community comment. This special session starts with a (brief) overview, and then focuses on soliciting the CRA community's feedback on this draft scheduled for release in 2013.  
Chair: Mehran Sahami (Stanford)  
Speakers: Steve Roach (University of Texas, El Paso); Dan Grossman (University of Washington); Rich LeBlanc (Georgia Tech); and Remzi Seker (University of Arkansas, Little Rock).
- **The Future of Scholarly Publications**  
Chair: Moshe Vardi (Rice University)  
Speakers: TBD
- **Industry/University Interactions**  
Chair: Ron Brachman (Yahoo!)  
Speakers: TBD

## Additional Activities at Snowbird

CRA Board of Directors Meeting July 21-22	Workshop for New Department Chairs July 22	CRA Deans Meeting July 24-25
----------------------------------------------	-----------------------------------------------	---------------------------------

For program details and registration information, please see the CRA website: <http://www.cra.org>; e-mail: [snowbird@cra.org](mailto:snowbird@cra.org); or call 202-234-2111.

## Organizing Committee

Co-Chairs: Eric Grimson (MIT) Academic Co-Chair; Dick Waters (MERL) Labs/Centers Co-Chair

Members: Annie Antón (North Carolina State University); Ron Brachman (Yahoo!); Carla Brodley (Tufts University); Anne Condon (University of British Columbia); Jim Kurose (University of Massachusetts Amherst); Peter Lee (Microsoft Research); Ran Libeskind-Hadas (Harvey Mudd College); Takis Metaxas (Wellesley College); Dave Patterson (UC Berkeley); Guri Sohi (University of Wisconsin, Madison); Alfred Spector (Google); and Ellen Zegura (Georgia Institute of Technology).