

# COMPUTING RESEARCH NEWS

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## Computing Researchers Take to the Hill as Congress Debates Science Budgets

By Peter Harsha

While congressional appropriators struggled to finish their work on the FY2012 budget—and a congressional supercommittee debated short- and long-term changes to the budget to combat the massive government debt—members of the computing research community continued their efforts in a variety of ways in September to make the case for the federal investment in early-stage computing research.

From across the country, computing researchers descended on Washington as part of a CRA-sponsored Congressional Fall Fly-in, others led a series of congressional briefings tracing the development of the technologies in the iPad, and three former CRA board members joined a government witness testifying on the value of the federal government's Networking and Information Technology Research and Development (NITRD) program before members of the House Science, Space and Technology Committee.

All came with the same message: the federal government's investment in early-stage computing research has been a critical part of the IT innovation ecosystem that has kept the United States the world leader in technology.

The message was well timed given the unsettled status of federal appropriations for FY2012, which began October 1, 2011. As this goes to press in early October, Congress has yet to pass any of the twelve annual appropriations bills required to fund the operations of government. In late September, Congress passed a stop-gap "continuing resolution" that will keep federal agencies open through November 18, though it is unlikely they will be any closer to a budget deal by then. More likely, Congress will pass yet another continuing resolution, pushing final reconciliation until December or later.

When that final resolution comes, it is unlikely to be very favorable for any federal agency, including federal

science agencies like the National Science Foundation, Department of Energy, or National Institute of Standards and Technology. Early versions of the FY2012 Commerce, Justice, Science Appropriations bills, which contain funding for NSF and NIST, indicate Members of Congress are likely to approve, at best, flat funding for science. But, the odds are greater that NSF, NIST and DOE will all see cuts compared to FY2011. Check CRA's Computing Research Policy Blog for the latest details: <http://cra.org/blog>.

### Congressional Fly-in

Seventeen researchers from CRA member institutions in 14 different states flew to DC on September 14 to participate in CRA's inaugural congressional fly-in—an opportunity for each to meet with members of their state's congressional delegations, talk about work going on in their institutions, and help make the case for the federal investment in research. Overall, the participants held 45 different meetings with Senators, Representatives, and key staff members—not to lobby for particular earmarks or fund special projects, but to build relationships, offer themselves as resources for their representatives, and deliver a multi-part message about computing:

- Advances in information technology are transforming all aspects of our lives;
- Advances in information technology also drive our economy;
- This history of innovation in computing is impressive, but the future opportunities are even more compelling;
- It is impossible to imagine a field with greater opportunity to change the world; and
- The IT R&D ecosystem is crucial to continued innovation in IT, and federal support is at the heart of that ecosystem.

Participants report that the message, in general, played well with Members of Congress. However, in almost all cases, Members cautioned that the budget pressures in DC are about as bad as they have ever been, and that increasing budgets for science agencies, or even preserving budgets when cuts are likely the rule, will be very difficult.

CRA is likely to host another series of congressional visits next fall. If you'd like to participate, let us know by visiting: <http://cra.org/govaffairs/2012-fly-in>.

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## Computer Science Education Week Wants You!

Join with the more than 1,800 people who have pledged to participate in the third annual Computer Science Education Week, December 4-10, 2011.

CSEdWeek 2011 is a call to action to raise awareness about computer science education and computing careers. Held annually the week of Admiral Grace Hopper's birthday (December 9, 1906), CSEdWeek brings together parents, students, teachers and others in celebrating the endless opportunities a computer science education offers students in K-12, higher education, and their careers.

The week will also feature activities designed to provide information and activities for students, educators, parents, and corporations to advocate for computer science education at all levels, and eliminate misperceptions about computer science and computing careers.

### Join In! Everyone Can Participate!

- Take the CSEdWeek pledge! Register your support and share your plans to celebrate by selecting the Red Ribbon at <http://www.CSEdWeek.org>.

- 'Like' CSEdWeek on Facebook at [www.facebook.com/CSEdWeek](http://www.facebook.com/CSEdWeek) and join the conversation.
- Blog, tweet, and post to spread the word and raise awareness. Use the #CSEdWeek hashtag.
- Celebrate CSEdWeek in your school, club, or workplace.
- Visit [www.CSEdWeek.org](http://www.CSEdWeek.org) for other suggested activities and resources.

### Why Computer Science Education?

Computer science education is essential to: expose students to critical thinking and problem-solving; instill understanding of computational thinking for success in the digital age; train students for computing careers that are exciting, plentiful and financially rewarding;

and prepare students to tackle the world's most challenging problems.

Yet as the role and significance of computing has grown, the teaching of computer science in our K-12 education system has dramatically declined. There are insufficient innovative computing curricula for students at all levels; few students have the opportunity to study computer science in an engaging and rigorous way; there is a lack of ethnic and gender diversity among those who do take computer science courses; and teachers have few opportunities for professional development and certification in computer science education.

Participate in Computer Science Education Week December 4 - 10, and encourage others to join in as well! ■

### Reminder to Department Chairs of Ph.D-Granting Institutions

Taulbee Surveys Were Due November 8

Please make certain your survey has been submitted to:

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

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

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## Expanding the Pipeline

## Career Mentoring for Faculty from Primarily Undergraduate Academic Institutions

By Sheila Castañeda and Susan Rodger

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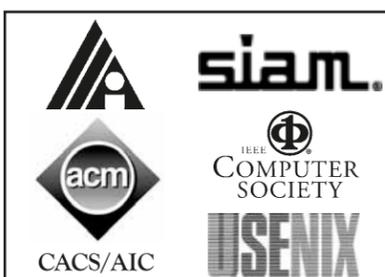
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## Affiliate Societies



Women in Computer Science and Engineering (CSE) face particular challenges in pursuing and maintaining academic careers at primarily undergraduate academic institutions. Women academicians in CSE typically have few female colleagues to provide critical information about the culture and content required for successful academic careers.

Women are significantly underrepresented at all levels of the academic Computer Science and Engineering (CSE) pipeline. Of particular concern is the scarcity of senior women who provide the role models, teachers, and mentors that female students need if they are to see careers in CSE as viable, and that male students need if they are to develop appropriately balanced views of female colleagues. As computing technology becomes increasingly pervasive, the underrepresentation of women translates to a loss of opportunity for individuals, a loss of talent to the Information Technology (IT) workforce, and a devastating loss of creativity in shaping the future of society.

To help this situation, the Computing Research Association Committee on the Status of Women in Computing Research (CRA-W) sponsored a Career Mentoring Workshop to focus on the undergraduate Education track (CMW-E) titled "Managing the Academic Career for Women Faculty in Undergraduate Computing Programs." The day-long workshop was held on Wednesday, March 9, co-located with the SIGCSE 2011 (ACM SIG on Computer Science Education) symposium in Dallas, Texas. The workshop was held the day before the SIGCSE symposium so participants could begin using some of their newly

acquired skills and strategies during the following days while networking with others who had attended the workshop. It is the sixth time the workshop has been co-located with SIGCSE, with previous sessions held in 2002, 2003, 2005, 2007 and 2009.

The goal of the workshop is to provide critical mentoring information for women at all career levels in undergraduate teaching. The target audiences of the workshop are pre-tenure faculty and graduate students in Computer Science and Engineering who are interested in an academic career, as well as post-tenure (senior) faculty seeking to improve their teaching and mentoring skills. Twenty-four participants attended the workshop, half of whom were graduate students, with the other half being professors. Two-thirds of the professors were assistant professors early in their careers.

The topics addressed issues of particular importance to faculty at teaching institutions: Teaching Survival Tactics, Promotion and Tenure, Getting What You Need, Networking Strategies, Mentoring 101, Research Strategies, Time Management, and a Q&A discussion with the presenters from all of the talks. The workshop speakers were established teachers and researchers who also served as mentors and met throughout the day with participants. They included: Tracy Camp, Boots Cassell, Sheila Castañeda, Andrea Danyluk, Ingrid Russell, Kelly Shaw and Jodi Tims. For more details on the agenda and links to the slides of the presentations please visit: <http://cra-w.org/career-mentoring-workshop-cmw>.

The SIGCSE symposium is the primary annual meeting focusing on undergraduate computing education. Academics who are teaching-focused

attend this symposium each year to present their scholarship, to learn about the innovative pedagogy of others, and to network. In addition to a papers track, SIGCSE has many avenues for participation including special sessions, workshops, panels, birds-of-a-feather (discussions), and posters. There is also an exhibit hall with a mix of industry representatives providing information on academic programs, publishers displaying textbooks, and academics demonstrating software and course tools. The many resources available at the SIGCSE symposium were discussed during the CMW-E workshop and specific sessions were recommended. After our workshop, the participants then attended all or part of the SIGCSE symposium. Sixty-five percent of the workshop participants would not have been able to attend the symposium had it not been for the travel and lodging funding provided through the workshop grant.

We received positive evaluations of the workshop. Eighty percent of the participants indicated that they increased their knowledge on these mentoring topics. A large percentage of the participants had increased confidence in many of the topics. For example, 71 percent of participants had increased confidence in networking and professional interaction, and 62 percent had increased confidence in time management. One hundred percent of the attendees rated the workshop as Excellent or Good and included many positive comments in post-workshop evaluations:

- "This was a great opportunity for me to get engaged with a new group, to see how other women have coped, and to find opportunities for helping my female students get connected with other women in the field."
- "Very good resource for faculty at small teaching institutions."
- "It was great! Insightful, and it's helped encourage me onward in my graduate program towards a career in teaching."

The workshop co-directors, Sheila Castañeda and Susan Rodger, thank all the speakers and participants for contributing to a successful and interactive workshop. They also want to thank Carla Romero for taking care of all the organizational tasks. We thank NSF and CRA for providing funding that allowed us to support the participation of a significant number of women in the workshop and SIGCSE. ■

Sheila Castañeda is Chair and Associate Professor of Computer Science at Clarke College.  
Susan Rodger is Professor of the Practice in the Department of Computer Science at Duke University.

## Applications Solicited

## CRA-W/CDC Distinguished Lecture Series (DLS)

The Committee on the Status of Women in Computing Research (CRA-W) and the Coalition to Diversify Computing (CDC) sponsor a Distinguished Lecture Series (DLS) to encourage women and minorities to pursue graduate education in computer science and engineering.

The DLS brings prominent academic and industry researchers to campuses to deliver technical talk(s) and to participate in "recruiting" events such as a panel discussion about graduate school. The events give students an opportunity to discuss the graduate school process and experience with successful female and minority researchers, facilitating their ability to make an informed decision about pursuing graduate study. The DLS program covers all costs associated with the event (i.e., all travel costs for the visiting researchers and local expenses for food, publicity, etc.).

**University sites are needed to host DLS recruitment events.** We are accepting applications for the 2011-12 and 2012-13 academic years. Neighboring institutions are encouraged to propose a joint event. We are particularly interested in applications that include institutions that have significant numbers of students from groups underrepresented in computing, such as women and minorities.

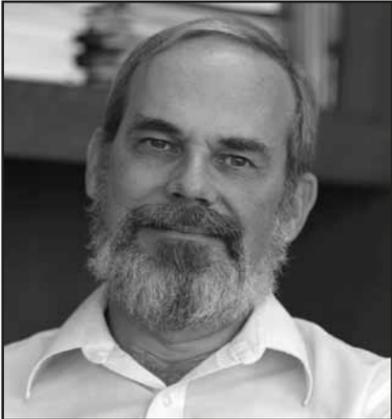
Information regarding the DLS program, including application details, is available on the DLS website: <http://cra-w.org/dls>

Please contact the DLS Co-Directors ([dls@cra.org](mailto:dls@cra.org)) for further information about the program or if you have questions about hosting an event. ■

# Musings from the Chair

## A Shifting Perspective on Computing's Future?

By Eric Grimson, CRA Board Chair



As all of us are acutely aware, recent turmoil in the financial markets, near gridlock on Capitol Hill, uncertainty about long-term fiscal planning in Congress, and concerns about hesitancy in the job market are all converging to create a somewhat daunting perspective for computing research, and especially for funding for computing research, in the next few years.

While the CRA Government Affairs group has been exceptionally active in promoting the critical role of computing research to Congress—offering testimony from computing community leaders to a range of Congressional committees, including a captivating argument to Congress showing how a now commonplace, disruptive technology like the iPad was deeply dependent on a wide range of federally funded research that preceded it—it is uncertain whether this message will overcome other forces and concerns in Congress. That implies considerable uncertainty about likely levels of federal funding for computing research.

This potential downturn in federal funding comes at a time when many institutions are seeing large-scale increases in student interest—especially at the undergraduate level, though these surges will reach the graduate population in a few years. A very informal sampling of some major computer science departments shows jumps in undergraduate majors of 20 percent to 30 percent last year, dramatically building on steady increases in enrolments over the past two to three years. So we may be headed towards a worrisome collision—an increase in student population and student interest, the emergence of a range of exciting new areas of opportunity, confronting a significant reduction in research

funding, and a potentially uncertain prospect for job opportunities.

So what options are available to the computing community? One could, of course, argue that we should not be so dependent on federal funding, but that simply leaves open the question of where to find other sources. One possibility is closer ties with industry, and indeed many of our major industrial partners have stepped up both their internal support for research and their outreach to academic centers. But companies naturally take a shorter-term, more applied view of research, and while these partnerships are very valuable, it is rare for industrial funding to fully substitute for federal funding of foundational work. The growth of interdisciplinary research within the computing community not only broadens the impact of computational methods, it also widens the set of funding sources, as witnessed by the growing number of computing researchers with NIH funding.

But even with actions being undertaken to encourage broader funding support for research, the community may have to face a fundamental challenge—that we will have less support for graduate students at a time when the output of the pipeline is increasing. And if that is correct, it suggests that the field may need to rethink some of its priorities. How would research centers cope with a reduction of from 10 percent to 20 percent in the number of graduate students? Does this dramatically change the kinds of research projects we undertake? In particular, would this have the potentially troubling side effect of pushing the community towards less risky, more near-term research? Are postdoctoral positions really a useful component of the research pipeline if there is an unclear trajectory towards academic research positions at the end of such positions? And finally, should we be rethinking the advice we give to undergraduates who are considering their options?

I certainly don't want to suggest that we discourage great students from pursuing graduate school and gaining the deeper training needed to pursue research careers. But perhaps we have an obligation to think about alternative, yet equally challenging, career trajectories, and to articulate these choices to students. This would include other

fields where computational thinking, algorithmic discipline, and analytic problem-solving are key elements to success—and would include finance, health care, large-scale systems management and delivery, and many others. And, in my view, it would include more explicit support for entrepreneurial trajectories.

As we have seen in the past, disruptive changes in jobs creation, in technological innovation, and in definition of entire new fields of inquiry (such as social media) can come from entrepreneurial forces. And concomitant with that perspective is the observation that some of our students may be much better suited for such endeavors than traditional graduate school, through a combination of personal temperament, ingenuity, and modes of thinking. As a consequence, it may be important for institutions to consider whether they are fully empowering such student opportunities. While there is no specific formula for supporting entrepreneurship, many departments are experimenting with

a range of tools: subjects within the discipline on entrepreneurial successes and failures and exposure to recent examples; business plan competitions that encourage team building between engineers and management practitioners; innovation sandboxes that provide opportunities for students to explore ideas and build networks of connections; technical competitions; and hackathons.

Each department must address its own particular needs and its own cultural constraints; however, perhaps this is a good time for a department to think about how, within those constraints, it can seek ways to broaden the scope of opportunities for its students, and strengthen its base of support in advance of potentially tumultuous times. ■

*Eric Grimson is Chancellor of MIT, the Bernard Gordon Professor of Medical Engineering, and Professor of Electrical Engineering and Computer Science at MIT.*

### CCC Names 2011 Computing Innovation Fellows

With the support of the National Science Foundation (NSF), the Computing Community Consortium (CCC)—a standing committee of CRA—has named 20 recent Ph.D. graduates in computer science and allied fields 2011 Computing Innovation Fellows (CIFellows; <http://cifellows.org/>). These exceptionally talented researchers—from 18 different Ph.D.-granting colleges and universities within the U.S.—are now beginning one- to two-year postdoctoral positions at 17 distinct academic institutions and industrial research labs nationwide. They join a total of 107 others who have been supported as part of an effort over the past three years to forestall a permanent loss of research talent due to the financial crisis and economic downturn.

The 2011 CIFellows were competitively selected from 177 applicants. The application and review process encouraged broad participation and diversity. About 30 percent of the CIFellows are women.

It is hoped this year's CIFellows will be afforded the kinds of independent research experiences that have enabled many of their 2009 and 2010 predecessors to sharpen their skills, enhance their credentials, and land permanent positions in research and teaching. For more details, including the names of the 2011 CIFellows and their mentors, see <http://tinyurl.com/cifellows2011>.

### CRA-W Welcomes New Co-Chairs



**Tracy Camp**, (top left), Professor of Computer Science at the Colorado School of Mines and current Interim Department Head of Math and CS, and **Kathryn McKinley**, (bottom left), a Principal Researcher at Microsoft Research and an Endowed Professor of Computer Science at the University of Texas at Austin, have recently become the new co-chairs of CRA's Committee on the Status of Women in Computing Research (CRA-W). They succeed Carla Brodley (Tufts University) and Kathleen Fisher (NSF and Tufts University) who have served as co-chairs for the past three years.

### CRA Board Member Elections 2012

Nominations Due:  
**December 2, 2011**

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

# Increasing Women and Underrepresented Minorities in Computing Research Careers: The CRA-W/CDC Alliance

By Manuel Pérez-Quiñones, Betsy Bizot, Kathleen Fisher

## Introduction

CRA-W and CDC have been working since the mid 1990s to encourage women and underrepresented minorities, respectively, toward graduate school and research careers in the computing field. In 2005, the two organizations collaborated on a proposal to the National Science Foundation's Broadening Participation in Computing (BPC) program and in 2006 they were awarded funding. The result was the Widening the Research Pipeline Alliance, one of 16 Alliances currently funded by the BPC program. Our alliance manages programs that encourage individuals to begin and remain on the path to a research career.

The Alliance faced a challenge when it came time to assess the impact of the programs we manage. The Alliance is national in scope and participants in our programs come as individuals rather than as institutions. As a result, there is no natural comparison group. National comparison data for nonparticipants are generally unavailable; national samples tend to be either outdated or have too few participants in computing (especially women and underrepresented minorities) to allow detailed comparison on the factors that interest us. Yet, we need to know if our programs are indeed making an impact.

The Data Buddy project was created to fill this void. Its primary purpose is to evaluate Alliance programs by comparing outcomes for program participants to those for nonparticipants. The secondary purpose is to gather more general baseline information about the ways that undergraduate and graduate students in computing make decisions about graduate school and research careers. Ultimately, we want to help departments and program designers improve outcomes for all

students, particularly for members of underrepresented groups, with an emphasis on encouraging promising students toward research careers.

To develop comparison groups we recruited Data Buddy departments to partner with us for ongoing data collection and analysis. Our reasoning was that these departments would facilitate individual-level data collection from their students and faculty and provide department-level data, thus increasing both the quality and quantity of collected data. In return for their participation, departments receive customized reports, summarizing information about their students and comparing them to students at peer institutions to the extent allowed by confidentiality concerns. In fact, some colleges informed us that they were planning to use the data for their program evaluations. In addition to summary reports, the departments that are part of our invited sample were offered a monetary incentive for their participation.

The project plans multiple waves of surveys. The first wave, in spring 2011, surveyed undergraduate and graduate students who completed or were completing degrees between September 2010 and August 2011. The second wave, in fall 2011, will include all undergraduate and graduate students. The third wave, tentatively planned for winter 2012, will include faculty and postdocs.

## Experimental Design

The full details of our method, data collection, and results from the first wave of surveys in spring 2011 are available at the project page <http://www.cra.org/databuddies>.

Many characteristics and conditions affect the participation of women and underrepresented minorities in research careers in computing. Our logic model (a way

**Table 1. Responses to Data Buddies Spring 2011 Surveys**

| Group   | Invited | Completed | Response rate |
|---|---------|-----------|---------------|
| <b>Undergraduate programs (CREU/DREU)</b>                         |         |           |               |
| Undergraduate Participants  | 50      | 30        | 60.0%         |
| Contacted by Departments  | 870*    | 320       | ~37%          |
| We Contacted  | 949     | 356       | 37.5%         |
| <b>Graduate programs (Grad Cohort/Career Mentoring Workshops)</b> |         |           |               |
| Graduate Participants   | 47      | 39        | 83.0%         |
| Contacted by Departments  | 1140*   | 304       | ~27%          |
| We contacted  | 549     | 212       | 38.6%         |

\*Estimated

of connecting program activities to intended outcomes and ways of measuring those outcomes) includes variables theorized and supported by research into Bandura's Theory of Self-Efficacy (1977), Eccles' Expectancy Value Theory (2000), Lent's Social Cognitive Model (1994), Magolda's Self-Authorship Theory (Creamer & Laughlin 2005), and Social Capital Theories (Seibert & Kraimer 2001), for example. Our survey included questions about students' awareness of career research options, students' interest in the next step toward a research career, development of technical credentials, knowledge of how to move on to the next step (e.g., graduate school application, financial aid), confidence that they can succeed at the next level, and use of their professional networks. In addition, we assessed the extent to which students progressed toward and reached major milestones toward a research career in computing and what factors influenced their decisions.

## First Wave Results

The recruited departments were stratified into four program

type groups: 1) Top-ranked PhD programs; 2) Other PhD programs; 3) Master's-granting programs; and 4) Four-year program institutions/liberal arts colleges. Note that the distinctions between PhD, master's, and four-year programs were for the computing department, not the institution as a whole. In spring 2011, forty-six departments participated in the surveys of completing students, including 8 PhD programs ranked 1-36, 13 other PhD programs, 8 masters programs, and 17 four-year programs. Table 1 shows the responses received.

Overall, participants in our two undergraduate research experience programs have better outcomes than nonparticipants, as shown in Table 2 and Figure 1. More participants than nonparticipants intended their highest degree to be a PhD, more of them said that their undergraduate research experience encouraged them to continue to graduate school immediately after completing their undergraduate degree, more of them had already enrolled in a graduate program for the fall of 2011, and more of those who were enrolling in graduate school were enrolling

**Department Chairs and Lab/Center Directors**

CRA Conference at Snowbird

**MARK the DATES!**

**July 22 - 24, 2012**

See Draft Program in January 2012 Edition of CRN

**Table 2. Undergraduate Results**

|  | Percentages          |   |              | Number Responding to Question |   |              |
|--|----------------------|---|--------------|-------------------------------|---|--------------|
|  | All Non-participants | Non-participants with research experience | Participants | All Non-participants          | Non-participants with research experience | Participants |
| Highest degree intended is a PhD                       | 17%                  | 27%                                       | 39%          | 41                            | 207                                       | 588          |
| Research experience encouraged grad school immediately | 30%                  | 55%                                       | 73%          | 41                            | 195                                       | 493          |
| Enrolled in graduate school in computing in Fall 2011  | 19%                  | 22%                                       | 39%          | 41                            | 195                                       | 526          |
| Enrolled in a PhD program                              | 18%                  | 41%                                       | 81%          | 16                            | 49  | 111          |

in PhD programs. The results are favorable for our programs even when comparing against nonparticipants who had other research experience (had participated in other NSF REU programs, for example).

Among the graduate survey results, we find that participants in our programs engage in the research community at higher rates than nonparticipants. As shown in Table 3 and Figure 2, among PhD graduates participants report better knowledge of strategies for developing professional networks, have served on service committees at higher rates than nonparticipants, and were more likely to have found conferences a source of job information. Additionally, some potentially interesting results about employment indicate that participants completing PhDs are more likely to take postdocs and less likely to take non-research industry employment than nonparticipants, but we need more data before we can claim these with certainty because the number of survey responses for that particular question was small.

Finally, and most interesting, we found that participation in our programs was one of the two factors most strongly predicting enrollment in graduate school in computing. The other, not surprisingly, was undergraduate GPA. A logistic regression analysis showed that participation in our programs is equally as predictive of graduate school enrollment as GPA, with B coefficients of .783 for program participation and .737 for GPA (both significant at the .05 level). The full model holds constant the effects of gender, race, institution type, and parental education and is included in the project report. This is a fantastic finding that shows the positive effect of the programs under our Alliance.

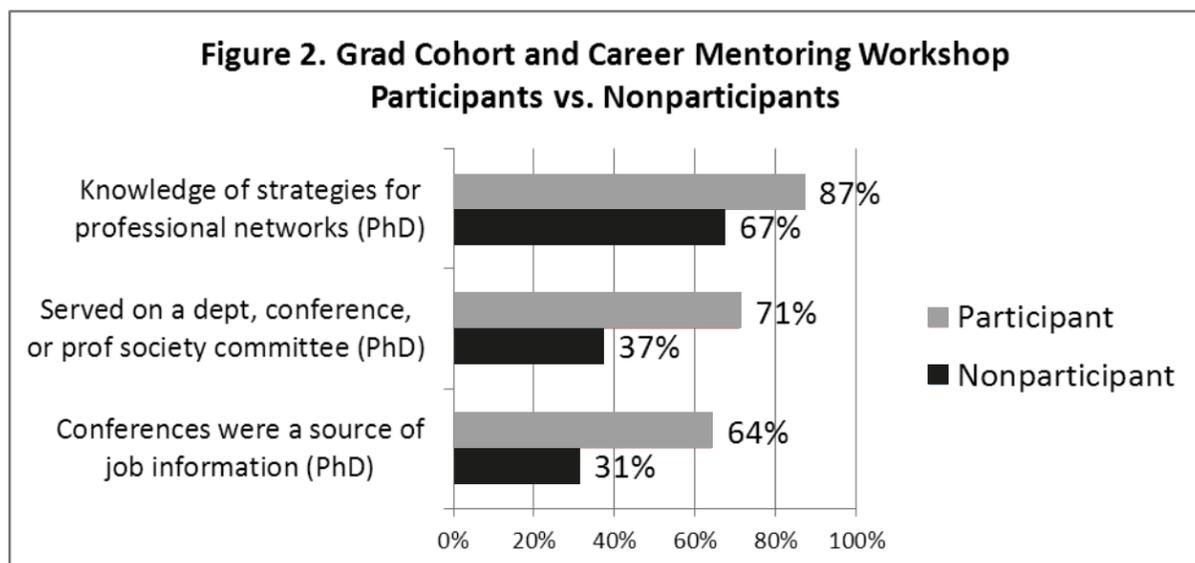
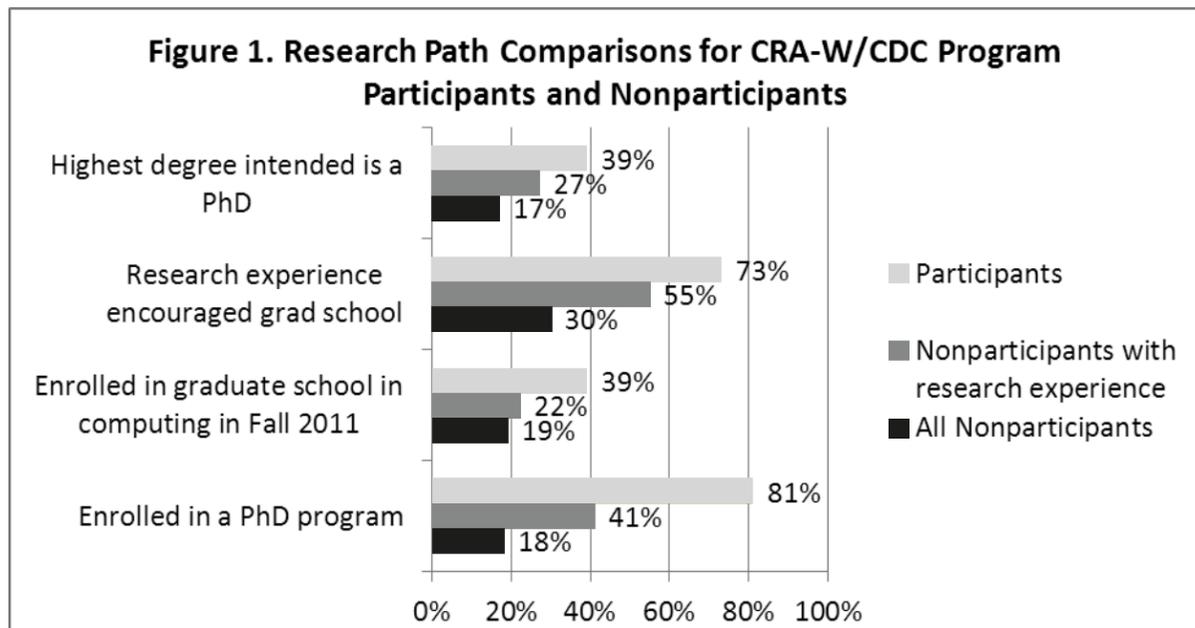
**Value to the Computing Community**

The Data Buddy project is funded for just one year. If funded to continue, we will begin to build longitudinal data on participants and nonparticipants. This will help the Computing Community in three ways. First, we will be able to better assess CRA-W and CDC efforts to increase participation of women and underrepresented minorities. Second, the collected data set will allow the Computing Community to evaluate other efforts to Broaden Participation, not just under BPC Alliances, but other efforts in which individual departments might engage on their own. And third, we will develop better information on the factors that encourage students to choose research careers in computing.

**Ways You Can Participate**

If the Data Buddy project continues, and we believe that it will, we can accept additional departments into the survey on a volunteer basis. As with the sampled departments, volunteer departments will help us survey their students and will receive a departmental report if enough students from their department

|   | Percentages     |             | Total Responding to Question |             |
|---|-----------------|-------------|------------------------------|-------------|
|   | Non-participant | Participant | Non-participant              | Participant |
| Conferences were a source of job information (PhD)                            | 31%             | 64%         | 55                           | 11          |
| Served on a departmental, conference, or professional society committee (PhD) | 37%             | 71%         | 122                          | 24          |
| Knowledge of strategies for developing professional networks (PhD)            | 67%             | 87%         | 93                           | 23          |



respond. Also, look for us on the Snowbird program next summer; a session on Data will discuss Data Buddies as well as the Taulbee Survey.

For further information, contact the authors or email [databuddies@cra.org](mailto:databuddies@cra.org).

**Acknowledgments**

Thanks to Joanne Cohoon (CRA-W board), Kenneth Hines (CRA staff), Ingrid Pufahl (CRA consultant), Tom McKlin and Shelly Engelman (The Findings Group) for their contributions to the project and this report. Thanks also to the Data Buddy departments and to the students who completed surveys. ■

**Call for Proposals  
Discipline-Specific  
Workshops**

**Deadline: 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.

Details: <http://cra-w.org/discipline-specific-mentoring-workshops>

# First Person: “Life as a NSF Program Director”

By Douglas H. Fisher

*Editor’s note: This article first appeared on the CCC Blog (<http://cccblog.org/>). That version (<http://wp.me/pmWqK-18P>) also describes Doug’s experiences representing the United States abroad and living in Washington, DC.*

In November 2006, I received a call from a colleague suggesting I apply for a Program Director opening at the National Science Foundation. Prior to his call, I had determined to re-orient my research in machine learning towards environmental applications. It didn’t take long to decide that NSF would be much more a retooling for, rather than a distraction from, this new direction.

The following March I gave my first job talk in 20 years. The talk included a retrospective of my research, teaching and professional service, but I was instructed that my work be a minority focus; I was to reflect on the works of others, attempting to express themes in, and visions for, my research and education community. I learned early that synthesis was highly valued at NSF. My themes included evolutionary specialization and competition as metaphors for incremental and transformative research agenda; my visions included the application of artificial intelligence (AI) to mitigation of, and adaptation to, climate change, as well as the integration of ethics and contemporary issues into technical courses.

I received an offer. I took leave from Vanderbilt University and worked at NSF under the auspices of the Intergovernmental Personnel Act (“as an IPA”)—that is, NSF made an award to Vanderbilt for 100 percent of my time. This elegant mechanism allowed me to retain my salary and benefits through my university. In addition, I was given a living allowance by NSF, which just covered an unfurnished, one-bedroom apartment one block from NSF. I would joke that my vertical (elevator) commute was greater than my horizontal commute. I was on a one-year contract, renewable yearly as Vanderbilt and NSF allowed, for no more than 4 years.

## ‘Eyes on the Prize’

A NSF PD, a ‘rotator’ like me or a permanent Federal employee, is working for the advancement of science and for the United States—this ‘eyes on the prize’ is sustaining through very long hours. Part of the ‘prize’ can also start as an individual vision. My Division Director (DD) told me that, as a rotating PD, I could change the ways that things are done, though the changes might not be manifest until after I had left NSF! However, occasionally change occurs more quickly—one program grew from the compelling vision that a PD colleague expressed in her recruiting talk.

While my passions were for environmental applications of computing, I learned of, bought into and contributed to the visions of others in areas that included international collaboration,

interdisciplinary research in biology and computing, creativity and computing, and social computational systems. Through negotiation and consensus building, both vertically and laterally, individual interests can grow into proposal solicitations and programs. Importantly, these interests are tempered, if not driven, by a strong ‘bottom-up’ research community influence—hypothetically, for example, PDs might notice an influx of research that intersects computer vision and human perception, which can lead to a new program a couple of years later. Such ‘serendipity’ is common at an agency like NSF, housed in a single building, with representatives of all scientific and engineering disciplines.

## Day-to-Day Responsibilities of a Program Director

A core responsibility of a PD is the vetting of research proposals—clustering proposals into overlapping topic areas and panels, recruiting panelists and other reviewers, overseeing the review panels, and making funding recommendations. This latter task is typically more complex than simply passing on the recommendations of a panel, though these recommendations are the most important single factor a PD considers.

A PD must make assessments across panels; in my case, these would typically be panels in areas such as planning, scheduling and search; machine learning; multi-agent systems; and knowledge representation. The PDs of a larger programmatic unit, in my case Robust Intelligence (RI), then come to joint recommendations across all the program’s areas—for RI these were robotics, natural language technologies, computer vision, computational neuroscience and other areas of AI that I covered.

Attention to factors such as research area balance, both for the current year and recent years, play a role in addition to panel recommendations. What sympathy I have for current Federal budget woes stems from my experience at NSF trying to reach consensus with other PDs over funding recommendations under tight budget constraints. After reaching agreement, PDs write up the recommendations as ‘review analyses,’ which justify the expenditure (or not) of public funds for proposals.

PDs spend a good deal of time talking with researchers. There is no greater treat than emailing investigators with news that I (RI) was considering recommending their proposals for awards—the follow-up talks on budgets and award specifics were very pleasant. Investigators also contact PDs to describe research ideas, wondering where they fit into NSF programs. This usually happens by email and phone, but NSF welcomes investigators to come to its offices with an appointment. Initially, talks with investigators of declined proposals were difficult, but it’s safe to say that these discussions changed me most and I quickly grew to appreciate them.

I would often reflect with investigators on the main messages of their proposals’ reviews to better inform possible revisions and resubmissions.

Early in my time as a PD I realized that I could not recommend funding for nearly all proposals that were worthy of funding. This was a source of genuine dismay; it’s an irony to me that I felt more empathy for investigators because I stood on the other side of the fence from them in these conversations, and of course because I had stood where they were, too (and would again). Tough decisions often resulted in small but significant points of pride as well—I recall one such instance when four PDs came together, pooling their very limited discretionary resources, to ‘save’ an excellent proposal that would not have otherwise been funded. One remembers these small victories. My experiences are also translating to civic action now that I have left NSF. In particular, I am writing my congressional representatives on the under-funding of science and other issues—something I hadn’t done before (and I don’t recall it having occurred to me to do before).

Within a few months of getting to NSF I was running panels. I felt some responsibility that panelists’ lives were significantly disrupted because of travel, particularly those coming from a great distance and/or with family and professional responsibilities—empathy again. I also found it hard to recruit panelists from among some groups, such as parents of young children, who may well constitute segments of the population weighting the broader impacts of computing more heavily than the rest!

Generally, I was encouraged to innovate for the good of the organization, and I chose to pursue remote (‘virtual’) panel participation on a large scale as one such innovation. With few exceptions I gave panelists a choice of whether to come to NSF for a panel or to participate remotely. Some panels were exclusively composed of remote panelists, and I ran two such panels from my Vanderbilt office. That said, one of the few NSF activities that I would characterize as ‘fun’ was dinner out with panelists who physically came to NSF; informal time with panelists after hours is a real social and intellectual perk. There is much I have said elsewhere on panelist choice to travel or ‘phone in’ relative to ecological footprints, broadening participation, panelist wear and tear, and other factors. Suffice it to say here that I am satisfied that I helped sprout a seed through this experience—aware of my DD’s cautious encouragement that changes might not manifest while I was there.

PDs are responsible for post-award oversight as well, through annual and final reports, and site visits—typically the PD recruits the site visit team. In addition to vetting and oversight duties in a core area like RI, most PDs also participate in like roles for cross-

cutting programs, which span two or more of NSF’s programmatic units. For example, I participated in various roles in Science, Engineering and Education for Sustainability (SEES), Social Computational Systems (SoCS), and Cyber-enabled Discovery and Innovation (CDI), and I served as the cognizant program officer for a large Science of Learning Center (SLC). I gained a greater appreciation for the place of AI (and computing broadly) in a larger scientific and societal landscape, in large part because of my participation in cross-cutting programs. I know that other IPAs similarly walk away with a broader appreciation of their chosen fields.

To stay up on the latest research developments and to gauge community interests, PDs are expected to attend conferences and other meetings in their respective fields—and they have a travel budget to do so. As a machine learning person who oversaw other areas of AI such as planning and knowledge representation, I would attend a broad range of talks at a conference to learn more about my areas of coverage. I would be invited to some meetings to give talks, typically on NSF programs. Ideally, after each professional meeting PDs prepare and circulate, by email or an internal wiki/blog, a conference report for the benefit of NSF colleagues.

In sum, being a NSF PD was richly rewarding, changing my approach to research, education and citizenship. There is no single stereotype of a NSF IPA, but I would guess that to be happy, or at least rewarded as an IPA, one would have a significant interest in broader impacts of science, skills at and motivation for synthesis, and a desire to learn from tightly coupled social interactions—in which faculty are often not practiced—with NSF colleagues, researchers, as well as others in government. Learning the “inside story” on funding is a benefit, but for purposes of improved grantsmanship, I think it’s very over-rated and probably not a motivation that would sustain a person for long through the challenges of being a NSF PD. Rather, the chief sustenance comes from a dedicated team of colleagues and service to country, science, planet and the people of those constituencies. ■

*Dr. Douglas Fisher is Associate Professor of Computer Science and Computer Engineering at Vanderbilt University. From July 2007 to August 2010, he served as a Program Director in the Division of Information and Intelligent Systems (IIS) within the National Science Foundation’s (NSF) Directorate for Computer and Information Science and Engineering (CISE). He has agreed to describe something of his life as a NSF PD so that others can judge whether it might be something they would like to try.*

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## CCC: Launching a New Resource for CS Undergraduates

The Computing Community Consortium's Research Community & Student Outreach Subcommittee is pleased to announce *a unique new website for undergraduates* in computing fields hoping to learn more about summer research opportunities as well as the process of applying to graduate school in computer science. The website contains:

- A section on what graduate school in computer science is all about (including frequently-asked-questions with answers provided by current graduate students and faculty);
- Information, advice, and insights on how to apply to graduate school in computer science (including another set of FAQs with answers from students who have just been through the process as well as faculty); and
- The URO Zone (Undergraduate Research Opportunities Zone), with details on undergraduate summer research positions nationwide.

We've tested this website with a handful of undergraduates—and the response has been very favorable. Please check it out at: <http://cra.org/ccc/csqs>

We hope this resource will be widely useful.

*Please help us get the word out by letting your colleagues and students know!*



## CRA Service Awards 2012

Distinguished Service Award  
and  
A. Nico Habermann Award

Nominations Due:  
**December 16, 2011**

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

### Computing Researchers Take to the Hill from Page 1

#### iPad Congressional Briefing

On September 21, CRA and the Task Force on American Innovation co-hosted a series of congressional briefings titled “Deconstructing the iPad: How Federally-Supported Research Leads to Game-Changing Innovations.” The idea was to take a device that was familiar to Members of Congress and their staff and tell the story of its development—a story that invariably bears the stamp of federal research support.

Led by Carnegie Mellon University Professor and MacArthur Fellow, Luis von Ahn, a panel of industry, government, and academic researchers traced the stories of three key technologies in the iPad—from their roots in early-stage research, through the long development period until the technology was ready for inclusion in the iPad—along the way talking about how federal investment in research enabled key breakthroughs that kept the work moving forward.

Martin Izzard, Vice-President for Research at Texas Instruments, told the story of the “chips” in the iPad—from Jack Kilby’s original integrated circuit to the A5 that powers the iPad, making the case that there was a long distance between those two points and a lot of government and industry investment. Nobel Laureate William Phillips from NIST took the “sensors” case and told the story of the development of the iPad’s GPS, from its origin in magnetic resonance research that led to atomic clocks and MRIs, and pointed out that similar research may unlock quantum computing. And Ben Bederson, a professor at the University of Maryland and former head of the Human-Computer Interface Group, discussed the origins of the iPad’s interface, including the touchscreen and multi-touch gestures—tracing a direct line from federally funded research in the late ‘60s and ‘70s though the technology’s inclusion in the iPad of today. In fact, Bederson may have made the most direct link, showing that technology funded by NSF at the University of Delaware

in the late 1990s and early 2000s led to work on capacitive multi-touch techniques. That led to the spinoff of a company called FingerWorks which was bought in 2005 by Apple, who then employed the company’s founders to deploy the technologies in the iPhone and iPad.

The panelists briefed staff members of both Senate and House offices, including a House luncheon briefing that attracted nearly 60 staffers. The message seemed to resonate well with staff, which may lead to hearings on the issue in both the House and Senate later this year or early next.

#### NITRD Hearing

On the same day these congressional staff were learning all about the technologies in the iPad, three former members of CRA’s Board were called to testify on behalf of the community on the federal government’s Network and Information Technology Research and Development program—the 15-agency, ~\$3.6 billion effort that comprises the federal investment in computing research. NITRD National Coordinating Office Director, George Strawn, was joined by Edward Lazowska (former CRA Board Chair and current Chair of CRA’s Computing Community Consortium), Robert Sproull (former CRA Board Member and current CCC Council Member), and Robert Schnabel (former CRA Board Member and current ACM Education Policy Board Chair) to testify before the Subcommittee on Research and Science Education about the current state of the NITRD program.

The committee called the hearing to determine whether the program is delivering on its goals, or whether there are areas in which the federal government’s effort might be better directed. Informational hearings like these—as opposed to those that focus on advancing a specific piece of legislation or a particular aspect of a program—are especially useful for this Congress, as the membership of the Science, Space and Technology

Committee is comprised in large part by freshmen members who are, in many cases, unfamiliar with the programs they oversee. Even the Chair of the Subcommittee, Rep. Mo Brooks (R-AL), is serving in his first term so the need to “educate” the members about the nature of the federal investment and its importance to the overall ecosystem is pretty crucial.

The panelists generally received a favorable reception from the Members in attendance. Chairman Brooks wanted the community to be mindful of the dire budget situation facing the country when they come to Congress asking for more money for science. He made reference to a briefing he’d attended as a member of the Armed Services Committee in which he learned the devastating impact of some of the cuts proposed for the Defense Department—

thousands of defense contractors out of work, cuts to the naval fleet, and more. “So how should we prioritize our spending?” he asked. Lazowska, in a moment of relative drama for the hearing, hopped on his iPhone and determined that the projected cost overrun of just one of the Navy’s submarines was equal to four years worth of spending in total at DARPA and NSF for computer science. And yet the payoff from that “rounding error” in the overall budget was extraordinary in its impact.

The committee seems interested in moving another version of a reauthorization bill for the NITRD program, especially now that PCAST has reviewed the program and come up with a series of recommendations. However, it is unlikely anything will come of it this year. As that process moves forward, we’ll have all the details available on the CRA blog. ■

## CRA Announces Career Mentoring Workshop

The seventh biennial Career Mentoring Workshop will be offered by the Computing Research Association on February 27 and 28, 2012 at the Fairmont Hotel in Washington, DC.

This exciting workshop provides career advice and mentoring activities for senior graduate students, post docs, assistant professors, and individuals just starting as industrial researchers in computer science. The workshop, consisting of a series of panels, is interspersed with opportunities to network with senior researchers and representatives from the NSF, DARPA, and NIH.

The panels being offered at this workshop cover a wide range of exciting topics. They include: Planning Your Research Career; Career Networking; Teaching, Mentoring and Managing Students; Preparing a Tenure Dossier; Time Management and Family Life; Advice from Early Career Faculty; and Writing Grant Proposals. A prestigious list of speakers has already been confirmed for this workshop.

Applications are now being accepted for this workshop. There will be a registration fee to cover the cost of the workshop, and limited financial assistance is available to those who qualify. Applications are due no later than December 15, 2011. Applications can be found at: [www.cra.org/Activities/workshops/academic.careers/2012/index.html](http://www.cra.org/Activities/workshops/academic.careers/2012/index.html). If you have any questions, you can email [sjacob@cra.org](mailto:sjacob@cra.org).

Don’t miss this exciting opportunity to jump-start your career. Apply now to ensure a spot in this space-limited workshop. ■

## Trip Report from Spain

By Tasneem Kaochar, University of Arizona

In July I had the opportunity to travel to Spain to attend and present at two research venues. The first event was the 19th International Conference on User Modeling, Adaptation, and Personalization (UMAP), which took place in Girona, a charming and beautiful old city in Costa Brava, Catalonia.

The conference lasted one week (July 11-15) with two days of tutorials and workshops for conference participants. I presented our group's short research paper, titled *Towards Understanding How Humans Teach Robots*, at the main conference on July 13, and gave an invited talk on our research at one of the workshops on the last day of the conference. One of six papers in the category with acceptance rate of 14.29 percent, our paper brought in some insight from the human-robot interaction domain to the overall user modeling discussion.

I enjoyed listening to the keynote talks, which addressed the definition of "user modeling" and the need to come up with standards to evaluate it in different domains. Following my workshop presentation, I discussed my research with a Spanish professor who was interested in seeing a comparative analysis between the teaching patterns presented in our paper versus the established theories of teaching in the educational community. In a separate instance, I met a Japanese professor who compared his group's research experiences in building teacher robots to our study's findings. I also had the opportunity to listen to fellow students' research work, including an interesting ongoing behavioral study by Iolanda Leite et al (from Instituto

Superior Tecnico, Portugal) on how children react to playing against an emphatic chess companion (social robot). Last, but not least, I witnessed an onsite interview for a postdoctoral research position that gave me the opportunity to hastily write down some hints and do's and don'ts for future interviews!

From Girona I travelled to Barcelona by train for the IJCAI 2011 Workshop on Agents Learning Interactively from Human Teachers (ALIHT). In this weekend workshop I gave a presentation on *Challenges to Decoding the Intention Behind Natural Instruction*, which was voted as the "Best Presentation" by the workshop participants. This was an incredible honor as the setting of the ALIHT workshop was much more interactive (with a lot more Q&As) than the UMAP presentation session as the workshop consisted of a much smaller group of participants who were focused on a narrower field of research.

My experience at these two research venues this summer was simply amazing. I met, chatted, listened to and learned from an international group of researchers working on exciting projects in different parts of the globe. Due to the high costs of an intercontinental trip and the conference and workshop registration fees, I was the only graduate student in our research group who was able to travel to Spain to attend and present at these research venues. This trip would not have been possible without the support of NSF (who funded the UMAP student scholarships), ACM-W and Wipro Technologies (who funded the ACM-W travel

scholarships for women in computing), and CDC's Sending Students to Technical Conferences Program. I am truly grateful for the support and funding I received that enabled this incredible journey.

**Tasneem Kaochar** is a graduate student in the School of Information: Science, Technology and Arts at the University of Arizona.

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## Awards and Transitions

Colleagues and friends in the computing community warmly congratulate **Richard Tapia**, University Professor, Maxfield-Oshman Professor in Engineering in the Department of Computational and Applied Mathematics at Rice University, who received the National Medal of Science from President Barack Obama at a White House ceremony in October. The medal is the highest national honor for a U.S. scientist. In 1996, Tapia also received the inaugural Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring and earned a presidential appointment to the National Science Board, the nation's highest scientific governing body.

Congratulations to CRA Board member, **Mary Fernández**, executive director of distributed computing research at AT&T Research, who in August was recognized with the 2011 Outstanding Technical Achievement-Industry award from HENAAC/Great Minds in STEM. The award was presented not only for her technical achievements, but for her "impressive record when it comes to giving her time to inspire future STEM professionals." HENAAC/Great Minds in STEM is a non-profit organization that focuses on educational awareness of careers in science, technology, engineering and math.

**Nancy M. Amato**, an active Board member of the CRA-Women's Committee, has been appointed to the endowed Unocal Professorship in the Dwight Look College of Engineering at Texas A&M University. This endowed professorship is in recognition of Amato's excellent record of scholarly achievement and outstanding service. It is supported by a monetary gift from Unocal. The gift will be used for research related travel and graduate and undergraduate student support and travel. Amato has been a faculty member in the Department of Computer Science and Engineering at Texas A&M since 1995.

Kudos to former CRA Board member, **Moshe Vardi**, who has been named a Distinguished Service Professor at Rice University, one of the university's highest faculty honors. In March, Moshe was also named winner of the IEEE CS's 2011 Harry H. Goode Award, which recognizes achievement in the information-processing field. Vardi is Karen Ostrum George Professor in Computational Engineering and Director of the Ken Kennedy Institute for Information Technology at Rice.

Carnegie Mellon University recently announced the winners of the Katayanagi prizes in computer science. **Barbara Liskov**, Institute Professor at MIT and head of the programming methodology group in MIT's Computer Science and Artificial Intelligence Laboratory, will receive the Katayanagi Prize for Research Excellence. The award recognizes an established researcher with a record of outstanding, sustained achievement. **Scott Klemmer**, Associate Professor of Computer Science at Stanford University and co-director of the Human-Computer Interaction Group, will receive the Katayanagi Emerging Leadership Prize honoring a researcher who demonstrates leadership promise in the field.

Congratulations to **Susan Graham**—the Pehong Chen Distinguished Professor of Electrical Engineering and Computer Science Emerita and a Professor in the Graduate School at the University of California, Berkeley, and Vice Chair of the CCC Council—who will receive this year's ACM-IEEE Computer Society Ken Kennedy Award for her work on "foundational compilation algorithms and programming tools; research and discipline leadership; and exceptional mentoring." ■

### DREU: Distributed Research Experiences for Undergraduates

(Known as the DMP, Distributed Mentor Project, from 1994-2008)

Application Deadline for Summer 2012

February 15, 2012

<https://parasol.tamu.edu/dreu/Application.php>

### CRA-W Anita Borg Early Career Award

Nomination Deadline

**February 15, 2012**

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

## Professional Opportunities



**Leslie Pack Kaelbling**

MIT's Professor of Computer Science and Engineering Research Director of the Computer Science and Artificial Intelligence Laboratory (CSAIL) Coordinator of SUTD's curriculum development for Information Systems Technology & Design Pillar

# INSPIRE THE NEXT GENERATION TO BUILD A BETTER WORLD.

The Singapore University of Technology and Design (SUTD), established in collaboration with the Massachusetts Institute of Technology (MIT), is seeking exceptional faculty members in the area of Information Systems Technology and Design for this new university slated to matriculate its first intake of students in April 2012.

SUTD, the first university in the world with a focus on design accomplished through an integrated multi-disciplinary curriculum, has a mission to advance knowledge and nurture technically grounded leaders and innovators to serve societal needs. SUTD is characterized by a breadth of intellectual perspectives (the "university"), a focus on engineering foundations ("technology") and an emphasis on innovation and creativity (design). The University's programmes are based on four pillars leading to separate degree programmes in Architecture and Sustainable Design, Engineering Product Development, Engineering Systems and Design, and Information Systems Technology and Design. Design, as an academic discipline, cuts across the curriculum and will be the framework for novel research and educational programmes.

MIT's multi-faceted collaboration with SUTD includes the development of new courses and curricula, assistance with the early deployment of courses in Singapore, assistance with faculty and student recruiting, mentoring, and career development, and collaborating on a major joint research projects, through a major new international design centre and student exchanges. Many of the newly hired SUTD faculty will spend up to year at MIT in a specially tailored programme for collaboration and professional development.

**A BETTER WORLD BY DESIGN.**

### FACULTY MEMBERS (INFORMATION SYSTEMS TECHNOLOGY AND DESIGN)

The qualifications for the faculty position include: an earned doctorate in Computer Science, Computer Engineering or Information Systems, a strong commitment to teaching at the undergraduate and graduate levels, a demonstrated record of or potential for scholarly research, and excellent communication skills. SUTD invites applicants for tenure-track or tenured appointments in all areas of computer science and information technology, with particular interest in candidates with expertise in operating systems, databases, networking, security, cryptography, and applied algorithms. Duties include teaching of graduate and undergraduate students, research, supervision of student research, advising undergraduate student projects, and service to SUTD and the community. Faculty will be expected to develop and sustain a strong research programme. Attractive research grant opportunities are also available. Successful candidates can look forward to internationally competitive remuneration, and assistance for relocation to Singapore.

If you want to be part of the founding faculty with a focus on Information Systems Technology and Design, please apply to SUTD at [www.sutd.edu.sg](http://www.sutd.edu.sg)



SINGAPORE UNIVERSITY OF  
TECHNOLOGY AND DESIGN

Established in collaboration with MIT

## Professional Opportunities

### American Association for the Advancement of Science Center for Science and Policy Science and Technology Policy Fellowships

Apply your science to serve society!  
Since 1973, more than 2,200 scientists and engineers have contributed their analytical skills to policymaking in Washington, DC, while learning about the role of science in the federal government.

Career-enhancing opportunities are available in more than 30 Congressional offices and 15 federal agencies for science and engineering professionals at all career stages.

Applicants must be US citizens and hold a doctoral level degree (PhD, MD, DVM, etc.) in any scientific discipline, or a master's degree in engineering with three years of post-degree experience.

Application Deadline: December 5  
Visit <http://fellowships.aaas.org> for more details.

### Buena Vista University Department of Computer Science Tenure-Track Faculty Position

Buena Vista University seeks applicants for a tenure-track position in computer science to begin August, 2012.

Candidates must have at least a Masters degree in computer science or a related field, with Ph.D. strongly preferred. The Ph.D. is required for tenure.

The successful candidate must be committed to excellence in undergraduate education and must be willing to teach introductory, core, and advanced undergraduate courses in computer science.

Service to the institution and advising of undergraduates are expected of all faculty.

Teaching responsibilities include areas such as programming, computer architecture, operating systems, networks, robotics, compiler theory, artificial intelligence, bioinformatics, computational science, computer graphics, and others based on the candidate's areas of expertise.

The computer science program's home is the Estelle Siebens Science Center, a modern and well-equipped facility opened in 2004 that features flexible media-enabled classrooms, a Linux server lab, a parallel computer lab, and a hardware and robotics lab. Buena Vista University issues laptops and iPads to all students on the Storm Lake campus, and provides a technology-rich environment for teaching and learning. The university's sound financial position enables continued investments in technology, training, and faculty development.

Buena Vista University's main 60-acre campus is situated on the shores of beautiful Storm Lake, a 3, 200-acre natural lake located in northwest Iowa.

Please submit letter of application, graduate school transcripts (photocopies acceptable but official copies required for appointment), teaching evaluation summaries, teaching philosophy statement, and current vita with the names of 4-6 references (including title, address, e-mail address and telephone number) to:

Peter Steinfeld, Associate Dean of Faculty

Buena Vista University  
610 W. 4th Street  
Storm Lake, IA 50588  
E-mail: [steinfeld@bvuu.edu](mailto:steinfeld@bvuu.edu)

Review of applications will begin October 3.

A background check will be conducted on the final candidate. Buena Vista University is an EOE/ADA/Smoke-Free Employer, and especially welcomes applications from individuals who

will contribute to any aspect of the university's diversity.

### California State Polytechnic University, Pomona Computer Science Department - <http://www.csupomona.edu/~cs/> Tenure-Track Position

The Computer Science Department invites applications for a tenure-track position at the rank of Assistant Professor to begin Fall 2012. We are particularly interested in candidates with specialization in Secure Software Engineering, although candidates in all areas of Computer Science will be considered, and are encouraged to apply. Cal Poly Pomona is 30 miles east of L.A. and is one of 23 campuses in the California State University. The department offers an ABET-accredited B.S. program and an M.S. program. Qualifications: Possess, or complete by September 2012, a Ph.D. in Computer Science or closely related area. Demonstrate strong English communication skills, a commitment to actively engage in the teaching, research, and curricular development activities of the department at both undergraduate and graduate levels, and ability to work with a diverse student body and multicultural constituencies. Ability to teach a broad range of courses, and to articulate complex subject matter to students at all educational levels.

First consideration will be given to completed applications received no later than January 9, 2012. Contact:

Faculty Search Committee  
Computer Science Department,  
Cal Poly Pomona  
Pomona, CA 91768  
Email: [cs@csupomona.edu](mailto:cs@csupomona.edu)  
Cal Poly Pomona is an Equal

Opportunity, Affirmative Action Employer. Position announcement available at:

<http://academic.csupomona.edu/faculty/positions.aspx>.

Lawful authorization to work in US required for hiring.

### Caltech CMI Postdoctoral Fellowship Program

Caltech's Center for the Mathematics of Information (CMI) announces openings in the CMI Postdoctoral Fellowship Program, starting in fall 2012. The CMI is dedicated to fundamental mathematical research with an eye to the roles of information and computation throughout science and engineering. Areas of interest include algorithms, complexity, algorithmic game theory, applied combinatorics, applied probability, statistics, machine learning, information and coding theory, control, optimization, networked systems, geometry processing, multiresolution methods, and molecular programming.

Please apply and have three reference letters sent directly as instructed at:

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

All candidate materials are due by Friday, December 16, 2011 and reference letters are due by Monday, December 19, 2011.

### Carnegie Mellon University School of Computer Science Faculty Positions

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

The School spans a wide range of topics in computer science and the

application of computers to real-world systems.

It houses the Computer Science Department; Human-Computer Interaction Institute; Institute for Software Research; Lane Center for Computational Biology; Language Technologies Institute; Machine Learning Department and the Robotics Institute.

We particularly have interest in the areas of big-data analytics, computational biology, computer graphics, computer vision, computing and society, cryptography, cyber-physical systems, data intensive computing, health IT and sustainability, human-computer interaction, machine learning, natural language processing/machine translation, robotics, scalable programming models and systems, social media analytics, software engineering, statistical machine learning, and usable security.

While only junior candidates are sought in most areas, senior candidates will be considered for computational biology and data intensive computing.

Applications must be in PDF format and include curriculum vitae, research and teaching interest statements, 1-3 representative papers, and the names and email addresses of three or more individuals who have been asked to provide letters of reference.

Applicants should arrange for reference letters to be sent in PDF directly to the Faculty Search Committee (see website instructions), to arrive before January 15th, 2012. The Search Committee will not directly request letters.

Incomplete applications will not be processed. Applications should indicate citizenship and, for non-US citizens, current visa status. Please refer to <http://www.cs.cmu.edu/~scsdean/HiringPage> for details and submission guidelines. Applications will be accepted from November 1st, 2011 through January 1st, 2012. Please contact the Search Committee at [faculty-search@cs.cmu.edu](mailto:faculty-search@cs.cmu.edu) with questions.

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

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

Colorado State University has an opening for one or more tenure-track assistant professor positions in Computer Science, beginning fall 2012. Areas of interest include computational biology, parallel computing, programming languages that focus on parallel programming models, mobile computing and HCI.

For more information go to:  
<http://www.cs.colostate.edu>

Applications must be received by January 9, 2012 at:

<http://www.natsci.colostate.edu/employment/compsci/>.

Complete applications of semi-finalists will be available to department faculty for review.

CSU is an EO/EA/AA employer. Colorado State University conducts background checks on all final candidates.

### Cornell University Department of Computer Science Multiple Faculty Positions

Multiple faculty positions are available at Cornell's Department of Computer Science. Candidates are invited to apply at all levels including tenured, tenure-track, or lecturer. We are interested in applications from any area of computer science, including artificial intelligence, computational biology, cryptography, databases, game design,

graphics, machine learning, networking, programming languages, robotics, security, scientific computing, systems, and theory of computation.

Applicants for tenured and tenure track must hold a Ph.D. and have demonstrated an ability to conduct outstanding research. Lecturers must hold the equivalent of a Masters degree, with a Ph.D. preferred. To ensure full consideration, applications should be received by December 1, 2011, but will be accepted until all positions are filled.

Applicants should submit a curriculum vita, brief statements of research and teaching interests, and arrange to have at least three references letters submitted at <http://www.cs.cornell.edu/apply>.

Cornell University is an equal opportunity, affirmative action educator and employer; qualified women and minority candidates are particularly encouraged to apply.

### 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 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](mailto:roth2012@cs.dartmouth.edu). Application review will start on January 15, 2011.

Applicants should arrange to have letters of recommendation sent directly

## Professional Opportunities

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.

### Dartmouth College Neukom Institute for Computational Science Neukom Fellow

The Neukom Institute for Computational Science is pleased to announce the inaugural Neukom Fellows competition. Neukom Fellows are designed as explicitly interdisciplinary positions for recent Ph.D.s whose research interests cuts across traditional disciplinary boundaries, but has some computational component, whether it be a framing concept for intellectual exploration or an explicit component of the work that is pursued.

The successful candidate should be interested in and, in the best case have a history of collaborative work across disciplines, but still show good evidence of independence and initiative. The Fellowships are two- to three-year appointments, with the third year extension considered upon request after a review early in the second year. Neukom Fellows will be mentored by faculty in two departments at Dartmouth College, take up residence in one department, and will teach one seminar course each year on a subject of their interest. There is a possibility of additional teaching if that is desirable on the part of the candidate.

Beyond that there are no additional duties. Neukom Fellow stipends are \$60,000 for 2012-2013.

Some additional funds are available for equipment, travel, and research materials.

Requirements:

1. Ph.D. in any discipline (or expected Ph.D. by September 2012). 2. Research interests that strongly intersect the theme of computation. 3. A proven ability to work independently and collaboratively 4. A demonstrated interest in multidisciplinary research. 5. Evidence of the ability to think outside traditional paradigms.

Application Materials:

Interested candidates must submit the following:

Curriculum vitae (including publications list)

Statement of research interests (max. 2 pages) including a short description of the research you would like to pursue and why.

Description of which departments (and even better, which Dartmouth faculty) you would be interested in working with and why the opportunity to engage with multiple departments would enhance your work.

Three referees who can write on your behalf to the aims of the Fellowship.

(Optional) A copy of one paper you have written in English, either published or unpublished.

Applications must be submitted to: [www.mathjobs.org](http://www.mathjobs.org) Position ID: NeukomInstitute-FELLOWS #3015.

Completed applications received by December 1, 2011 will get first consideration.

Materials received after that date stand the chance of not being considered.

Applications from women and minorities are encouraged. Dartmouth College is an equal opportunity employer.

### Dominican University Computer Science Department Assistant Professor

Dominican University, a comprehensive Catholic university located ten miles west of downtown Chicago, invites applications for a full-time tenure-track faculty position in Computer Science beginning in August 2012 at the rank of Assistant Professor. Preferred candidates will have a doctoral degree in Computer Science or a related field. Candidates must have excellent communication skills and the ability and willingness to teach undergraduate courses at all levels, including the university's Core Curriculum. Previous teaching/industry experience is preferred. Teaching is the primary responsibility, but other responsibilities include scholarly activity and participating in university life and governance. Review of applications will begin immediately. Salary and benefits are competitive.

Apply online at <https://jobs.dom.edu>. Applicants will be asked to submit a CV, letter of interest, statement of teaching philosophy, and prior teaching evaluations if available.

Dominican University is an equal employment opportunity employer seeking applicants from underrepresented groups.

### Duke University Department of Computer Science Tenure-track Faculty Positions

The Department of Computer Science at Duke University in Durham, North Carolina, invites applications and nominations for tenure-track faculty positions at the assistant professor level, to begin August 2012. We are interested in strong candidates in all active research areas of computer science, as well as interdisciplinary areas.

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

A successful candidate must have a solid disciplinary foundation and demonstrate promise of outstanding scholarship in every respect, including research and teaching. Please refer to [www.cs.duke.edu](http://www.cs.duke.edu) for information about the department and to [www.provost.duke.edu/faculty/](http://www.provost.duke.edu/faculty/) for information about the advantages that Duke offers to faculty.

Applications should be submitted online through the link provided at [www.cs.duke.edu/facsearch](http://www.cs.duke.edu/facsearch). A Ph.D. in computer science or related area is required. To guarantee full consideration, applications and letters of reference should be received by December 1, 2011.

Durham, Chapel Hill, and the Research Triangle of North Carolina are vibrant, diverse, and thriving communities, frequently ranked among the best places in the country to live and work. Duke and the many other universities in the area offer a wealth of education and employment opportunities for spouses and families.

Duke University is an affirmative action, equal opportunity employer.

### Emory University Biology and Mathematics & Computer Science Postdoctoral Scholars

The Taylor Lab is recruiting postdoctoral scholars with expertise in Bioinformatics and Computational Biology. Our current research interests include:

- The Galaxy project, which builds software and infrastructure to make

computational biology accessible to experimentalists. Research foci include development of analysis and data management tools, and novel user interfaces and interactive visualizations for analyzing large-scale data.

- Distributed and high-performance computing for data intensive science, specifically genomics.
- Vertebrate functional genomics, particularly through the development of novel machine learning, data mining, and data integration methods incorporating genomic sequence and experimental data.
- Genomics and Epigenomic mechanisms of gene regulation, the role of transcription factors and chromatin structure in global gene expression, development, and differentiation.

We are seeking post-docs with complementary research interests. Well developed research plans that complement but extend the lab's current interests will be looked upon favorably. Specific area of academic background is flexible. Our group is located in the Biology Department; however because our work is largely computational, programming / software development experience is important.

Applicants should submit a CV, a statement of research interests or research plan, and a few references to [james.taylor@emory.edu](mailto:james.taylor@emory.edu).

### 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-month, 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 (CAE-R).

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.

### Georgia Institute of Technology College of Computing Tenure-Track Faculty Positions

The School of Computational Science and Engineering of the College

# Dartmouth

[www.cs.dartmouth.edu](http://www.cs.dartmouth.edu)



The Dartmouth College Department of Computer Science invites applications for a tenure-track faculty position at the level of assistant professor. We seek candidates who will be excellent researchers and teachers in the areas of systems, computer architecture (especially with applications to computer graphics), networking, or human-computer interaction.

The department is home to 17 tenured and tenure-track faculty members whose research encompasses the areas of systems, security, graphics, vision, digital arts, algorithms, theory, 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, a member of the Ivy League, is located in Hanover, New Hampshire (on the Vermont border). Dartmouth has a beautiful, historic campus, located in a scenic area on the Connecticut River. Recreational opportunities abound in all four seasons.

Applicants are invited to send their CV, research statement, teaching statement, and names of at least four references, at least one of whom should comment on teaching. Application review will start on December 1, 2011.

**[search2012@cs.dartmouth.edu](mailto:search2012@cs.dartmouth.edu)**

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

## Professional Opportunities

of Computing at the Georgia Institute of Technology invites applications for tenure-track faculty positions. Applications at all levels of service will be considered. Applicants must have an outstanding record of research, a sincere commitment to teaching, and interest in engaging in substantive interdisciplinary research with collaborators in other disciplines.

We encourage applications from all areas of computational science and engineering. Applicants with expertise in areas related to high-performance computing, scientific computing, large-scale data analytics and systems, visualization, computational systems biology, modeling & simulation, or complex systems are especially encouraged to apply.

Applications will be considered until open positions are filled, however, to receive full consideration, applications should be submitted online through <https://recruiting.cc.gatech.edu/cse> by December 16, 2011. The application material should include a full academic CV, teaching and research statements, a list of at least three references and up to three publications.

Applicants are encouraged to clearly identify in their cover letter the area(s) that best describe their research interests. Georgia Tech is an Affirmative Action/Equal Opportunity Employer. Applications from women and under-represented minorities are strongly encouraged.

### Harvey Mudd College Computer Science Department Two Assistant Professorships in Computer Science

The Computer Science Department at Harvey Mudd College intends to appoint two tenure-track assistant professors of computer science commencing July 1, 2012. Successful applicants should provide evidence of excellence in teaching and a research program that can be sustained in a college setting, ideally involving undergraduates. Candidates in all areas of computer science will be considered. A candidate's commitment to contributing to a diverse learning environment will also be considered.

Harvey Mudd College is a highly-selective undergraduate college (770 students) emphasizing science, mathematics, and engineering. It is a member of the Claremont Consortium that includes four other colleges and two graduate schools. The Department of Computer Science currently has nine permanent faculty members and serves three major programs (computer science, a joint major with mathematics, and a second joint major in mathematical and computational biology) with a total of approximately 50 majors in each graduating class. Most classes are relatively small and the teaching load is typically four courses per year on the semester system and supervision of a senior capstone "clinic" project. Visit [www.cs.hmc.edu](http://www.cs.hmc.edu) for more information about the department and the clinic program.

Applicants should respond with a cover letter that describes the candidate's interests in joining the faculty at Harvey Mudd, a curriculum vitae, a statement regarding teaching philosophy and experience (along with any supporting materials such as teaching evaluations), and a similar statement on research interests. Where applicable, applicants are encouraged to describe evidence that they can contribute to the college's efforts to support a diverse community through mentoring or other activities.

Concurrently, please ask three references to submit reference letters using the secure web-based system below. It is desirable for at least some letters

of reference to address the candidate's potential as a teacher. Applications received by January 1, 2012 will receive full consideration.

All application materials should be submitted through the AcademicJobOnline system at: <https://academicjobsonline.org/ajo/jobs/921>

Any questions about the position can be sent to Professor Ran "RON" Libeskind-Hadas at [cssearch@cs.hmc.edu](mailto:cssearch@cs.hmc.edu).

Harvey Mudd College is an Equal Opportunity Employer and is committed to the recruitment of candidates traditionally underrepresented on college faculties.

### Henry M. Jackson Foundation (HJF) Physiological Data Modeling Scientist (206381/205350)

The Henry M. Jackson Foundation (HJF) is seeking junior and senior scientists to join the U.S. Army Medical Research and Materiel Command's Biotechnology High Performance Computing Software Applications Institute (BHSAL) [[www.BHSAL.org](http://www.BHSAL.org)]. HJF provides scientific, technical, and programmatic support services to the BHSAL.

These openings are for dynamic scientists interested in working in an interdisciplinary environment focused on the development and the application of computational solutions to biomedical problems, involving signal processing of time series physiological data, data mining, data-driven and physiological-based models, and artificial intelligence. The candidate should have a Ph.D. in a related discipline and a strong publication record. The candidate is expected to simultaneously work on multiple projects, involving a diverse and interdisciplinary team of scientists across multiple laboratories.

Foreign nationals are welcome to apply. U.S. citizenship or permanent resident status is not required. These positions are located in Frederick, Maryland.

Please apply on-line at [www.hjf.org/careers](http://www.hjf.org/careers) Click "Advanced Search" and enter job number 206381 OR 205350 in the Job Opening ID box. OR fax your resume to 240-314-7334. Please specify title and job number on fax.

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. (HJF) is a congressionally authorized, not-for-profit corporation that provides unparalleled scientific and management services to military medical research and education programs worldwide. Our mission is to advance military medical research.

For a comprehensive list of our benefits, please visit: <http://www.hjf.org/careers/benefits.html>.

AA/EEO

### Ithaca College Computer Science Department Tenure-Eligible Position

Tenure-eligible position to teach at a variety of undergraduate levels and participate in research in one or more areas of emerging media such as game design / virtual worlds, web science and social networking, and mobile computing. Visit our website [www.icjobs.org](http://www.icjobs.org) for a full description and to apply. Questions about online application, call (607) 274-8000.

Ithaca College is committed to building a diverse academic community and encourages members of underrepresented groups to apply. Experience that contributes to the diversity of the college is appreciated.

### The Johns Hopkins University Department of Computer Science Tenure-Track Faculty Positions

The Department of Computer Science at The Johns Hopkins University is seeking applications for tenure-track faculty positions. The search is open to all areas of Computer Science, with a particular emphasis on candidates with research interests in machine learning, networked and distributed systems, information security, computational biology, and data-intensive or health-related applications.

All applicants must have a Ph.D. in Computer Science or a related field and are expected to show evidence of an ability to establish a strong, independent, multidisciplinary, internationally recognized research program.

Commitment to quality teaching at the undergraduate and graduate levels will be required of all candidates. Preference will be given to applications at the assistant professor level, but other levels of appointment will be considered based on area and qualifications. The department is committed to building a diverse educational environment; women and minorities are especially encouraged to apply.

A more extensive description of our search and additional supporting information can be found at <http://www.cs.jhu.edu/Search2012>. More information on the department is available at <http://www.cs.jhu.edu>.

Applicants should apply using the online application which can be accessed from <http://www.cs.jhu.edu/apply>. Applications should be received by Dec 15, 2011 for full consideration. Questions should be directed to [fsearch@cs.jhu.edu](mailto:fsearch@cs.jhu.edu).

The Johns Hopkins University is an EEO/AA employer.

Faculty Search  
Johns Hopkins University  
Department of Computer Science  
Room 224 New Engineering Building  
Baltimore, MD 21218-2694  
Fax: 410-516-6134  
Phone: 410-516-8775  
E-mail: [fsearch@cs.jhu.edu](mailto:fsearch@cs.jhu.edu)  
<http://www.cs.jhu.edu/apply>

### King's College Computer Science and Mathematics Assistant Professor of Computer Science

Tenure-track begins Fall 2012. Ph.D. in Computer Science or Mathematics required with demonstrable ability to effectively teach the second discipline. Teaching duties: courses for computer science and/or mathematics majors and introductory courses. Normal teaching load is 12 hrs/semester. Primary interest and commitment must be quality instruction and formally training and mentoring young computer scientists and mathematicians. Public scholarship plus active involvement in the college and department expected.

Send letter of interest, CV, teaching philosophy (2 pages maximum), research statement (250 words maximum), transcripts, 3 professional reference letters to:

VP Academic Affairs  
King's College  
133 N. River Street  
Wilkes-Barre, PA 18711

Application deadline 1-31-12. No electronic applications accepted.

King's is a private, Catholic, teaching college of the liberal arts, sciences, and pre-professional programs sponsored by the Congregation of Holy Cross. It serves over 2000 FT and 350 PT undergrads and 300 grad students. A rigorous core curriculum provides foundation for all majors. The



### King Abdullah University of Science and Technology in Saudi Arabia (KAUST)

is a new international, graduate-level research university dedicated to inspiring a new age of scientific achievement in the Kingdom, the region, and beyond. As an independent, merit-based institution, KAUST enables top researchers from around the globe and across all cultures to work together to solve the most challenging scientific and technological problems. We seek the following talented individual:

#### COMPUTATIONAL BIOLOGY - POSTDOCTORAL FELLOW

A postdoc position is available at King Abdullah University of Science and Technology (Saudi Arabia) in computational biology.

This position is part of a joint project between Dr. Xin Gao and Dr. Antoine Vigneron on protein loop structure prediction from NMR data. The candidate should hold a PhD in computer science or a related field, with expertise in bioinformatics, and good programming skills.

The initial appointment is for one year, renewable for another year upon mutual agreement. We offer a very competitive compensation package which includes a tax-free salary, as well as free on-campus housing and health benefits.

Applications should include a CV and contact information of at least two reference. For further information, or to submit an application, please email Dr. Xin Gao ([xin.gao@kaust.edu.sa](mailto:xin.gao@kaust.edu.sa)) or Dr. Antoine Vigneron ([antoine.vigneron@kaust.edu.sa](mailto:antoine.vigneron@kaust.edu.sa)).



## Professional Opportunities

College is located on a small urban campus in Wilkes-Barre, on the edge of the Pocono Mountains. King's is committed to recruiting a diverse faculty and student body and welcomes applications from persons of traditionally under-represented groups. EOE [www.kings.edu](http://www.kings.edu)

### Louisiana Tech University Center for Secure Cyberspace Research Assistant Professor Position

Applications invited for a non-tenure track Research Assistant Professor. Initial appointment for one year, and possibly extendable. PhD required in computer science, statistics, mathematics, or related field. Opportunities for pursuing cutting edge research and joining a group of leading researchers. Background required in cyber security, internet, social networks, data mining, or related areas. Highly competitive salary.

Send vita to Vir Phoha: [phoha@latech.edu](mailto:phoha@latech.edu)

### Massachusetts Institute of Technology Department of Electrical Engineering and Computer Science (EECS) Faculty Positions

The Department of Electrical Engineering and Computer Science (EECS) seeks candidates for faculty positions starting in September 2012. Appointment will be at the assistant or untenured associate professor level. In special cases, a senior faculty appointment may be possible. Faculty duties include teaching at the graduate and undergraduate levels, research, and supervision of student research. We will consider candidates with backgrounds and interests in any area of electrical engineering and computer science. Faculty appointments will commence after completion of a doctoral degree.

Candidates must register with the EECS search website at <https://eecs-search.eecs.mit.edu>, and must submit application materials electronically to this website. Candidate applications should include a description of professional interests and goals in both teaching and research. Each application should include a curriculum vita and the names and addresses of three or more individuals who will provide letters of recommendation. Letter writers should submit their letters directly to MIT, preferably on the website or by mailing to the address below. Please submit a complete application by December 15, 2011.

Send all materials not submitted on the website to:

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

### 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.

### NEC Laboratories America Research Staff Members – Computing Systems Architecture

NEC Laboratories America, a premier research facility of NEC Corporation, has multiple openings in the Computing Systems Architecture Department located in Princeton, NJ. The department's mission is to innovate, design, evaluate and deliver parallel systems for high-performance, energy-efficient enterprise computing. We invite applications from exceptional candidates (senior-level or junior-level) for research staff (RSM) and associate research staff (ARSM) positions.

Candidates for the RSM position must have a PhD in CS, CE, or EE, strong research record and excellent credentials in the international research community. Applicants must be able to propose and execute innovative research projects, including prototyping effort that leads to demonstration in an industry environment. Applicants must demonstrate competency in one or more parallel computing research areas like heterogeneous cluster architectures, parallel programming models and runtimes, and key technologies to accelerate performance and lower power consumption of enterprise applications on heterogeneous clusters. Candidates for the ARSM position must have at least a MS in CS, CE, or EE, with a strong motivation and skill set to prototype/transfer innovative research results into industry practice. Expertise in one or more of the above parallel computing areas is desirable. Strong interest and aptitude for research is necessary.

For consideration, please access our career center at <http://www.nec-labs.com> and submit your resume/CV and research statement.

EOE/AA/MFDV

### Northeastern University- Boston, Massachusetts 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. 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.

The College maintains a strong research program with significant funding from major federal research agencies and private industry and was instrumental in Northeastern being recognized by NSA/DHS as a center of excellence for research and education in Information Assurance.

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 75 Ph.D. students.

Northeastern University 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. 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. The College has been a major participant in this initiative and will continue the efforts this year, with additional interdisciplinary searches ongoing in related areas.

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.

Additional information and instructions for submitting application materials may be found at the following web site: <http://www.ccs.neu.edu/hiring/>.

Screening of applications begins immediately. To guarantee full consideration, application materials should be received by December 1, 2011. However, applications will be accepted until the search is completed.

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

### Princeton University Computer Science Department Assistant Professor (Tenure-Track Positions)

The Department of Computer Science at Princeton University invites applications for faculty positions at the Assistant Professor level. We are accepting applications in all areas of Computer Science.

Applicants must demonstrate superior research and scholarship potential as well as teaching ability. A PhD in Computer Science or a related area is required. Successful candidates are expected to pursue an active research program and to contribute significantly to the teaching programs of the department. Applicants should include a CV and contact information for at least three people who can comment on the applicant's professional qualifications.

There is no deadline, but review of applications will start in December 2011. Princeton University is an equal opportunity employer and complies with applicable EEO and affirmative action regulations.

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

Requisition Number: 0110422

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

The Department of Computer Science at Purdue University invites applications for tenure-track positions 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

## Professional Opportunities

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.

### Rutgers University Department of Computer Science Tenure Track Faculty Position in Robotics

The Rutgers University Department of Computer Science and the Center for Computational Biomedicine, Imaging and Modeling (CBIM) seeks applicants at in robotics, for a tenure-track faculty position starting September 2012. We're particularly interested in synergy with CBIM and thus we're excited about receiving applications primarily in areas related to multimodal sensing, decision making under uncertainty, planning, learning and novel designs for collaborative robots, co-robots, social robots, network-based robotics, underwater autonomous robots and heterogeneous swarms of robots. Rutgers University offers an exciting and multidisciplinary research environment and encourages collaborations between Computer Science and other disciplines.

Applicants for this research/teaching position 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, potential for developing an externally funded research program, and commitment to quality advising and teaching at the graduate and undergraduate levels. Hired candidates who have not defended their Ph.D. by September 2012 will be hired at the rank of Instructor, and must complete the Ph.D. by December 31, 2012 to be eligible for tenure-track title retroactive to start date. Senior applicants at the Associate or Full Professor level will need to have demonstrated significant funding, scholarship, collaborative, and leadership abilities.

Applicants should go to <http://www.cs.rutgers.edu/employment/> and submit their curriculum vitae, a research statement addressing both past work and future plans and a teaching statement along with three letters of recommendation. If electronic submission is not possible, hard copies of the application materials may be sent to:

Professor Dimitris Metaxas, Hiring Chair  
Computer Science Department  
Rutgers University  
110 Frelinghuysen Road  
Piscataway, NJ 08854

Applications should be received by January 31st, 2012 for full consideration.

Rutgers subscribes to the value of academic diversity and encourages applications from individuals with varied experiences, perspectives, and backgrounds. Females, minorities, dual-career couples, and persons with disabilities are encouraged to apply.

Rutgers is an affirmative action/equal opportunity employer.

### Rutgers University Department of Computer Science Tenure-Track Position

The Department of Computer Science at Rutgers University invites applications for tenure-track faculty positions at the rank of Assistant, Associate or full Professor, with appointments starting in September 2012, subject to the availability of funds. All areas in experimental computer systems will be considered, but special emphasis will be given to compilers and programming languages.

Applicants for this research/teaching position 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, potential for developing an externally funded research program, and commitment to quality advising and teaching at the graduate and undergraduate levels. Hired candidates who have not defended their Ph.D. by September will be hired at the rank of Instructor, and must complete the Ph.D. by December 31, 2012 to be eligible for tenure-track title retroactive to start date.

Applicants should go to <http://www.cs.rutgers.edu/employment/> and submit their curriculum vitae, a research statement addressing both past work and future plans and a teaching statement along with three letters of recommendation. If electronic submission is not possible, hard copies of the application materials may be sent to:

Mary Hoffman  
Computer Science Department  
Rutgers University  
110 Frelinghuysen Road  
Piscataway, NJ 08854

Applications should be received by December 20, 2011 for full consideration.

Rutgers subscribes to the value of academic diversity and encourages applications from individuals with varied experiences, perspectives, and backgrounds. Females, minorities, dual-career couples, and persons with disabilities are encouraged to apply.

Rutgers is an affirmative action/equal opportunity employer.

### Stanford University Department of Management Science & Engineering Faculty Opening

We invite applications from individuals working at the frontiers of Management Science & Engineering, broadly defined, including candidates from engineering and the mathematical, medical, physical, and social sciences. Appointments are to tenure-line junior faculty positions at the Assistant or untenured Associate Professor level. Please visit our website for more information about the MS&E Department at <http://www.stanford.edu/dept/MSandE/>.

An earned Ph.D., evidence of the ability to pursue a program of research, and a strong commitment to graduate and undergraduate teaching are required. A successful candidate will be expected to teach courses at the graduate and undergraduate levels and to build and lead a team of graduate students in Ph.D. research.

Applications should include a resume, brief statements of research and teaching interests, and the names and e-mail addresses of at least three referees. Candidates should apply online at:

<http://www.stanford.edu/dept/MSandE/cgi-bin/about/search.php>

Applications will be accepted until January 15, 2012. The review of applications will begin on October 1, 2011. Interviews will begin prior to January 31, 2012. Therefore, applicants are encouraged to apply early.

Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women and members of minority groups, as well as others who would bring additional dimensions to the university's research and teaching missions.

### Stanford University Department of Computer Science Faculty Openings

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

We are seeking applicants from all areas of Computer Science, spanning theoretical foundations, systems, software, and applications. We are also interested in applicants doing research at the frontiers of Computer Science with other disciplines, especially those with potential connections to Stanford's main multidisciplinary initiatives: Energy, Human Health, Environment and Sustainability, the Arts and Creativity, and the International Initiative. Interdisciplinary candidates whose research combines other fields of engineering or mathematics with computer science may be considered for a joint appointment in the Institute for Computational and Mathematical Engineering (<http://icme.stanford.edu/>).

Applicants must have completed (or be completing) a Ph.D., must have demonstrated the ability to pursue a program of research, and must have a strong commitment to graduate and undergraduate teaching. A successful candidate will be expected to teach courses at the graduate and undergraduate levels, and to build and lead a team of graduate students in Ph.D. research. Further information about the Computer Science Department can be found at <http://cs.stanford.edu>. The School of Engineering website may be found at <http://soe.stanford.edu>.

Applications should include a curriculum vita, brief statements of research and teaching interests, and the names and contact information of at least four references. Applications should be sent to: <http://soe-apps.stanford.edu/FacultyApplyCS>. Questions should be directed to, Search Committee Chair, c/o Laura Kenny-Carlson, via electronic mail to [search@cs.stanford.edu](mailto:search@cs.stanford.edu).

The review of applications will begin on November 28, 2011, and applicants are strongly encouraged to submit applications by that date; however, applications will continue to be accepted at least until February 15, 2012.

Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women and members of minority groups, as well as others who would bring additional dimensions to the university's research and teaching missions.

### SUNY Korea Computer Science Department Faculty/Researcher Positions

SUNY Korea  
Graduate Degrees of Stony Brook University  
Computer Science Department and CEWIT Korea  
Faculty/Researcher Positions  
SUNY (State University of New York)

Korea, is located in Incheon Free Trade Zone (IFEZ) in Songdo, South Korea, about 1 hour from Seoul and about 20 mins from the Incheon International Airport. SUNY Korea is committed to delivering high-quality research oriented MS and PhD programs in Computer Science while providing the full American university experience in Korea. The degrees granted will be from Stony Brook University. For more information: [www.sunykorea.ac.kr](http://www.sunykorea.ac.kr).

The Department of Computer Science at Stony Brook University, Stony Brook, New York, is consistently ranked among the top Computer Science research departments and the most recent NRC survey ranked it among the top 20 graduate programs in the U.S. Detailed information can be found in: [www.cs.stonybrook.edu](http://www.cs.stonybrook.edu).

The Department has more than 40 faculty and is in a stage of significant expansion, including new faculty and students, a new Computer Science building, a new Center of Excellence in Wireless and Information Technology (CEWIT), SUNY Korea and CEWIT Korea.

CEWIT at Stony Brook University, Stony Brook, New York, is a research and development center housed in a 100,000 square ft state-of-the art facility. CEWIT's broad goal is to conduct first-class applied interdisciplinary research in the emerging, critical technologies of the information age and foster new enterprise development in these areas. The Center has about 70 associated faculty members, and close to 300 graduate students engaged in various forms of government and industry sponsored research. Practically all the faculty of the Computer Science Department are also CEWIT researchers.

As a part of its globalization strategy, CEWIT has established a branch center in Songdo, co-located with SUNY Korea. The Korean branch will work in active collaboration with the Center in New York, and will focus on technologies of strategic importance to Korea and foster global collaboration. Furthermore, faculty and students in SUNY Korea will have an opportunity to be involved in a collaborative research/education venture with the Pohang University of Science and Technology (POSTECH), under a Ministry of Knowledge Economy grant, the IT Consilience Creative (ICC) Program, for fostering premium IT professionals.

To learn more about CEWIT and its Korea branch, please visit [www.cewit.org](http://www.cewit.org) and [www.cewit.or.kr](http://www.cewit.or.kr).

The Computer Science Department of SUNY Korea together with CEWIT Korea invites applicants for faculty/researcher positions for the inaugural Spring 2012 semester. We are particularly interested in receiving applications from highly qualified junior candidates in all areas of computer science. Applicants should hold a Ph.D. in Computer Science or closely related area and exhibit a strong commitment to teaching and research, especially in applied interdisciplinary areas. We are also interested in receiving applications from a highly qualified senior candidate for the Program Chair position in Songdo.

Applicants should apply online at: <https://hiring.cs.stonybrook.edu>

Review of applications will start immediately and will continue until the positions are filled. Applications from non-Korean citizens, women and minorities are encouraged.

### Swarthmore College Computer Science Department Tenure track Assistant Professor Position

Applications are invited for a tenure track assistant professor position and for a two-year leave replacement position at the assistant professor level. Both positions begin Fall semester 2012. Swarthmore College is a small, selective liberal arts college located in a suburb of Philadelphia. The Computer Science Department offers majors and minors in computer science at the undergraduate level. The teaching load is 3 courses and 3 labs per year. Applicants must

## Professional Opportunities



**Department of Computer and Information Sciences  
Temple University**

**Tenure Track Faculty**

Applications are invited for tenure-track, open rank, faculty positions in the Department of Computer and Information Sciences at Temple University.

Areas of interest for the junior position include, or should be closely related to,

- Security and privacy, and
- Cloud computing.

The senior position is open to all fields. Applications should include curriculum vitae, a statement of recent achievements, research and teaching goals, up to three representative publications, and names and addresses of at least three references. Junior candidates should have three reference letters sent directly. Please submit applications online at <http://academicjobsonline.org>. For further information check <http://www.cis.temple.edu> or send email to search committee chair Dr. Eugene Kwatny at [ekwatny@temple.edu](mailto:ekwatny@temple.edu). Review of candidates will begin on January 2, 2012 and will continue until the position is filled. Temple University is an equal opportunity, equal access, affirmative action employer.

have teaching experience and should be comfortable teaching a wide range of courses at the introductory and intermediate level.

For the tenure track position, all areas of CS will be considered, but we are particularly interested in areas that complement our current offerings, including databases, networking, and other systems and algorithms areas. Candidates should additionally have a strong commitment to involving undergraduates in their research. A Ph.D. in CS by or near the time of appointment is required.

For the leave replacement position, all areas of CS will be considered. A Ph.D. in CS by or near the time of appointment is preferred (ABD required).

See <http://cs.swarthmore.edu/jobs> for application submission information and more details about both positions. We expect to begin interviewing by mid January 2012. Applications will be accepted until the positions are filled.

Swarthmore College has a strong institutional commitment to excellence through diversity in its educational program and employment practices and actively seeks and welcomes applications from candidates with exceptional qualifications, particularly those with demonstrable commitments to a more inclusive society and world.

### **Texas State University – San Marcos** Department of Computer Science Faculty Position

Applications are invited for a faculty position at the rank of Assistant, Associate, or full Professor to start on September 1, 2012. Consult the department's recruiting page, <http://www.cs.txstate.edu/recruitment/>, for job duties, qualifications, application procedures, and information about the university and the department.

Texas State University-San Marcos will not discriminate against any person in employment or exclude any person from participating in or receiving the benefits of any of its activities or programs on any basis prohibited by law, including race, color, age, national origin, religion, sex, disability, veterans' status, or on the basis of sexual orientation. Texas State University-San Marcos is a member of the Texas State University System.

### **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 at Buffalo, The State University of New York** Faculty Positions in Computer Science and Engineering

Tak Associate/Assistant Professor position: The CSE Department invites excellent candidates in all core areas of Computer science and Engineering to apply for an opening at the associate/assistant professor level.

Assistant Professor positions: The CSE Department also invites excellent candidates in all core areas of Computer science and Engineering to apply for openings at the assistant professor level.

The department is affiliated with successful centers devoted to biometrics, bioinformatics, biomedical computing, cognitive science, document analysis and recognition, high performance computing, and information assurance.

Candidates are expected to have a Ph.D. in Computer Science/Engineering or related field by August 2012, with an excellent publication record and potential for developing a strong funded research program.

Applications should be submitted by December 31, 2011 electronically via <http://www.ubjobs.buffalo.edu/>.

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

### **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 Houston** Department of Computer Science Research Associate in Parallel and Distributed Computing

High Performance Systems Laboratory in the Department of Computer Science at University of Houston seeks a Research Associate with expertise in parallel and distributed systems. The research in the laboratory spans computation frameworks, performance modeling, and fault tolerance in the context of parallel and distributed computing. The position is associated with the Volpex project ([volpex.cs.uh.edu](http://volpex.cs.uh.edu)) which has the goal of enabling mainstream parallel computing on volunteer nodes.

Experience in building parallel or distributed systems is required.

Familiarity with MPI, virtualization, volunteer computing, and grid and cloud computing are helpful for this research.

The successful candidate will participate in all aspects of the Volpex project spanning development and experimentation, mentoring graduate and undergraduate students and authoring publications and funding proposals.

Candidates interested in the position should submit an application, their CV and names of at least 3 references to jobs.uh.edu. Reference Researcher positions, posting 066403, when applying.

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 Nov 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 Illinois Urbana- Champaign** Advanced Digital Sciences Center 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-docs 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

## Professional Opportunities

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 in particular 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.

Positions are available immediately and will remain open until filled. Interested candidates should submit your curriculum vitae, cover letter, and three letters of recommendation. Further information and the on-line application procedure are available at <http://adsc.illinois.edu/employment.html>.

### University of Kentucky Computer Science Department Tenure-Track Faculty Positions

The University of Kentucky Computer Science Department expects to hire one or more tenure-track faculty to begin employment August 15, 2012.

Candidates must have earned a PhD in Computer Science or closely related field at the time employment begins. Review of credentials will begin

1 October 2011 and continue until a suitably qualified candidate is found.

The department seeks to hire energetic researcher/educators who are interested in the application of advanced computing to challenging and relevant problems. We are especially interested in researchers who can collaborate to solve multidisciplinary problems. Areas of interest include, but are not limited to:

- Optimal application of high-performance computing and database

systems to problems in the sciences, medicine, engineering, business and the humanities.

- Design of scalable distributed computing, communication, and storage systems that protect the economic and privacy interests of both providers and users;
- Specification, design and engineering of robust, maintainable and evolvable software systems.

The University of Kentucky

Department of Computer Science, one of the oldest CS departments in the United States, has 22 faculty members committed to excellence in education, research and service. It is one of the occupants of the brand-new, LEED Gold-certified Davis Marksbury Building. The Department awards B.S., M.S., and Ph.D. degrees.

To apply, a University of Kentucky Academic Profile must be submitted at [www.uky.edu/ukjobs](http://www.uky.edu/ukjobs) using job # SM537241 or SM537246. For more detailed information about these positions, go to [www.cs.uky.edu/opportunities/faculty](http://www.cs.uky.edu/opportunities/faculty).

Questions should be directed to HR/Employment (phone 1-859-257-9555 press 2 or email [ukjobs@email.uky.edu](mailto:ukjobs@email.uky.edu)), or Diane Mier ([diane@cs.uky.edu](mailto:diane@cs.uky.edu)) in the Computer Science Department.

Applications will be accepted as of 19 August. The application deadline is March 1, 2012, but may be extended as needed. Upon offer of employment, successful applicants must undergo a national background check as required by University of Kentucky Human Resources.

The University of Kentucky is an equal opportunity employer and encourages applications from minorities and women.

### University of Maryland, College Park Center for Bioinformatics and Computational Biology Professor and Director

The University of Maryland invites applications for Director of the Center for Bioinformatics and Computational Biology. Candidates are expected to be prominent scholars with publications and research experience at the interface of biological science and computing. Their primary responsibility will be to lead a nationally visible research program complementing existing strengths in computational genomics, proteomics, and molecular evolution. They will also be expected to promote the CBCB, and help build collaborative relationships, both on and off-campus. Information about the Center can be found at [www.cbcb.umd.edu](http://www.cbcb.umd.edu). Collectively, the CBCB faculty spans the fields of computer science, mathematics and statistics, biology, and biochemistry. The Center is housed in contiguous space and has access to significant high-end computing infrastructure through the University of Maryland Institute for Advanced Computer Studies. CBCB faculty members are also affiliated with at least one other campus academic unit appropriate to their interests. There is ample potential for collaboration with other organizations in the area, such as the NIH, the JCVI, and the Smithsonian Institution.

For more information contact the search chair, Thomas D. Kocher ([tdk@umd.edu](mailto:tdk@umd.edu)). To apply, send a letter of application, curriculum vitae, and names of three references, following the instructions at <http://cbcb.umd.edu/hiring/>. Review of applications will begin November 15, 2011.

The University of Maryland is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply.

### University of Massachusetts Amherst Department of Computer Science Faculty Positions in Computer Science

We invite applications for tenure-track faculty positions in computer science with a preference for applicants with expertise in software engineering, programming languages, security, graphics, robotics, and computer vision. Applicants must have completed (or be completing) a Ph.D. in Computer Science, or a related area, and should show evidence of exceptional research promise. Three positions are available at either the Assistant Professor or Associate Professor level.

Our department is highly supportive of junior faculty, providing both formal and informal mentoring. Many of our faculty are involved in interdisciplinary research, working closely with other departments including statistics/mathematics, electrical and industrial engineering, biology, physics, linguistics, and nursing, as well as new "green" initiatives. Amherst, a historic New England town, is the center of a vibrant and culturally rich area that includes four other colleges. For more information about the department, visit <http://www.cs.umass.edu/>.

To apply, please send a cover letter referencing search R41582 with your vita, a research statement, a teaching statement, and at least three letters of recommendation. Electronic submission of application materials in pdf format is preferred. Send to [facrec@cs.umass.edu](mailto:facrec@cs.umass.edu). Alternatively, paper copies of application materials may be sent to: Search R41582 c/o Chair of Faculty Recruiting, Department of Computer Science, University of Massachusetts Amherst, MA 01003.

We will begin to review applications on November 15, 2011 and will continue

until the positions are filled. Salary will be commensurate with education and experience. Inquiries and requests for more information can be sent to: [facrec@cs.umass.edu](mailto:facrec@cs.umass.edu).

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

### University of Massachusetts Lowell Computer Science Department Nontenure-Track Faculty Position at the Rank of Lecturer

The University of Massachusetts Lowell is 25 miles northwest of Boston in the high-tech corridor of Massachusetts. The Computer Science Department has 15 tenured and tenure-track faculty, serving 250 BS students, 110 MS students, and 55 PhD students. It also offers bioinformatics options at all levels, a robotics minor, and a PhD in computational mathematics. The department has four NSF CAREER Award recipients. More information about the department can be found at [www.cs.uml.edu](http://www.cs.uml.edu).

The Computer Science Department invites applications for one full-time, nontenure-track faculty position at the rank of Lecturer to start January 15, 2012. Primary responsibilities are to provide high quality teaching and service to the department. This position is renewable annually, potentially leading to an appointment as Senior Lecturer following six consecutive years of outstanding performance evaluations.

Qualifications: Applicants must hold a doctoral degree in Computer Science or a closely related discipline. Experience and demonstrated excellence teaching Computer Science at the undergraduate level is required.

How to Apply: Please submit a cover letter, a current CV, teaching statement, and at least three names and contact information of references who have agreed to write letters of recommendation through the University of Massachusetts Lowell's website at <http://jobs.uml.edu> under "Faculty Positions". Direct submissions to the department will not be accepted.

Review of applications will begin on November 15, 2011 and continue until the position is filled. However, the position may close when an adequate number of qualified applications are received.

The University of Massachusetts Lowell is committed to increasing diversity in its faculty, staff, and student populations, as well as curriculum and support programs, while promoting an inclusive environment. We seek candidates who can contribute to that goal and encourage you to apply and to identify your strengths in this area.

### University of Massachusetts Lowell Computer Science Department Tenure-Track Assistant/Associate/ Full Professor

The University of Massachusetts Lowell is 25 miles northwest of Boston in the high-tech corridor of Massachusetts. UMass Lowell is classified as a DRU/H University. The Computer Science Department has 14 tenured and tenure-track faculty and one full-time lecturer, serving 250 BS students, 110 MS students, and 55 PhD students. We are looking to fill a number of tenure-track/tenured positions in the next few years. The Department has received approximately \$6M in external research funding in the past two years and has four NSF Career Award recipients. More information about the Department can be found at [www.cs.uml.edu](http://www.cs.uml.edu).

We invite applications for two tenure-track positions at any rank to

### Tenure Track Assistant Professor, Computer Science University of Maryland, Baltimore County

The University of Maryland, Baltimore County (UMBC) Computer Science and Electrical Engineering (CSEE) department invites applications for one or more tenure track positions in Computer Science at the rank of Assistant Professor to begin in August 2012. All Computer Science areas will be considered, but we are especially interested in candidates with systems or experimental approaches to their research. Applicants must have completed or be completing a Ph.D., have demonstrated the ability to pursue a program of research, and have a strong commitment to both undergraduate and graduate teaching. Candidates will be expected to teach at the graduate and undergraduate levels, build and lead a team of graduate students in Ph.D. research, and obtain external research support.

CSEE is UMBC's largest department, with 34 tenure-track faculty, six teaching faculty and 16 research faculty. We currently have over 900 undergraduate students in two programs, computer science and computer engineering, and 250 graduate students in three core programs, computer science, computer engineering and electrical engineering. The department also manages graduate professional programs in cybersecurity, systems engineering and engineering management. The CSEE department has a diverse research portfolio with over \$6M of research expenditures per year. Our location in the Baltimore-DC corridor puts us in the center of one of the largest concentrations of federal agencies and research and development centers as well as many industrial research labs. Our CS and EE Ph.D. programs were highly ranked by the 2010 NRC study for research productivity.

In addition to our strong, traditional undergraduate computer science and computer engineering programs, we have special concentrations in security and information assurance and in game development, and are designated as a Center of Academic Excellence in both Information Assurance Education and Information Assurance Research by NSA and DHS. The UMBC Center for Women In Technology is dedicated to increasing the representation of women in engineering and information technology fields and helps to attract and retain women majors in our programs. UMBC's well known Meyerhoff Scholars Program produces a large number of graduate students from underrepresented minorities.

UMBC is a selective, medium-sized public research university categorized by the Carnegie Foundation as a research university with high research activity. This fall, for the third year in a row, U.S. News & World Report ranked UMBC number one among "up and coming" national universities. UMBC is a two-time winner of the U.S. Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. UMBC was recognized in a 2011 Chronicle of Higher Education survey as one of only 42 "great colleges to work for."

UMBC's convenient, suburban campus is just off I-95 between Baltimore and Washington DC, 10 minutes from downtown Baltimore and the BWI airport, and 25 from the DC Beltway. It is surrounded by a great concentrations of commercial, cultural and scientific activity and enjoys the advantages of modern, urban living, including professional sports, major art galleries, museums, theaters, symphony orchestras, and good public transport.

Applicants should submit a cover letter, a brief statement of teaching and research experience and interests, a complete CV, and three letters of recommendation. Details on the application process are at <http://cs.umbc.edu/about/jobs/>. Applications received by January 15, 2012 are assured full consideration, but those received later may be evaluated as long as a position remains open. UMBC is an affirmative action/equal opportunity employer and a recent recipient of a NSF ADVANCE award to promote hiring and advancement of women in science and engineering. We welcome applications from women, minorities, and individuals with disabilities.

## Professional Opportunities

start in January 2012 or September 2012. Appointments with tenure at the rank of Associate Professor or higher could be made based on qualifications. The successful candidate will be expected to teach undergraduate and graduate courses, including Department core and specialty areas based on the candidate's expertise, conduct external funded research, direct PhD dissertations, and provide service to the Department and the University.

Qualifications: applicants must have a PhD in computer science or a closely related discipline and must be committed to developing and sustaining externally funded research programs. By the time of appointment, applicants must either have one or more years of teaching and research experience as an assistant professor in a US University or have one or more years as a post-doctoral researcher in a US University or research lab. All applicants should have participated in significant federal grant writing. Current US federal funding as PI is highly desirable. Outstanding candidates in any major computer science research area will be considered.

For appointment at the rank of Associate Professor or higher, applicants must have substantial research, teaching, and service experience, have made significant contributions to their fields with strong ongoing research projects, and be the PI of substantial current funding from major US funding agencies.

Interested applicants should apply online at <https://jobs.uml.edu>.

The University of Massachusetts Lowell is committed to increasing diversity in its faculty, staff, and student populations, as well as curriculum and support programs, while promoting an inclusive environment. We seek candidates who can contribute to that goal and encourage you to apply and to identify your strengths in this area.

### University of Michigan School of Information Faculty Positions

The School of Information at the University of Michigan seeks outstanding faculty candidates, from any discipline, whose research complements any of our existing strengths. Our open positions in human-computer interaction, information organization and social computing are described in more detail at <http://www.si.umich.edu/aboutsi/open-faculty-positions>. Candidates should have completed a Ph.D. and be committed to working in an interdisciplinary environment. Learn more about the School at <http://www.si.umich.edu>.

Applicants should submit the following materials: a cover letter, curriculum vitae, separate statements for research and teaching, three representative publications, and three letters of reference. (See website for instructions). Review of applications begins between October 15 and December 1, 2011 (depending on the position), and continues until all positions are filled.

The University of Michigan is an equal opportunity, affirmative action educator and employer.

### The University of Michigan, Ann Arbor Department of Electrical Engineering and Computer Science Computer Science and Engineering Division Faculty Positions

Applications and nominations are solicited for multiple faculty positions in the Computer Science and Engineering (CSE) Division.

1. As part of an interdisciplinary cluster hire, CSE seeks individuals broadly interested in parallel systems that scale to petascale and beyond. Relevant

areas include run-time systems, compilers, algorithms, programming languages, tools, applications, and networking.

2. As part of an interdisciplinary cluster hire, CSE seeks individuals in the area of Computational Media and Interactive Systems. Relevant research areas include those related to analyzing, understanding, representing, and creating computational media, including but not limited to audio, music, image, and video information retrieval, video understanding and mashups, time-based, distributed, collaborative and interactive media, and automatic classification, clustering and activity recognition in heterogeneous and social media.

3. CSE also seeks individuals in the broad areas of theoretical computer science and software systems (for the latter including but not limited to the areas of programming languages, databases and networking).

We encourage all highly qualified candidates to apply, particularly those with expertise in the above areas. Qualifications include an outstanding academic record, a doctorate or equivalent in computer engineering or computer science or a discipline relevant to the positions, and a strong commitment to teaching and research. Applications must be received by January 1, 2012.

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

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

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

The University of Michigan is a Non-Discriminatory/Affirmative Action Employer with an Active Dual-Career Assistance Program. The college is especially interested in candidates who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community.

### University of Minnesota Department of Computer Science & Engineering Tenure-track Faculty Positions

The Department of Computer Science and Engineering at the University of Minnesota—Twin Cities invites applications from outstanding candidates in all areas of Computer Science for two faculty positions at the rank of Assistant Professor, although exceptional candidates for more senior positions will be considered. We strongly encourage applications from women and members of minority groups. For one of the positions, we are particularly interested in candidates who can apply their research to address the myriad challenges of "Big Data". These challenges span a broad range of computer science topics and methods, such as: theoretical foundations and algorithms for high dimensional data and data streams; architecture, storage, data management, systems, and networking; security and privacy; knowledge discovery; visualization and social computing.

The Department has an outstanding faculty of nearly forty members, including 3 ACM Fellows, 22 NSF CAREER Award recipients, and multiple PECASE winners, with

specialties across the broad spectrum of computing. Research funding has increased significantly, with over \$35 million awarded in the past two years, including large awards such as NSF Expeditions in Computing. Faculty research productivity and impact are high, with recent Top 10 rankings from The Chronicles of Higher Education and Science Watch. The University of Minnesota ([www.umn.edu](http://www.umn.edu)) is a comprehensive research institution, with highly-ranked programs in many areas of the sciences and engineering, health and medicine, and the humanities. Department members play key roles in interdisciplinary efforts with colleagues from throughout the University, conducting research on topics such as climate modeling, bioinformatics and biomedical applications, environmental monitoring, and social computing, and participating in interdisciplinary centers like the Institute for Mathematics and its Applications ([www.ima.umn.edu](http://www.ima.umn.edu)) and the Digital Technology Center ([www.dtc.umn.edu](http://www.dtc.umn.edu)). For more information about the Department, see [www.cs.umn.edu](http://www.cs.umn.edu).

Minneapolis / St. Paul is a thriving and vibrant metropolitan area, with a strong and diverse economy, world-class cultural institutions, extensive year-around outdoor recreation opportunities, and outstanding public and private K-12 schools and four-year undergraduate colleges. It is a major center for the computer and medical technology industries, among others, and offers numerous opportunities for collaborative research and consulting. Minneapolis / St. Paul is consistently ranked among the leading cities in the United States for economic opportunity, innovation, educated population, healthy lifestyle, and general quality of life. For more information, see [www.metromsp.org/sidebar/why\\_nationalrankings.htm](http://www.metromsp.org/sidebar/why_nationalrankings.htm).

Candidates should have a Ph.D. in Computer Science or a closely related discipline, the ability to carry out excellent high-impact research, and a commitment to quality teaching. Senior candidates must have a distinguished record of research, teaching, and leadership.

#### Application Instructions

Applicants should submit their application, including a curriculum vitae, research and teaching statements, and the names of at least three references through the web page: [www.cs.umn.edu/employment/faculty](http://www.cs.umn.edu/employment/faculty).

For full consideration, applications should be received by December 15, 2011. However, the search will remain open until the position is filled. The University of Minnesota is an equal opportunity employer and educator.

### The University of Mississippi Department of Computer & Information Science Assistant Professor Positions

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

An applicant must hold a PhD or equivalent in computer science or a closely related field by August 15, 2012. An applicant must have the ability to teach both graduate and undergraduate students, conduct research in major areas of computer and information science, and supervise MS and PhD students. An applicant must provide evidence of research potential, effective communication skills, and a broad background in computing.

The Department has an ABET/CAC-accredited undergraduate program and MS and PhD programs. See the website

<http://www.cs.olemiss.edu> for more information about the Department.

The University is located in Oxford, one of America's top-ranked college towns. Oxford has a wonderful small-town atmosphere and excellent schools.

Individuals may apply online at <http://jobs.olemiss.edu>. The application requires a cover letter, curriculum vitae, research and teaching statements, and contact information for four references. Review of applications will begin immediately and continue until the position is filled or an adequate applicant pool is reached.

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

### University of Nebraska at Omaha Department of Computer Science Tenure-Track Position

The Department of Computer Science (CS) at the University of Nebraska at Omaha (UNO) invites applications for a tenure-track position at the rank of Assistant Professor. Areas of interest include, but are not limited to, Computer and Distributed Systems, Networks, HCI, AI, and closely related areas. Candidates with additional strength in computer security are encouraged to apply. Candidates must have received a doctorate in Computer Science or a closely related field from a nationally or internationally recognized program prior to the employment start date. The selected candidate is expected to conduct high-quality research and demonstrate strong commitment to undergraduate and graduate teaching. Contributions to service within the university, business and/or professional areas are expected.

To apply, please create an account at the UNO's careers website ([www.unomaha.edu/humanresources/employment.php](http://www.unomaha.edu/humanresources/employment.php)). The application should include a curriculum vita, research and teaching statements, and at least three letters of recommendation to be attached to the electronic application.

The university and department have a strong commitment to achieving diversity among faculty and staff. We are particularly interested in receiving applications from members of underrepresented groups and strongly encourage women and persons of color to apply for this position.

### University of North Carolina at Charlotte

#### Department of Software and Information Systems Chairperson

The SIS Department invites applications for the position of Department Chair. Candidates for the position must have a Ph.D. in Computer Science, Information Technology, or a closely related field, a record of research and publication commensurate with that of a Full Professor, evidence of a commitment to excellence in teaching, and strong administrative skills. SIS has a fast-growing enrollment and expects to grow significantly in faculty and research funding over the next 5 years. The chair is expected to bring dynamic leadership in research, curricular, and faculty development, and to build consensus within the department for strategic initiatives such as large, multidisciplinary research efforts. The university is one of the most rapidly growing in the country, and the goal within the College of Computing and Informatics is that the college and the SIS Department will lead this growth both in enrollment and quality of programs.

Applications must be made electronically at <https://jobs.uncc.edu>

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(position 1770) and must include a CV, references, and a statement on teaching, management, leadership, and research goals. Informal inquiries can be made to the Search Committee Chair, William Ribarsky, [ribarsky@uncc.edu](mailto:ribarsky@uncc.edu). Review of applications will begin as they are received and continue until the position is filled. All inquiries and applications will be treated as confidential.

The University of North Carolina at Charlotte is an EOE/AA employer and an NSF ADVANCE Institution.

For additional information, please visit our website at <http://sis.uncc.edu>.

The Department of Software and Information Systems has 15 faculty members, a large Ph.D. program, and over 350 students. The department offers a B.A. degree in Software and Information Systems, an M.S. degree in Information Technology, and a Ph.D. degree in Computing and Information Systems. SIS also plays a key role in the interdisciplinary Professional Science Master's in Health Informatics. The department has focus areas in Security, Design, and Analytics, with research that includes Complex Adaptive Systems, Information Security and Assurance, Data Privacy, Formal Analytics, Modeling and Simulation and Human Computer Interaction. The Security and Privacy program is recognized by the National Security Agency as a National Center of Academic Excellence in Information Assurance Education and Research. SIS is part of the College of Computing and Informatics along with the Departments of Computer Science and Bioinformatics and Genomics. CCI is the university leader in external funding per faculty member and has the largest Ph.D. program at UNC Charlotte.

### University of Notre Dame Department of Computer Science and Engineering Assistant or Associate Professor

The Department of Computer Science and Engineering at the University of Notre Dame invites applications for Assistant or Associate Professor.

Excellent candidates in all areas will be considered.

The Department of Computer Science and Engineering at the University of Notre Dame invites applications for Assistant or Associate Professor.

Excellent candidates in all areas will be considered.

The Department offers the PhD degree and accredited undergraduate Computer Science and Computer Engineering degrees, with currently over 80 PhD students and over 150 undergraduate majors.

Faculty are expected to excel in classroom teaching and to build and lead cutting-edge and highly visible research projects that attract substantial external funding.

The University of Notre Dame is a private, Catholic university with a doctoral research extensive Carnegie classification, and consistently ranks in U.S. News & World Report as a top-twenty national university. The South Bend area has a vibrant and diverse economy with affordable housing and excellent school systems, and is within easy driving distance of Chicago and Lake Michigan.

Applicants should send (pdf format preferred) a CV, statement of teaching and research interests, and contact information for three professional references to: [facultysearch@cse.nd.edu](mailto:facultysearch@cse.nd.edu)

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

### University of Oregon Department of Computer and Information Science Professor/Department Head

The Computer and Information Science (CIS) Department at the University of Oregon invites applications for Professor/Department Head. We seek an outstanding scholar who will be excited to head a computer science department in a strong public research university. A number of senior faculty have recently or will soon retire, creating an opportunity for regeneration through multiple hires over the next several years. The department is currently developing and implementing a strategic plan for increased research prominence in the context of a college-wide plan for excellence.

We seek an individual with strategic vision and leadership abilities. The ideal candidate will be a prominent scholar with a sustained record of publication and research funding in an area of software or intelligent systems that complements existing research strengths of the department. We are looking for an innovative thinker who is eager to advance interdisciplinary scholarship, build bridges between academia and industry, mentor faculty to achieve excellence, teach at the undergraduate and graduate levels, and communicate the intellectual excitement of computer science and its broad, evolving role in contemporary society. A PhD in Computer Science or a closely related field is required.

The University of Oregon is an AAU comprehensive research university with many nationally and internationally renowned programs. It is 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 integrated 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>, or by contacting the search committee at [faculty.search@cs.uoregon.edu](mailto:faculty.search@cs.uoregon.edu).

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 January 4, 2012 and continue until the position is filled. Please address 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 Pennsylvania Department of Computer and Information Science Research Assistant Professor Position

The University of Pennsylvania's Department of Computer and Information Science invites applicants for Research Assistant Professor. The department seeks an individual with exceptional promise for, or a proven record of, excellence in research in compositional theory for real-time systems, multimode systems, and real-time cloud computing systems. Applicants should hold a Ph.D. degree in Computer Science or Computer Engineering, and have a strong interest

in applying research results to automotive systems and medical systems.

The position is to be filled as soon as an appropriate candidate is identified. Research assistant professor position is for four years, renewable for additional years, contingent upon availability of research funding. Successful applicant will find Penn to be a stimulating environment conducive to professional growth in research.

Please go to [www.cis.upenn.edu/facultypositions](http://www.cis.upenn.edu/facultypositions) to apply.

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

The Penn CIS Faculty is sensitive to "dual career situations" and would be pleased to assist with opportunities in the Philadelphia region.

### University of South Florida Computer Science and Engineering Assistant Professor Positions (2)

Applications are invited for two tenure-track Assistant Professor positions in the Department of Computer Science and Engineering. The Department is hiring in all areas of computer engineering and computer security (cybersecurity). Applicants doing interdisciplinary research that intersects with the College strategic plan are of particular interest. We seek candidates with a record of outstanding-quality research publications and potential for excellence in teaching. Salary will be commensurate with qualifications and experience. Screening will continue until the position is filled. Candidates must have completed, or be near completion, of a Ph.D. degree in computer science, computer engineering, or a related discipline.

The Department of Computer Science and Engineering (<http://www.cse.usf.edu>) has 23 faculty members and offers B.S., M.S., and Ph.D. degrees. The graduate program serves approximately 135 students (evenly split between Ph.D. and M.S.). The research program is well supported by federal and state agencies including DoD, DoE, DoT, NIH, NSF, as well as industry. A strong partnership for inter-disciplinary research exists with other research centers within the College and University. The NRC rankings in 2010 placed the Department within the upper third of the 129 programs in the discipline and the top in the state of Florida.

The University of South Florida serves over 47,000 students and is one of the nation's top public research universities. USF was recently ranked 17th among all schools for diversity by Princeton Review. USF is located in the Tampa Bay metropolitan area with a population of about 2.5 million.

An application package should include a cover letter, curriculum vitae, statement outlining research goals, statement outlining teaching goals, and the names and contact information of at least three references. Application materials are to be submitted online. See <http://www.cse.usf.edu/faculty-search/> for instructions. For questions please send email to [faculty-search@cse.usf.edu](mailto:faculty-search@cse.usf.edu). Applications will be considered starting immediately until the positions are filled.

According to Florida law, applications and meetings regarding them are open to the public. The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Institution. Women and minorities are strongly encouraged to apply. Dual career couples with questions about opportunities are encouraged to contact the Department chair.

### University of St. Thomas Department Chair-Computer and Information Sciences

The Computer and Information Sciences (CISC) Department at the University of St. Thomas (<http://www.stthomas.edu/cisc/>) invites applications for the position of Department Chair, to start September 2012. Successful candidates will be expected to provide dynamic and creative leadership to grow the department while teaching courses and maintaining an active scholarly agenda.

The department has nine full-time and additional adjunct faculty who are strongly committed to undergraduate education, including involving undergraduate students in research. The department offers BA degrees in Computer Science, Information Systems, Information Technology, and Information Security and, in collaboration with Mathematics, an interdisciplinary BS degree in Statistics. Applicants should have demonstrated excellence in undergraduate teaching and scholarship in one of these areas. Prior experience in academic administration is preferred. A Ph.D. in Computer Science or a closely-related field is required. Rank and disciplinary expertise are open.

Established in 1885, the University of St. Thomas is located in the major metropolitan area of Minneapolis-St. Paul, and is Minnesota's largest private university. Its 11,000 students pursue degrees in a wide range of liberal arts, professional, and graduate programs.

Inspired by Catholic intellectual tradition, the University of St. Thomas educates students to be morally responsible leaders who think critically, act wisely, and work skillfully to advance the common good. The successful candidate will possess a commitment to the ideals of this mission. The University of St. Thomas has a strong commitment to the principles of diversity and inclusion, to equal opportunity policies and practices, and to the principles and goals of affirmative action. The University welcomes nominations and applications from a broad and diverse applicant pool.

For a complete position description, position requirements, and to apply, please visit <https://jobs.stthomas.edu> or [www.stthomas.edu/jobstatust](http://www.stthomas.edu/jobstatust).

### University of St. Thomas Tenure Track Faculty Position- Computer and Information Sciences

The Department of Computer and Information Sciences (<http://www.stthomas.edu/cisc/>) at the University of St. Thomas invites applications for a tenure-track position to begin September 2012 at the rank of assistant professor. Applicants should have outstanding teaching skills, an active research agenda, and a willingness to contribute to the work of the department and the university. We are particularly interested in candidates with expertise in one or more of the following areas: Systems, Networking, Architecture, and Databases. A PhD in computer science or closely related area is preferred, but ABDs (with appointment at the rank of instructor until proof of PhD is supplied) will be considered.

The department consists of 9 full-time faculty members and offers bachelor's degrees in Computer Science, Information Systems, Information Technology, Information Security, and Statistics. The teaching load of 6 courses per academic year includes lower-division courses for non-majors and lower- and upper-division courses for majors.

Established in 1885, the University of St. Thomas is located in the major

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metropolitan area of Minneapolis-St. Paul, and is Minnesota's largest private university. Its 11,000 students pursue degrees in a wide range of liberal arts, professional, and graduate programs.

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For a complete position description, position requirements, and to apply, please visit <https://jobs.stthomas.edu> or [www.stthomas.edu/jobsatust](http://www.stthomas.edu/jobsatust).

### University of Utah School of Computing *Tenure-Track or Tenured Faculty Position for the Jay Lepreau Professorship of Computer Science*

The University of Utah's School of Computing is seeking to hire an outstanding tenure-track or tenured senior faculty member in systems, with a particular emphasis on operating systems, testbeds, or networks. This professorship is named in honor of Jay Lepreau, a professor of Computer Science at Utah. Candidates for this position should have an established record of leadership and an interest in large-scale systems research. To assist in discharging research and leadership obligations, successful applicants for this position will have a reduced teaching load and an endowment providing funding into perpetuity.

This professorship provides an opportunity to work closely with the Flux Research Group, which Jay founded and led. This well-established group of research staff and students is more than a dozen years old and draws on decades-long history of strong systems research at Utah. Its past and ongoing projects span a range of systems topics including operating systems, networking, security, programming languages, compilers, software engineering, and testbeds. The group has been a part of research initiatives sponsored by NSF, DARPA and several major companies. One of the group's ongoing and best-known projects is Emulab, a network testbed with global impact. The Emulab software runs testbeds at dozens of sites, and the installation at Utah, in operation for eight years, is used by thousands of researchers at hundreds of institutions worldwide.

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

The University of Utah is an Equal Opportunity/Affirmative Action

employer and educator. Minorities, women, and persons with disabilities are strongly encouraged to apply. Veterans preference. Reasonable accommodations provided. For additional information: <http://www.regulations.utah.edu/humanResources/5-106.html>.

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.

### 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 GPGPUs.

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).

### Virginia Tech Electrical & Computer Engineering Department *Postdoctoral Associate*

Two Postdoctoral positions are available at Virginia Tech's Real-Time Systems Group. The postdocs will lead efforts in a project to develop automated concurrency refactoring techniques that exploit software transactional memory, with formal semantics and compiler and virtual machine support. The project vision includes developing concurrency refactoring tools and compilers/runtimes with STM support, transitioning them to production/operational platforms of research sponsors, and also evolve them as open-source systems.

Applicants with systems background are sought, and in particular, with experience in STM, compilers, VMs, and operating systems. Positions are for two-year minimum, strong possibilities for additional years, no teaching obligations.

Qualified applicants must submit a letter of application, a full curriculum vita, and a list of three references to [jobs.vt.edu](mailto:jobs.vt.edu). Apply to posting 0110297. Carefully follow the instructions found on the employment website regarding the application submission process. Unfortunately, we are unable to accept paper applications. Paper applications or electronic applications sent via e-mail cannot be considered.

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### Washington State University Vancouver

#### Computer Science Faculty

Washington State University Vancouver invites applications for a tenure-track position at the assistant professor level beginning 8/16/2012. Candidates are sought with expertise in software engineering, software architecture and design, or software security. Position duties include teaching undergraduate/graduate courses, developing strong research program and providing service to the university.

Required qualifications: Ph.D. in Computer Science or Computer Engineering or related field at the time of employment and demonstrated ability to (1) develop funded research program, (2) establish strong industrial collaborations, (3) teach undergraduate/graduate courses, and (4) demonstrated ability to contribute to our diversity goals: incorporate issues of diversity (<http://admin.vancouver.wsu.edu/diversity>) into mentoring, curriculum, service or research. Preferred qualifications: knowledge of the ABET accreditation process and relevant industrial background.

WSU Vancouver serves about 3000 graduate and undergraduate students and is fifteen miles north of Portland, Oregon. The rapidly growing School of Engineering and Computer Science (ENCS) equally values both research and teaching. WSU is Washington's land grant university with faculty and programs on four campuses. For more information: <http://www.vancouver.wsu.edu/encs>. WSU Vancouver is committed to building a culturally diverse educational environment.

Applications must include: (1) cover letter with a clear description of

experience relevant to the position; (2) vita including a list of references; and (3) maximum three-page total summary addressing the following: (a) How your research will expand or complement the current research activities in ENCS; (b) A list of the existing ENCS courses and proposed new courses that you can develop/teach; and (c) Your plans on working with diverse student and community populations to support our campus strategic plan: (<http://admin.vancouver.wsu.edu/office-chancellor/wsu-vancouver-strategic-plan>).

Application deadline is December 5, 2011. Mail application materials to: CS Search Committee School of ENCS - VELS 130 Washington State University 14204 NE Salmon Creek Avenue Vancouver, WA 98686-9600 WSU is committed to excellence through diversity, has faculty friendly policies including a partner accommodation program, and a NSF ADVANCE Institutional Transformation grant (see <http://www.excelinse.wsu.edu/>). WSU employs only US citizens and lawfully authorized non-citizens. WSU is an EO/AA educator and employer.

### Wentworth Institute of Technology Assistant Professor in the Computer Science & Networking Department Full-time Faculty Position

Preference will be given to candidates with significant expertise in at least one of the following areas: (1) Games programming; (2) Networking; (3) Bioinformatics. In addition, candidates should be able to teach standard undergraduate courses in areas including Network Technology, Operating Systems,

Object-Oriented Programming (C++ and Java), C, Database Management, Algorithm Design, Software Design, etc. Although the primary mission of the faculty is to teach undergraduate courses, they are also expected to engage in research and render service to the institute (such as undergraduate advising and serving on committees).

#### Requirements:

A PhD in Computer Science (or closely related field) or a master's degree plus significant teaching and industrial experience. A PhD in Computer Science is preferred. Significant college-level teaching experience is preferred.

To apply, please visit our online application site at <https://jobs.wit.edu>. Wentworth is an AA/EEO employer. Women and minorities are encouraged to apply. Wentworth is a tobacco-free campus.

### York University, Toronto Department of Computer Science and Engineering Canada Research Chair (Tier 2)

York University, Toronto: The Department of Computer Science and Engineering invite applications for Canada Research Chair (Tier 2) faculty appointment in Digital Media with research expertise in Data/ Information/ Scientific Visualization and/or Interaction Design at the Assistant/ Associate Professor level in the tenure track stream. The deadline for the applications is November 30, 2011 with a start date of July 1, 2012.

For detailed information, please visit <http://yorku.ca/acadjobs>.

York University is an Affirmative Action Employer.

### NSF-Sponsored Academic Workshop in Computing for Underrepresented Ethnic Minorities and People with Disabilities at the level of Assistant Professor, Associate Professor, and Senior Doctoral Student

March 15 - 18, 2012

Georgia Tech Global Learning Center <http://www.gatechcenter.com/> (Co-located with the Minority Faculty Development Workshop in Engineering)

**Deadline for Participant  
Applications  
Tuesday, January 10, 2012  
[http://apply2.cse.tamu.edu/  
AcademicCareerWorkshop/](http://apply2.cse.tamu.edu/AcademicCareerWorkshop/)**

The Coalition to Diversify Computing (CDC), the Center for Minorities and People with Disabilities in IT (CMD-IT), Computing Alliance of Hispanic-Serving Institutions (CAHSI), and the Alliance for Access to Computing Careers (AccessComputing) are organizing the fifth annual Academic Workshop for Underrepresented Ethnic Minorities and People with Disabilities with funding from NSF, which covers participant travel, lodging, and meeting logistics.

The goal of the workshop is to provide unique, tailored experiences for underrepresented ethnic minorities and people with disabilities about the academic career ladder. The workshop will include panels of diverse senior faculty talking about the tenure and promotion process, launching a research program, professionalism, and a detailed session on proposal writing. Questions about the program can be sent to Valerie Taylor ([taylor@cse.tamu.edu](mailto:taylor@cse.tamu.edu)).



## Worcester Polytechnic Institute

### Computer Science Tenure Track Positions

Balance. Research & Teaching, Theory & Practice, Innovation & Fundamentals, Classes & Projects. Balance defines life at WPI. If you are that unique individual who strives for and achieves it, consider joining the faculty at WPI.

The Computer Science Department anticipates hiring faculty members for the Fall of 2012 whose expertise is in the following areas:

1. Computer Security, Privacy and Trust. An ideal candidate will be able to teach and do research in areas such as network/system/software security, usable security or applied cryptography as well as support related fields such as algorithms, networking, software engineering, systems or theory.
2. A unique individual whose talents and interests span both the artistic and technical aspects of computer animation to support the Interactive Media and Game Development Program and the Computer Science Department. Ranked the #6 best game design program in the country by the Princeton Review, the program grants Bachelor and Master of Science degrees with approximately 200 students nurtured by more than a dozen dedicated faculty.
3. A faculty position in our Robotics Engineering Program. We offer the Nation's first undergraduate degree in Robotics, as well as the M.S. and Ph.D. degrees, and have rapidly growing research activities. Candidates should hold a PhD in Computer Science, Electrical & Computer Engineering, Mechanical Engineering, or closely related field.

In addition to these specific areas, outstanding candidates in any area will receive full consideration. Candidates should have a PhD in Computer Science or a closely related field, and the potential for excellence in research and teaching.

WPI, founded in 1865 and located in Worcester, Massachusetts one hour west of Boston, is a highly selective private university with an undergraduate student body of over 3,600 and 1,400 full-time and part-time graduate students enrolled in more than 50 Bachelor's, Master's and Ph.D. programs. Its undergraduate curriculum engages students and faculty in real-world problem solving, often at one of WPI's global project centers. That curriculum, combined with a significant graduate program, offers faculty a unique balance between research and teaching. U.S. News and World Report consistently ranks WPI among the top national universities.

Located in the heart of New England, WPI is surrounded by cultural and recreational opportunities. The UMass Medical Center, a large number of technology companies and many colleges and universities are located in the immediate area making it ideal for two career families.

Questions about the hiring process should be sent to [recruit@cs.wpi.edu](mailto:recruit@cs.wpi.edu).

Applications should be submitted per instructions at <http://apptrkr.com/208575>. You will need to include detailed research and teaching statements, vitae and contact information for at least three references.

For full consideration, applications should be received by 12/15/2011.

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

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