

# Computing Research News

COMPUTING RESEARCH ASSOCIATION, CELEBRATING 40 YEARS OF SERVICE TO THE COMPUTING RESEARCH COMMUNITY

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## Important Dates

### [CRA Award for Outstanding Undergraduate Researchers 2013](#)

**Nomination Deadline: March 15**

### [Collaborative Research Experiences for Undergraduates \(CREU\)](#)

The CREU program is aimed toward increasing the number of women and underrepresented minorities who go on to CS&E graduate programs. Students have the opportunity to conduct undergraduate research at their home institution during the academic year.

**Application Deadline: May 20**

### [2013 Graduate Cohort Workshop](#)

**April 5-6, Boston, MA**

## Announcements



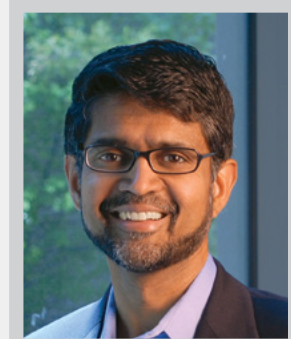
*Anita Jones*

Congratulations to CCC Council member Anita Jones for being named the recipient of the [2012 Philip Hauge Ableson Award](#). [The Ableson Award](#) is the highest award conferred by the American Association for the Advancement of Science (AAAS). Jones was actively involved in supporting the Computing Research Association's proposal to create the Computing Community Consortium (CCC), and has served on the CCC Council since its inception. She is currently University Professor Emerita at the University of Virginia.

Jones was selected for the honor by AAAS "for her outstanding scientific-technical achievements; her contributions as a mentor, inspiration, and role model for other scientists and engineers; and her lifetime of exemplary public service to government, professional institutions, academia and industry."



*Erik Horvitz*



*Vijay Kumar*

CRA would also like to congratulate [two new members elected to the the National Academy of Engineering \(NAE\)](#) - Eric Horvitz, CCC Council member and Vijay Kumar, currently working in the Office of Science and Technology Policy, supported jointly by CRA, ACM and IEEE-CS. The NAE has roughly 2,000 members across a dozen fields and is one of the highest professional honors accorded to engineers in academia, industry and government.



*David Notkin (center) at "Notkinfest" held at the University of Washington.*

[Click here to view photos and videos from the event](#)

## 2012 Taulbee Report Sneak Preview

**By: Stu Zweben**, *The Ohio State University (CRA Survey Committee Chair)* & **Betsy Bizot** (*CRA Director of Statistics and Evaluation*)

The full 2012 Taulbee Report will be published in the May 2013 issue of CRN. However, the degree and enrollment numbers for bachelor's and doctoral level programs in the departments responding to the survey have been compiled at this time, and they should be of interest to our members and readership. Thus, we are providing a sneak preview into these data. [Click here to view the press release.](#)

The accompanying table shows the one-year comparison between last year's survey and this year's. Since the specific departments reporting from one year to the next may vary, we show both the overall values for all departments who reported in a given year, and the comparable totals from only those departments that reported in both years.

The data show strong growth at the

bachelor's level, and a more modest, but solid, growth at the doctoral level. Overall reported Ph.D. production in computing programs rose 8.2 percent in 2011-12, with 1,929 degrees granted compared with 1,782 in 2010-11. This is the highest number of PhDs ever reported in Taulbee, surpassing the previous high of 1,877 in 2008. Among departments reporting both this year and last year, the number of total doctoral degrees increased 5.2 percent, and the number of doctoral degrees in U.S. CS programs rose 6.8 percent. Doctoral enrollments also are up, in aggregate and if only new doctoral students are considered. Among all departments that reported both years, the increase is in the 4-5 percent range, while in U.S. CS departments the increase is slightly higher.

Bachelor's degree production increased

by a double-digit percentage for the third straight year. Among all departments reporting, the increase was 15.7 percent, but if only those departments that reported both years are counted, the increase was 17.1 percent. In U.S. CS departments the increases were 19.8 percent overall and 16.6 percent among those departments that reported both years. Enrollments in the bachelor's programs also rose at double-digit percent levels. Among all departments that reported both years, there is a 10.6 percent increase in total bachelor's enrollment, but a 20.8 percent increase in new student enrollment, while the increase within U.S. CS departments is even higher.

Interest in computing seems to be growing at a healthy clip. Stay tuned to the May 2013 CRN for a more complete analysis of the Taulbee data.

Table 1. Degree Production and Enrollment Change From Previous Year												
	Total						Only Departments Responding Both Years					
	US CS Only			All Departments			US CS Only			All Departments		
	2011	2012	% chg	2011	2012	% chg	2011	2012	% chg	2011	2012	% chg
<b>PhDs</b>												
# Departments	140	150	7.1%	178	187	5.1%	134	134		167	167	
PhD Awarded	1,457	1,620	11.2%	1,782	1,929	8.2%	1,435	1,532	6.8%	1,736	1,826	5.2%
PhD Enrollment	12,035	13,235	10.0%	14,671	15,648	6.7%	11,765	12,528	6.5%	14,217	14,783	4.0%
New PhD Enroll	2,442	2,702	10.6%	2,812	3,064	9.0%	2,396	2,532	5.7%	2,744	2,869	4.6%
<b>Bachelor's</b>												
# Departments	133	142	6.8%	165	174	5.5%	127	127		151	151	
BS Awarded	10,901	13,055	19.8%	13,806	15,975	15.7%	10,438	12,171	16.6%	12,694	14,867	17.1%
BS Enrollment	48,817	56,742	16.2%	60,636	67,850	11.9%	47,105	52,396	11.2%	56,344	62,296	10.6%
New BS Majors	13,337	17,226	29.2%	16,279	20,618	26.7%	12,614	15,492	22.8%	15,149	18,294	20.8%
BS Enroll/Dept	367.0	399.6	8.9%	367.5	389.9	6.1%	370.9	412.6	11.2%	373.1	412.6	10.6%

## IT Research Hearing Focuses on Security, Education

By: **Peter Harsha** (*Director of Government Affairs, CRA*) & **Melissa Norr** (*Policy Analyst, CRA*)

On February 14, the House Science, Space, and Technology Committee's Subcommittee on Research held a hearing on Applications for Information Technology Research and Development. [CCC Chair](#) and former CRA Board Chair [Ed Lazowska](#), CRA-W Chair and current CRA Board Member [Kathryn McKinley](#), representing Microsoft, and Kelly Gaither of the University of Texas at Austin testified on behalf of the computing community and articulated the importance of federal funding for computing research.

Gaither testified first and spoke to the need for interdisciplinary research as computing is an integral piece of other research areas. She also talked about how research isn't just about end products and discoveries but about the researchers that are supported and the opportunities researchers have because of federal funding.

McKinley testified about the fact that computing is reaching some fundamental limits and that research is needed to make breakthroughs to overcome those limits. She noted that while the US is still leading the world in computing research, other nations are investing more and if we do not keep up, we will lose our competitive advantage. McKinley also addressed the diversity problem in computing and noted that we need far more graduates than we currently have and that we will have to attract more women and minorities if we want to have enough people to fill the needs of the future in computing.

Lazowska spoke about the NITRD program's history and the role of computing in the US economy. He showed an NRC chart on research and IT sectors with billion dollar markets. Lazowska also talked about the need to integrate security into the building of systems and not added on at the end as a defensive measure when questioned



CCC Chair and former CRA Board Chair Ed Lazowska, and CRA-W Chair and current CRA Board Member Kathryn McKinley prepare to testify before Congress.

about cybersecurity by Congressman Steven Stockman (R-TX). Stockman, who credits support from the fiscally-conservative Tea Party for his election, had the quote of the hearing, when after having pressed Lazowska for an order-of-magnitude estimate on how much additional investment in fundamental cyber security research would move the needle seemed surprised that the number PITAC requested back in 2005 was "only" \$90 million. "Well, I'm interested in getting you billions, not millions," he said, indicating he was very concerned about the U.S. vulnerability to cyber attack.

The Subcommittee members were very interested in how to tackle the education

problem in computing as well as how they could help researchers address cybersecurity moving forward.

Written testimony and a webcast of the hearing can be found [here](#). Additionally, a PDF of Lazowska's oral testimony can be found [here](#).

This article was originally published in the [Computing Research Policy Blog](#). Sign up for the latest policy blog updates [via email](#) or the [RSS feed](#).



# CISE Welcomes the Division of Advanced Cyberinfrastructure

By Farnam Jahanian

Assistant Director of the National Science Foundation for Computer and Information Science and Engineering

On September 6, 2012, the National Science Foundation (NSF) [announced plans](#) for realigning the Office of Cyberinfrastructure (OCI) as a unit within the Directorate for Computer and Information Science and Engineering (CISE). With the December 27, 2012 Congressional approval of NSF's plan for operations through March 27, 2013, OCI has now become the Division of Advanced Cyberinfrastructure (ACI) within CISE. The new division will continue to benefit from the leadership of Alan Blatecky.

As cyberinfrastructure has increasingly become a critical component of the R&D ecosystem, the CISE community has a unique opportunity to help accelerate a new era in scientific discovery and engineering innovation, pushed by fundamental advances in computing, information, and communication technologies and pulled by the expanding complexity, scope, and scale of today's national and global priorities<sup>[1]</sup>.

The goal is to more tightly couple foundational research in computing, communication, and information with advanced cyberinfrastructure; engage domain scientists to develop and deploy advanced cyberinfrastructure; use cyberinfrastructure to empower and enable knowledge environments and distributed collaboration; and address long-term sustainability of advanced cyberinfrastructure through cross-foundational and cross-institutional partnerships.

Four main principles guide this realignment:

1. *Build on Shared Strengths, Interests, and Expertise:* Bringing the Division of Advanced Cyberinfrastructure into CISE builds on the shared interests, expertise, partnerships, and intellectual synergy between both communities. While a number of joint programs existed (e.g., [Big Data](#), [Exploiting Parallelism and Scalability](#), and [Secure and Trustworthy Cyberspace](#)), integration will enable closer collaborations, relationships, and knowledge sharing – benefitting all NSF programs.

2. *Strengthen the Commitment to Cyberinfrastructure and Multi-disciplinary Collaborations:* Through this realignment, NFS will strengthen its commitment to creating secure, advanced, and global cyberinfrastructure through which multi-disciplinary collaboration networks can effectively address science and engineering grand challenges in an increasingly computational- and data-intensive world.

3. *Ensure Continuity of Staff, Budget, and Programs:* A seamless integration will be enabled by continuity of existing programs and operations and will also help identify new opportunities as programs naturally evolve. CISE will oversee a budget of approximately \$865M, including the \$212M dedicated for cyberinfrastructure (based on [FY 2012 estimates](#)). The new division, ACI, will continue to provide leadership for cross-foundational and cross-institutional cyberinfrastructure partnerships, in addition to its research and education activities.

4. *Accelerate Transition to Practice and Benefit Society:* Enabling the transition of new concepts

and technologies into practice will accelerate the deployment and use of advanced cyberinfrastructure to benefit all areas of science and engineering with potential broader societal impact.

During the transition phase, NSF will continue to engage with internal and external stakeholders, including staff across NSF, members of the CISE Advisory Committee and the Advisory Committee for Cyberinfrastructure (ACCI), and other members of the external research and education communities. Two internal task force teams were formed - one focused on ensuring the continuity of operations during this realignment and the other charged with developing a strategy to effectively accomplish NSF's mission for cyberinfrastructure, building on the shared strengths, expertise, and interests of OCI and CISE.

The [CISE Advisory Committee](#) will continue to provide advice and recommendations to NSF on strategic opportunities for the community. Similarly, the [ACCI](#) will continue its role in providing perspective and advice to NSF on the agency's plans and programmatic strategies to develop and support cyberinfrastructure. The ACCI will also continue to have representation from every directorate/office.

As NSF and CISE fully implement this integration during the next several months, we will continue to engage and communicate with stakeholders. We are excited to work with you to ensure the success of this new endeavor.

1 References: Six Task Force Reports from the NSF-wide Advisory Committee for Cyberinfrastructure. April 2011. Available at: <http://www.nsf.gov/od/oci/taskforces/>; Cyberinfrastructure for 21st Century Science and Engineering Advanced Computing Infrastructure Vision and Strategic Plan. February 2012. Available at <http://www.nsf.gov/pubs/2012/nsf12051/nsf12051.pdf>; and Revolutionizing Science and Engineering Through Cyberinfrastructure: Report of the National Science Foundation Blue-Ribbon Advisory Panel on Cyberinfrastructure. January 2003. Available at <http://www.nsf.gov/od/oci/reports/atkins.pdf>.



# Updates from the Computing Community Consortium

By Ed Lazowska  
CCC Chair

The role of CRA's Computing Community Consortium is to assist the computing research community in envisioning and enabling new high-impact research directions. Here are some key activities since our last report two months ago:

CCC organized a **“Challenges and Visions” track at the 6th Biennial Conference on Innovative Data Systems Research**, January 6-9 in Pacific Grove, CA – the ninth in a series of such tracks at major conferences in the field. See others [here](#). Proposals for additional “challenges and visions” tracks are welcome!

On January 15--16, 2013 the Semiconductor Research Corporation (SRC), NSF and CCC held a workshop on **Convergence of Software Assurance Methodologies and Trustworthy Semiconductor Design and Manufacture**. The workshop brought together academic and industry experts from the programming language and semiconductor design/manufacturing communities to discuss challenges to securing the semiconductor manufacturing process. More information on the workshop can be found [here](#). Proposals for research visioning workshops are always welcome! Further information [here](#).

On January 17, the President's Council of Advisors on Science and Technology released its latest **assessment of the Federal Networking and Information Technology Research and Development Program**. The Working Group for this report was co-chaired by CCC Vice Chair Susan Graham. (The working group for the 2010 PCAST report, which this report updates, was co-chaired by CCC Chair Ed Lazowska.) Further information [here](#).

The February issue of CACM carried an article by CCC Council member Anita Jones on [“The Explosive Growth](#)

[of Postdocs in Computer Science.”](#)

This is a follow-up to the CCC-initiated [CRA “Best Practices” memo on Computer Science Postdocs](#), adopted in December. CCC believes this to be an issue of great importance to our field.

On February 11 – 12, 2013 CCC held a workshop on **Multidisciplinary Research for Online Education (MROE)**. The workshop was an extension of CCC's earlier visioning activity on Global Resources for Online Education (GROE), which addressed education-relevant research in areas such as intelligent student modeling through data mining, mobile computing for data logging, social networking, and many other areas, to include research at the interface of computing and the social/behavioral sciences. More information on the workshop can be found [here](#).

A workshop on **Privacy R&D** was held on March 4. This workshop is a partnership between CCC and Rob Atkinson's Information Technology and Innovation Foundation. It brought together representatives from industry, academia, and government to discuss developing a consensus statement on the need for a concerted effort to address privacy R&D and developing a strategy for communicating this consensus statement to relevant stakeholders. More information on the workshop can be found [here](#).

As a result of an open solicitation last year, CCC approved a proposal for a set of three workshops on **Extreme Scale Design Automation**. Participants will discuss a broad set of challenges facing the electronic design community, and how these challenges impact the design and fabrication of new electronic systems (both with conventional CMOS and with emerging technologies). Organization has been completed for the first workshop, to be held on March 7--8, 2013, which will focus on emerging

technologies and the interplay between graduate education and the design automation workforce. The second workshop (date TBD) will focus on the challenges of system design with many billions of transistors. The final workshop (date TBD) will unify observations made into a series of milestones, benchmarks, and metrics, to help direct future research efforts.

CCC Chair Ed Lazowska testified to the **House Science Committee** regarding the impact of computing research on February 14, 2013, along with Kathryn McKinley (Microsoft Research) and Kelly Gaither (TACC). Information and written testimony [here](#); Lazowska's oral testimony [here](#).

**We are actively seeking nominations for members of the CCC Council.** The CCC Council consists of 18 members with staggered 3-year terms. Information [here](#).



# Expanding the Pipeline

## Growing the Tech Talent Pool: NCWIT Aspirations in Computing Program Scales Up

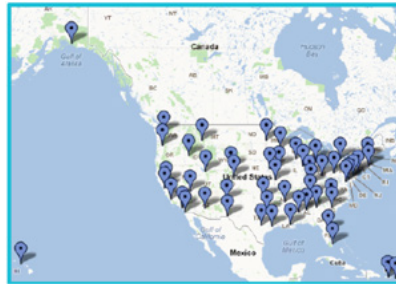
By Ruthe Farmer

Director of Strategic Initiatives, NCWIT

In May 2007, the National Center for Women & IT (NCWIT) launched the [Award for Aspirations in Computing](#) at its annual members meeting, which that year took place in Boulder, Colorado. Fifteen young women were selected from local Boulder and Denver high schools and recognized for their aspirations and achievements in computing.



Six years later, the Aspirations in Computing Talent Development Program has grown dramatically and evolved from an award and recognition program to a complete talent development experience, beginning as early as middle school and lasting through college and into the workforce. In 2013, the Aspirations in Computing Program will recognize as many as 1,000 young women through a national award and 54 local Affiliate award programs, serving all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. The program is made possible through the efforts of hundreds of NCWIT member and non-member partner organizations nationwide, thousands of volunteer committee members, application reviewers, and committed sponsors.



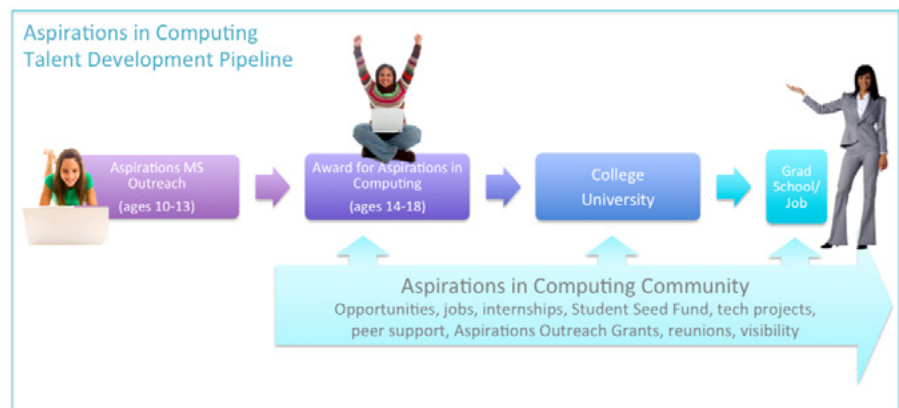
Our approach – to recognize computing aspirations in addition to achievement – is designed to identify, develop, and sustain technical potential among young women. Rather than “weed out” students who are ambivalent or intimidated, the program seeks to welcome as many capable, technically-inclined young women as possible, and works to counteract societal factors like stereotypes, isolation, and peer pressure that discourage interested girls from persisting in computing.

### How It Works

The Aspirations in Computing Talent Development Program comprises four major components: recognition, community, outreach and research.

Girls enter the program either as a middle school student participating in an Aspirations-sponsored outreach program, or via the [Award for Aspirations in Computing](#) at the high school level. Girls over age 13 engage with the Aspirations community of peers, which becomes a sustained experience from the time they enter through college and into the workforce.

Teams of volunteers come together to support Aspirations in Computing Affiliate Awards, which identify and publicly recognize technically aspiring young women through events in their own communities. Teams typically include K-12 organizations, academic institutions, and corporate partners. This places young women in direct contact with a local network of computing faculty and technical professionals – delineating a clear pathway into a computing career, and connecting the stakeholders with a vested interest in this aspiring computing talent. At the same time the award experience provides a big boost of encouragement and visibility for the young woman, and introduces her to fellow like-minded girls in her own community.





*"It is really great to be recognized for something that I love and work hard at. It can be difficult sometimes being the only girl in the technology department at my small school. Meeting other girls who share my interests is great and this award gives me confidence in my ability to succeed in a field that I love so much. Thank you."*

**Samantha, 2011 National Winner, Freshman  
Worcester Polytechnic University**



Upon entering the program, girls are invited to join an exclusive community just for them – they call themselves 'NCWITers' – a sort of sorority of technical young women. The community exists both online, through social networks, and in person through reunions and meet-ups.

and opportunities, and sometimes just a place to share and vent. Group members also engage in technical skill (and confidence) building projects. An example is the Techicks mobile app development project, sponsored by a grant from the Motorola Mobility Foundation, in which a virtual team of Aspirations recipients envisioned and built a social mobile application.

In 2013, NCWIT will be piloting a middle school outreach component. Inspiration for this initiative came from Aspirations participants who wanted to reach out to encourage more girls into technology. For example:

- Savannah L. in Hillsboro, Oregon, created a Girls Get IT camp for her Girl Scout Gold Award project and has engaged 80 middle school girls over two summers.
- Dana & Aleis M. in Greensboro, North Carolina, created a five-day Alice programming summer camp for middle school girls in 2011, which they expanded to three camps in 2012.
- Kate M. in New Albany, Ohio, created a series of pre-engineering summer workshops for 7th and 8th grade girls.

NCWIT is building program infrastructure to formalize, seed, support, and evaluate outreach efforts by these energized young women through partnerships with NCWIT member organizations. NCWIT intends to pilot between six and ten middle school outreach efforts in 2013.



Aspirations in Computing is unique in that the program provides a long-term, sustained community of peers and a national network of supporters, spanning middle and high school through to college, advanced degrees, and into the workforce. This provides an unprecedented opportunity for research and evaluation. NCWIT researchers Dr. Wendy DuBow and Dr. Zhen Wu are documenting the outcomes of the program, and have developed tools to help understand the roles of recognition and community on engagement with and persistence in computing.

*As DuBow explains, "We know from survey data that a majority of Award recipients major at the post-secondary level in computing, or other STEM fields that where women are usually under-represented. We are eager to do this longitudinal research though to find out more about the factors that influence the girls' study and career choices. What role, if any, does the Award play? How does the community they may find as a result of this program impact their perspective and opportunities? We will be looking at self-efficacy, confidence, interest, and intention to persist, along with other variables of interest."*

This three-year, mixed-methods research project focuses on both Aspirations Award recipients and applicants, is funded by the National Science Foundation (NSF), and was launched in fall 2012 at the Grace Hopper Celebration of Women in Computing.



This "virtual peer group" acts as a stand-in for the female classmates who are missing from the formal education experience. It also provides support and connections, access to resources

Her STEM girls club, FIONA (Future Innovators of New Albany,) boasts a membership of 32 high school girls engaged in middle school outreach.



## Successes

Early outcomes of the Aspirations in Computing Program are promising. Eighty-eight (88%) percent of Aspirations participants now in college report a major or minor in traditionally male-dominated fields of engineering and computer science (64% specifically in CIS majors or minors.) Participants also report:

- increased interest in technology fields,
- increased confidence in their technical potential,
- increased awareness of opportunities for women in technology,
- and decreased apprehension about entering a male-dominated field.



Aspirations in Computing also is raising the visibility of technical young women. Participants frequently are invited to participate in and represent NCWIT through presentations and events nationwide. Recently, “sisters in CS,” Cassidy and Camryn Williams, were featured on the Iowa State website and alumni magazine; a group of alums [helped kick off CSEdWeek](#) at Google New York; and winners Courtney Thurston, Abril Vela, and Blair Chisholm took part in 2012 Presidential Inauguration events. Southern California winner Molly Cinnamon created a moving video on stereotypes of technical women called [“This is Laura”](#) for the Aspirations Video Challenge. Her video was picked up for distribution by the Entertainment Industries Council and screened at the [S.E.T. Awards event in Hollywood](#) in November 2012. Since 2011, 23 Aspirations in Computing recipients have been invited to events at the White House, including presenting projects at the White House science fair

and participating in the [Tech Inclusion Summit](#).



Just a few years out, Aspirations in Computing can already boast a PhD candidate. 2010 National winner Tesca Fitzgerald has been accepted into programs at University of Illinois Urbana-Champaign, University of Massachusetts Amherst, and University of Texas Austin. Her intended research involves the application of cognitive science toward artificially intelligent robotics.



## The Future

Looking ahead, NCWIT expects the Aspirations in Computing Program to continue to grow. The regional infrastructure is expected to reach between 65 and 70 Affiliate programs by 2015, recognizing approximately 1,000-1,500 young women annually thanks to significant investments from Microsoft, Bank of America, Bloomberg, Motorola Solutions, Google, Intel, and Northrop Grumman, as well as local support from more than 350 partner organizations across the country.

*Microsoft Research is pleased to support Aspirations in Computing. We know it is programs like these that help young women build their confidence, exposure and network that will help them become successful computer scientists and future innovators.*

– **Rane Johnson-Stempson, Principal Research Director, Microsoft Research**

As the Aspirations talent pool cohort grows, NCWIT is building out resources and infrastructure to continue support and retention for this large group of young women in computing.

These will include more opportunities to meet face-to-face, technical projects and challenges, outreach opportunities, and additional resources for career development. Currently more than 35 NCWIT Academic Alliance member institutions offer scholarships to Aspirations in Computing participants, and a project team is working to spread the word and grow that number. Efforts are underway to connect Aspirations young women with REUs at Academic Alliance institutions and inform this cohort of young women about the opportunities in computing research and academia, as well as engage them as early as high school in the Regional Celebrations of Women in Computing and the annual Grace Hopper Celebration of Women in Computing.

CRA members are invited to participate with the Aspirations in Computing program both through engaging with the regional Affiliates and online with the national community. Example opportunities include:

- Participating with regional Affiliates by providing volunteer application reviewers and committee members, hosting award ceremonies and providing scholarships and prizes.
- Sharing REU and graduate school opportunities.
- Hosting regional meet-ups of Aspirations participants.
- Leading webinars and virtual events on the graduate school application and admissions process

To learn more, contact the team at [aspirations@ncwit.org](mailto:aspirations@ncwit.org).

The success of Aspirations in Computing is a testament to the commitment of NCWIT member organizations and thousands of individuals that participate and support the program. NCWIT is looking forward to continued growth and success,

learning from this unique group of young women, and ultimately moving the needle for women in information technology.

**ABOUT THE AUTHOR:** Ruthe Farmer has focused her efforts on increasing girls' participation in technology and engineering since 2001 and is Director of Strategic Initiatives at NCWIT. Ruthe is the driving force behind the [NCWIT Award for Aspirations in Computing](#) and served as the 2012 Chair of [Computer Science Education Week](#). [www.ncwit.org/ruthefarmer](http://www.ncwit.org/ruthefarmer).

The National Center for Women & Information Technology is a non-profit change leader network of more than 350 prominent corporations, academic institutions, government agencies, and non-profits working to increase women's participation in information technology. NCWIT helps organizations recruit, retain, and advance women from K-12 and higher education through industry and entrepreneurial careers by providing community, evidence, and action. More information at [www.ncwit.org](http://www.ncwit.org).



## 2013 CRA Distinguished Service and A. Nico Habermann Awardees Announced



**David Notkin**  
*photo credit - Bruce Hemingway*



**Peter G. Neumann**

The CRA Board of Directors has announced its selections of the 2013 Service Awards. David Notkin, Professor of Computer Science and Engineering at the University of Washington Seattle, was selected for the [A. Nico Habermann Award](#), and Peter G. Neumann Principle Scientist at SRI International, was selected for the [Distinguished Service Award](#).

Neumann was selected in recognition of the outstanding contributions to advancing the field of computing that he has made during over half a century of service and dedication. Neumann has led and driven the fields of computer-related risk and socially-responsible use of information technologies. These activities have also had an enormous impact in computing science research and remain at the forefront today. He has carried out this service quietly, but his impact has been very significant.

The CRA Board of Directors, in bestowing the award on Notkin, cited his tireless work to advance the success of all students in computing, and his strong and consistent advocacy for the inclusion of women and members of other underrepresented groups in the field. In his time at the University of Washington, Notkin has served as an extraordinary mentor to many graduate students, as a faculty member, and as Chair of the Department of Computer Science and Engineering. Notkin was Nico Habermann's Ph.D. student, and he attributes his focus on and success with mentoring to Nico's example. He has been an outspoken advocate for underrepresented groups in computing, has pushed the field to try new approaches, and serves as a role model for the computing community.



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**Margo Seltzer**, Harvard

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**Ellen Zegura**, Georgia Tech



*CRA Executive Director, Andy Bernat (right) gives Eric Grimson (left) a gift for his service as CRA Board Chair.*

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**Maria Zhuravleva**, Web Designer and IT Specialist

# Professional Opportunities

## Allegheny College

### Department of Computer Science Tenure-track Assistant Professor

The Department of Computer Science invites applications for a tenure-track position beginning September 2013. Applicants with interdisciplinary interests that combine computer science with art, biology, economics, or environmental science are particularly encouraged to apply; candidates with interests in architecture, graphics, mobile computing, security, or other areas of computer science are also invited. Qualifications include a Ph.D. in computer science or a related field.

Teaching load is 6 courses per year, with a laboratory course in computer science counting as 1.5 courses. All faculty must participate in teaching college-wide first-year/sophomore seminars that emphasize writing and speaking. Beyond providing evidence of the ability to effectively teach and advise undergraduates, applicants must demonstrate a commitment to ongoing scholarship and professional development. Salary for this position is competitive and start-up funds are available. Allegheny College is a highly selective private liberal arts college with a dedicated faculty of teacher-scholars.

More information about the Department of Computer Science's students, faculty, staff, and facilities is available at <http://www.cs.allegheny.edu>.

Send letter of application, curriculum vitae, statement of teaching and research interests, applicable transcripts, and arrange to have three letters sent from references, at least one of whom can comment on teaching, to: Gregory M. Kapfhammer, Associate Professor and Chair, care of Pauline Lanzine, [planzine@allegheny.edu](mailto:planzine@allegheny.edu). Review of applications will begin immediately.

Allegheny College is an Equal Opportunity Employer, with a strong institutional commitment to develop a diverse faculty and staff. Women and members of other under-represented groups are encouraged to apply.

## Ball State University, Muncie, Indiana

### Department Of Computer Science Assistant Professor

Tenure-track faculty position available August 16, 2013. Responsibilities: teaching courses for computer science majors, including network and operating systems courses as well as computer architecture operating systems, database systems, and/or security courses; supervising graduate students; scholarship including publications and presentations. **Minimum qualification:** earned doctorate in computer science or closely related field by August 16, 2013. **Preferred qualifications:** Ph.D. in computer science; demonstrated teaching ability, publications, and/or evidence of other scholarly contributions related to software engineering.

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

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

## Boston University

### Department of Computer Science Full-Time Lecturer Position

The Department of Computer Science, in the College of Arts and Sciences at Boston University invites applications for a full-time lecturer position (one-year appointment beginning September 2013 with the possibility of a one-year renewal). This position entails teaching undergraduate courses that may include introduction to computer science for non-majors, data structures in Java, introduction to discrete structures for computer science, algebraic algorithms, probability in computing, and other background undergraduate courses in computer science. The position may also involve an advanced undergraduate/early graduate course if the expertise of the applicant matches departmental needs. The position also involves supervision of graduate student teaching fellows, graders, and undergraduate course assistants.

**Required Skills:** Candidates should be strongly committed to excellence in teaching and should have at least two years of teaching experience at the college level. Applicants should submit Curriculum Vitae, a cover letter outlining teaching experience, a sample of recent teaching evaluations and three letters of reference to <https://academicjobsonline.org/ajop/jobs/2553>. Application reviews will begin on March 15, 2013 and continue until the position is filled.

Boston University is an Affirmative Action/Equal Opportunity Employer

## Bucknell University

### Assistant Professor, Computer Science – Area Unspecified

Applications are invited for a tenure-track position in computer science beginning mid-August 2013. We expect to hire at the Assistant Professor level, but outstanding candidates will be considered at Associate Professor or Professor; years of credit toward tenure will be awarded based upon qualifications. We seek a teacher-scholar with a demonstrated ability to work with a diverse student body and whose research area is in AI/machine learning, algorithms, or human-computer interaction (HCI). The successful candidate must be able to participate in the teaching of required core courses and be able to develop elective courses in the candidate's area of expertise. Candidates are expected to have completed or be in the final stages

of completing their Ph.D. by the beginning of the 2013 fall semester. A strong commitment to excellence in teaching and scholarship is required.

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

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

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

Bucknell University, an Equal Opportunity Employer, believes that students learn best in a diverse, inclusive community and is therefore committed to academic excellence through diversity in its faculty, staff, and students. Thus, we seek candidates who are committed to Bucknell's efforts to create a climate that fosters the growth and development of a diverse student body. We welcome applications from members of groups that have been historically underrepresented in higher education.

committed to Bucknell's efforts to create a climate that fosters the growth and development of a diverse student body. We welcome applications from members of groups that have been historically underrepresented in higher education.

## Cal Poly, San Luis Obispo

### Electrical Engineering Assistant or Associate Professor in Computer Engineering

ELECTRICAL & COMPUTER ENGINEERING - Tenure track faculty position in Electrical and Computer Engineering at Cal Poly, San Luis Obispo, California, beginning September 2013.

For details, qualifications, and application instructions (online application required), visit [WWW.CALPOLYJOBS.ORG](http://WWW.CALPOLYJOBS.ORG) and apply to requisition #102633. Application review is ongoing.

EEO

## Case Western Reserve University

### Engineering Strategic Hiring Initiative 2013

Case Western Reserve University's Engineering Strategic Hiring Initiative continues in 2013 with a focus on recruiting extraordinary faculty in the broad areas



# Professional Opportunities

of **advanced materials, energy and human health.**

Research clusters identified as strategic priorities and opportunities for the Case School of Engineering include Biomolecular Engineering, Fire and Materials Flammability, Informatics, Multi Scale Mechanical Modeling, and Smart Grid.

Informatics is seeking candidates in the area of informatics, including engineering epidemiology, materials genome, and biomedical/health informatics. Candidates should be grounded in computer and information science or related areas, with an aptitude for interdisciplinary and translational teamwork. Areas of specific interest include big data management, convergence, mining, and analytics, with the creation of unique tools, methodology, and novel data resources (e.g. time-series, imaging, electronic medical records, sequence, and material properties).

Launched in 2010, the strategic hiring initiative has attracted outstanding junior and senior candidates interested in being part of a community determined to drive discoveries that improve people's lives. The Case School of Engineering values interdisciplinary thinking, creative collaboration and entrepreneurial ideas. It also believes strongly in the vital importance of diversity within the professorial ranks, both in terms of women and underrepresented minorities.

Successful candidates will hold primary appointments in the Case School of Engineering, although in many instances they will be eligible for additional appointments within the School of Medicine or College of Arts and Sciences, among others.

Candidates seeking positions at the Assistant Professor level and higher should hold an earned doctorate in a field of engineering or related science and demonstrate promise for research and teaching excellence. Those seeking these positions should provide the names and contact information of three references in addition to a cover letter, research and teaching statements and CV. Candidates seeking positions at the Associate Professor level should have established a significant research reputation nationally and possess a record of extramural funding. Candidates seeking positions at the level of full Professor should be recognized internationally for research excellence, leadership and scholarship in their discipline.

We welcome all nominations and applications. For additional information, please visit <http://engineering.case.edu/strategichiring/> or contact Dean Jeffrey Duerk at [cseinterest@case.edu](mailto:cseinterest@case.edu).

In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and Diversity. Women, veterans, members of underrepresented minority groups, and individuals with disabilities are encouraged to apply.

Case Western Reserve University provides reasonable accommodations to applicants with disabilities. Applicants desiring a reasonable accommodation for

any part of the application and hiring process should contact the Office of Inclusion, Diversity and Equal Opportunity at 216-368-8877. Determinations regarding granting accommodations will be made on a case-by-case basis.

## Carnegie Mellon University

### Computer Science Department Teaching Track Positions

Applications are invited for two teaching-track positions in Computer Science, beginning Fall 2013. This is a renewable, career-oriented position with an initial appointment for three years. We seek highly qualified applicants with a strong commitment to excellence in teaching and the ability to teach at all levels in the undergraduate curriculum.

Applicants for the position must have a Ph.D. in Computer Science or a related field, and demonstrated excellence in teaching Computer Science courses. Teaching-track appointments are typically at the rank of Assistant Teaching Professor, with the possibility of promotion to the ranks of Associate Teaching Professor and Teaching Professor. None of these ranks are tenured; applicants seeking a tenure-track position at a research university are therefore not a good match for these positions.

In order to receive full consideration, applicants should submit a letter of application, curriculum vitae, a statement of teaching philosophy, and the names and email addresses of three or more individuals whom the applicant has asked to provide letters of reference. Applicants should arrange for reference letters to be sent directly to the contact below. This information should be sent by January 31, 2013, to the contact listed below.

Additionally, applicants are encouraged to submit a video sample of their teaching. This enables applicants to add another dimension to their application. Since the people who will eventually fill these positions will be expected to be an excellent classroom teachers, the video sample is an opportunity for candidates to show off their talents in a way other than traditional on paper means.

Please send your applications and accompanying materials to

Dr. Klaus Sutner  
Computer Science Department  
Carnegie Mellon University  
5000 Forbes Avenue  
Pittsburgh, PA 15213  
Email: [sutner@cs.cmu.edu](mailto:sutner@cs.cmu.edu)

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

## Harvard University

### School of Engineering and Applied Sciences Preceptor in Computer Science

The Harvard School of Engineering and Applied Sciences (SEAS) seeks applicants for the position of Preceptor in Computer Science. The preceptor will be primarily responsible for the coordination and support of core undergraduate courses in Computer Science, including Computer Science 50: Introduction to Computer Science I, CS51: Introduction to Computer Science II, and CS61: Systems Programming and Machine Organization. The position is an annual (twelve-month), academic appointment, renewable for up to three or more years, depending on continuing curricular need and performance.

Typical Responsibilities:

Work with and report to the faculty members who are the principal course instructors on the preparation of lecture materials, in-class exercises, homework assignments, and examination questions. Lead weekly sections and teach undergraduate students. Hire, train, and supervise a team of teaching fellows, including leading regular TF meetings. Design and

implement tools and test cases to be used by each courses' students and TFs. Hold office hours and advise undergraduate students across the Computer Science concentration.

A background in computer science is required; master's or PhD in computer science or education preferred. We seek candidates with superior organizational, written and interpersonal communication skills, along with the ability to lead and train teaching fellows and to manage relationships with hundreds of undergraduate students. Prior experience teaching and designing problem sets and classroom exercises is strongly preferred and industry experience is a plus.

Applicants will apply on-line at <http://academicpositions.harvard.edu/postings/4473>. Required documents include a cover letter, CV, names and contact information for at least three references, and a summary of prior teaching or tutoring experience including, for each course, its name, school, description, syllabus (if available), and website (if available).

Applications will be reviewed as they are received. Applicants are strongly encouraged to submit applications by February 15, 2013. However, applications will continue to be accepted until the position is filled. Harvard is an Equal Opportunity/Affirmative Action Employer. Applications from women and minority candidates are strongly encouraged.

## The Henry M. Jackson Foundation (HJF)

### Research Scientist - Physiological Data Modeling Scientists

# Professional Opportunities

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

This opening is 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. This position is 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 207965 or 207966 in the Job Opening ID box.

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. AA/EEO

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

## IBM T.J. Watson Research Center

### Research Staff Member

We invite applications for a permanent research staff position in the Algorithms group ([http://researcher.ibm.com/researcher/view\\_pic.php?id=134](http://researcher.ibm.com/researcher/view_pic.php?id=134)) at IBM T.J. Watson Research Center. We do basic research in optimization, approximation, online and streaming algorithms and other areas of theoretical computer science and apply our theoretical ideas to industrial problems. Applicants must have a Ph.D. (or obtain the degree by the time of employment) in Computer Science or in a closely related field.

Applications are accepted until February 19, 2013 at: [https://jobs3.netmedia1.com/cp/job\\_summary.jsp?job\\_id=RES-0362481](https://jobs3.netmedia1.com/cp/job_summary.jsp?job_id=RES-0362481)

## IMDEA Software Institute

### Faculty Positions

The Madrid Institute for Advanced Studies in Software Development Technologies (The IMDEA Software Institute) invites applications for tenure-track (Research

Assistant Professor) and tenured (Research Associate Professor and Research Professor) faculty positions. We are primarily interested in recruiting excellent candidates in the areas of

- Software testing
- Empirical software engineering
- Embedded, reactive, autonomous software
- Systems, broadly construed, including multicore, distributed systems, operating systems, compilers and runtime systems
- Cloud computing

but are open to other areas within the general research focus of the Institute.

The primary mission of The IMDEA Software Institute is to perform research of excellence at the highest international level in the area of software development technologies and, in particular, to develop tools and techniques which will allow the cost-effective development of sophisticated software products with high quality, i.e., which are safe, reliable, and efficient.

### Selection Process

The main selection criteria will be the candidate's demonstrated ability and commitment to research, the match of interests with the institute's mission, and how the candidate complements areas of established strengths of the institute. All positions require an earned doctoral degree in Computer Science or a closely related area. Candidates for tenure-track positions will have shown exceptional promise in research and will have displayed an ability to work independently as well as collaboratively. Candidates for tenured positions must possess an outstanding research record, have recognized international stature, and demonstrated leadership abilities.

Applications should be completed using the application form at <https://www.imdea.org/internationalcall/Default.aspx?IdInstitute=17>

For full consideration, complete applications must be received by February 1, 2013 although applications will continue to be accepted until the positions are filled.

### Salaries

Salaries at The IMDEA Software Institute are internationally competitive and are established on an individual basis within a range that guarantees fair and attractive conditions with adequate and equitable social security provision in accordance with existing national Spanish legislation. This includes access to an excellent public healthcare system.

### Work Environment

The working language at the institute is English. The institute is located in the vibrant area of Madrid, Spain. It offers an ideal working environment, open and collaborative, where researchers can focus on developing new ideas and projects. A generous startup package is offered. Researchers are also encouraged

to participate in national and international research projects.

The IMDEA Software Institute is an Equal Opportunity Employer and strongly encourages applications from a diverse and international community. The institute complies with the European Charter for Researchers.

## Indiana University Bloomington

### School of Informatics and Computing Lecturer

The School of Informatics and Computing at Indiana University Bloomington is accepting applications for up to 3 lecturer positions in the Informatics program. A Master's of Science (MS) degree in Computer Science, Informatics, or other relevant discipline is required. The ability to teach courses in one or more areas is required, including: math and logical foundations, introductory programming, human centered computing and human computer interaction, mobile app development, and database design and access. Applicants must have two academic years' experience (may be part-time). In addition, qualified candidates must provide evidence of teaching experience, and indicate in the application materials the types of courses they are prepared to teach. Lecturers are expected to support the teaching mission of the School of Informatics and Computing through excellence in pedagogical practice, service to the school and academic programs, and inquiry into the advancement of pedagogy in computing.

Applicants should submit a letter of application, teaching statement and philosophy (to include types of classes you can teach), and a current CV, and arrange for three letters of reference to be submitted using the submissions link at: <http://indiana.peopleadmin.com/postings/280> (preferred), or by mail to Lecturer Search Committee, School of Informatics and Computing, 919 E 10th Street, Bloomington, IN 47408. Questions may be sent to [lecturer-search@soic.indiana.edu](mailto:lecturer-search@soic.indiana.edu). Applications will be accepted immediately. The search will remain open until the positions are filled. To receive full consideration completed applications must be received by March 23, 2013.

Indiana University is an equal opportunity/affirmative action employer committed to excellence through diversity. The University actively encourages applications of women, minorities, and persons with disabilities.

## Indiana University-Purdue University Indianapolis

### Department of Computer & Information Science Tenure-track Faculty Position

The Department of Computer and Information Science invites applications for a tenure track faculty position at the Assistant Professor level, beginning August 2013. Competitive salary and start-up funds will be provided.



# Professional Opportunities

An applicant must hold a Ph.D. in Computer Science or a closely related field at the time of appointment, and is expected to develop a high-quality externally funded research program and be committed to excellence in teaching undergraduate and graduate students. We are especially interested in candidates with expertise in high performance computing including large scale scientific computing, algorithms for high performance computing, and cloud computing, though we also welcome applications in the areas of visual analytics, network security, and information retrieval.

The application should be submitted, in one PDF file, via email to the Faculty Search Committee ([wittlief@cs.iupui.edu](mailto:wittlief@cs.iupui.edu)), and must consist of a letter of interest, curriculum vitae, and a statement of research direction and teaching interests. Applicants should also arrange for three letters of recommendation sent directly to the Faculty Search Committee via email. Evaluation of applications will begin immediately and will continue until the positions are filled.

The IUPUI campus, located in downtown Indianapolis, has a student population in excess of 30,000 and attracted more than \$330 million in research funding in FY 12. For further information about the department, please visit [www.cs.iupui.edu](http://www.cs.iupui.edu).

IUPUI is an EEO/AA Employer, M/F/D. We are committed to achieving excellence through diversity. Applications and nominations of women, persons of color, applicants with disabilities, and members of other under-represented groups are desired.

## The Indiana University School of Informatics

### Department Chair, BioHealth Informatics

The Indiana University School of Informatics invites applications for an appointment as the inaugural Chair of its new (as of July 1, 2013) Department of BioHealth Informatics. The position is tenure eligible and will begin August 1, 2013 at the Indiana University–Purdue University Indianapolis (IUPUI) campus. An exceptional leader is being sought to join our new, fast-growing, dynamic department. This position will oversee all faculty, students and managerial aspects of the Department of BioHealth Informatics.

### Qualifications:

- Ph.D. in an area such as bioinformatics, health informatics, biochemistry and molecular biology, biophysics, computational biology, nursing, public health, computer science, or related fields
- Demonstrated record of outstanding research productivity and high scholarly impact
- Demonstrated ability to secure external research funding
- Proven ability to exhibit effective teaching at the undergraduate and graduate level
- A strong commitment to teaching, mentoring,

interdisciplinary research, and cultural diversity

- Superior leadership and administrative ability

The Department of BioHealth Informatics is home to a dynamic and interdisciplinary group of 15 faculty members and over 300 students across its Health Information Administration, Bioinformatics and Health Informatics programs. To see the full job announcement and for additional information about the Indiana University School of Informatics, including degrees, course descriptions, plans of study and faculty research, please see <http://www.informatics.iupui.edu>.

Submit PDF files containing (1) curriculum vita, (2) cover letter explaining your interest in this position, (3) research statement and philosophy of teaching, (4) a vision statement for the department, and (5) the names and contact information of three references to: Teresa Stuke, Human Resources Coordinator Email: [informhr@iupui.edu](mailto:informhr@iupui.edu)

The School of Informatics is eager to consider applications from women and people of color. Indiana University is an Affirmative Action/Equal Opportunity Employer.

## Iowa State University

### Computer Science Department

#### Chair and Professor, Computer Science Department

Iowa State University, the most student-centered public research university in the nation, is seeking a chair for the department of Computer Science.

Twenty-seven full-time tenure-track faculty members, nine of whom are NSF CAREER Award winners, serve almost 700 students in undergraduate and graduate education in computer science and software engineering. Faculty also play a pivotal role in interdepartmental graduate majors and minors in bioinformatics and computational biology, information

assurance, human-computer interaction, and neuroscience. The department has more than \$4.2 million in active research grants.

Iowa State is a leading land-grant institution of 31,000 students, a member of the Association of American Universities, and ranked as one of the top 50 public universities in the nation by U.S. News and World Report. The university is located in Ames, Iowa, a community ranked as one of the top 10 places to live in the United States by Money magazine. Visit [www.iastate.edu/about](http://www.iastate.edu/about).

For a complete job description, required qualifications, deadlines, and information about how to submit applications, please see vacancy #121311 at [www.iastatejobs.com](http://www.iastatejobs.com).

Iowa State University is an Affirmative

Action/Equal Opportunity Employer.

## Lafayette College, Easton, PA



Through Inspiration, Discovery

King Abdullah University of Science and Technology

## Postdoctoral Researchers

Make A Difference!

Make a difference by joining GMSV's research staff to work on unique projects in an outstanding research environment. Put your expertise to practical use and push boundaries in your field. Apply for one of GMSV's multiple openings for Postdoctoral Fellow positions in the following fields:

- **Visualization and Image Processing with emphasis on Large Scientific Data Processing**
- **Computer Vision and Machine Learning for Visual Computing**
- **Virtual Mecca Project (a collaboration with TU Munich, Germany)**

The job offer includes unique research opportunities during a 2 year contract. Postdoctoral Fellows will have no teaching obligations and will be provided with outstanding research infrastructure. Successful candidates will receive globally competitive salaries including health care and relocation assistance.

The Virtual Mecca Project deals with the scientific documentation and historic reconstruction of the last 40 years of this rapidly changing and extremely important site. Research topics involved include (but are not limited to): Image Understanding, Visualization, Geometric Modeling, Structure from Motion. The applicant is expected to spend part of her or his assignment at our partner TU Munich in Germany. This stay will be fully funded.

Come for 365 days of sun per year, stay for unique research opportunities!

The Geometric Modeling and Scientific Visualization Center (GMSV) at King Abdullah University of Science and Technology (KAUST) is located at the Red Sea in Thuwal, Kingdom of Saudi Arabia. Our mission is to ensure that KAUST is at the forefront of Petascale Computing, Modeling, Visualization, and Immersive Environments. Our Center has established itself as an institution of international academic recognition and is committed to further its reputation in the future. For more information, visit us at <http://apptkr.com/303052>.

To obtain further information or to apply, contact our faculty via email: [gmsvfaculty@kaust.edu.sa](mailto:gmsvfaculty@kaust.edu.sa) and include a resume and/or a full CV including a publication list.

For more information about the Virtual Mecca Project, please contact Dr. Jens Schneider via email: [jens.schneider@kaust.edu.sa](mailto:jens.schneider@kaust.edu.sa) and include a resume and/or full CV including a publication list.



To ensure full consideration, please submit your application materials by January 15, 2013. However, the position will remain open until filled.

# Professional Opportunities

## Computer Science

### Visiting Assistant Professor

The Computer Science Department invites applications for a one-year visiting Assistant Professor position starting in the fall of 2013. All areas of CS will be considered. Consideration will be given to applicants with earned Master's degrees in CS, but preference will be given to applicants with an earned Ph.D. in CS or closely aligned fields by or near the time of appointment.

The department has five full-time tenure-track members and is accredited by ABET. The teaching load for visitors is approximately 6 courses per year. This opportunity provides a teaching experience in one of the nation's highly-selective, undergraduate-only institutions. For more information about our program, please check out our home page: <http://compsci.lafayette.edu>

**To apply:** Please visit [compsci.lafayette.edu/search](http://compsci.lafayette.edu/search) and complete the form as well as upload a cover letter, curriculum vitae, teaching statement, research statement, current transcript, and any supporting materials (as a single document). As a response to submitting these materials, you will be provided with information about the process by which at least three references are to submit their letters. Questions should be emailed to the search committee chair at [compsci@lafayette.edu](mailto:compsci@lafayette.edu). To receive full consideration, application materials should be submitted by March 10th, although applications will be accepted until the position is filled.

Located within 70 miles of New York and Philadelphia, Lafayette College is a highly selective undergraduate institution with an enrollment of 2400 students. We are committed to creating a diverse community that is inclusive, responsive, and supportive of each member of the faculty, student body, and staff. All members of the College community share a responsibility for creating and maintaining a learning environment in which difference is valued, equity is sought, and inclusiveness is practiced. Lafayette College is an equal opportunity employer and encourages applications from women and minorities.

## Polytechnic Institute of New York University

### Computer Science and Engineering Department Faculty Position

The Computer Science and Engineering Department of the Polytechnic Institute of New York University (NYU Poly) invites applications for a faculty position with research focus in one or more of the following broadly interpreted areas: visualization, data analysis, visual analytics, and large-scale data management. We welcome applications at all levels with an exceptional record in research, teaching, and professional accomplishments. The rank of initial appointment will be commensurate with experience and accomplishments.

The successful candidate will have excellent opportunities to initiate interdisciplinary research and educational collaborations with the diverse institutes and departments within NYU, including NYU Courant, NYU Stern, and the NYU Medical and Dental schools, and to play a major role in establishing new programs in Bioengineering and Data Science.

Our department has existing research strengths in several relevant areas, including data management, visualization, cyber security, web and text search, content distribution and distributed systems, machine learning, and HCI. We have just moved into a new building that significantly expands our research space, with a generous allocation for a state-of-the-art visualization lab. The newly established Game innovation Lab provides excellent facilities for game and HCI related research and education, and nicely complements the visualization facilities for a unique environment.

New York City brings unique opportunities for visualization and data science researchers, including a large number of established companies with large-data needs such as banks, media companies, and data integrators, as well as a rich environment of technology startups. It is also a hotbed for research in urban technologies, much of which can benefit from advanced data analysis and visualization.

Applicants should send their curriculum vitae, statement of research and teaching interests, and the names and addresses of three referees, as a PDF attachment, to [cssearch@poly.edu](mailto:cssearch@poly.edu).

Polytechnic is an Equal Opportunity Employer.

## Portland State University

### Electrical and Computer Engineering Department Assistant/Associate Professor (Tenure-Track) - Senior Instructor/Assistant Professor (Fixed-Term)

The Electrical and Computer Engineering (ECE) Department at Portland State University (PSU) seeks outstanding candidates for tenure-track and non-tenure track fixed-term faculty in design verification/validation.

The ideal tenure-track candidate possesses excellent teaching and research skills. The candidate is expected to build and lead a research program in design verification/validation, collaborating with local industry, other ECE and Computer Science faculty, and worldwide leaders in EDA.

The ideal fixed-term candidate has a passion for undergraduate and graduate education with proven teaching skills, and a desire to develop compelling curriculum in design verification/validation. The candidate must have industry experience in verification/validation of large-scale systems. Expertise with contemporary verification/validation methodologies is required. Expertise in hardware emulation is a plus.

Located in the heart of one of America's most

progressive cities, PSU is Oregon's largest and most diverse public university. The downtown campus is a vibrant center of culture, business, and technology. Portland and the nearby Silicon Forest are hosts to many high-tech companies.

Additional information and requirements for applying are at <http://pdx.edu/hr/faculty-administrative-openings>. Positions #D93193 and #D93195.

PSU is an Affirmative Action, Equal Opportunity institution and welcomes applications from diverse candidates and candidates who support diversity.

## Syracuse University

### Department of Electrical Engineering and Computer Science (EECS) Associate or Full Professor

The EECS department invites applications for a tenure track/tenured Associate or Full Professor in the discipline of Computer Science for a position partially funded by JPMorgan Chase Corporation. The ideal candidate would be an accomplished researcher in Cybersecurity. Particular focus is in the area of mobile system security, requiring an understanding of the latest technological developments in mobile computing and mobile communications, the rapidly increasing penetration of world markets by mobile platforms, and the attempts by the financial industry to reach consumers through mobile platforms.

A doctorate in Computer Science or a closely related field is required at the time of employment. Start-up funds commensurate with the needs of the individual will be provided for the successful candidate.

Review of applications will begin immediately and continue until the position is filled. The starting date is expected to be in August 2013. For more information or to apply, please visit the following web site: <http://www.sujobapps.com> (Job# 070191).

For detailed information about the Department of EECS, please see the following web site: <http://www.eecs.syr.edu>.

The University and surrounding areas offer a vibrant intellectual and cultural atmosphere, a diverse ethnic community, great public education systems, affordable homes, and many other assets that make it a great place to live and work. Syracuse University is strongly committed to gender and ethnic diversity. Women and members of minorities are especially encouraged to apply. Syracuse University is an Affirmative Action/Equal Opportunity Employer.

## Towson University

### Department of Computer & Information Sciences Tenure-track Assistant Professor Position in Computer Science

The position requires a Ph.D. in Computer Science or equivalent with specialization in computer/cyber



# Professional Opportunities

security. The selected candidate is expected to teach undergraduate and graduate courses, apply for external research funding and conduct research, supervise graduate and doctoral students, and participate in department activities.

The Department offers an ABET/CAC-accredited B.S. in CS, a B.S. in IS, a B.S. in IT, a M.S. in CS, and a D.Sc. in IT. The Department has 39 full-time faculty, collectively over 1000 undergraduate, and approximately 200 graduate students including 60 doctoral students. Towson University has been a CAE/IA since 2002.

Applicants should submit a letter of application, current curriculum vitae, copies of graduate transcripts, a recent research paper, and the name, address, phone and e-mail address of three professional references.

**All materials must be submitted electronically.**

Applicants should send their items to [CSSearch@towson.edu](mailto:CSSearch@towson.edu).

For more information, please visit:  
<http://www.towson.edu/cosc/positions.asp>.

## Tulane University

### Computer Science Postdoctoral Fellow Position

Tulane University is soliciting applications for a 2-year postdoctoral researcher position working with Professor Carola Wenk.

More detailed information is available at <http://www.cs.tulane.edu/~carola/postdocAd.html>

The application deadline is January 31, 2013; applications received thereafter will be considered until the position is filled.

## University of Chicago

### Department of Computer Science Lecturer

The Department of Computer Science at the University of Chicago invites applications for the position of Lecturer. Subject to the availability of funding, this would be a three year position with the possibility of renewal. This position involves teaching in the fall, winter and spring quarters, and is paid uniformly over 12 months. The duties include one week of preparation before the fall quarter; the preparation for the winter and spring quarters can be done in the fall and winter, respectively. The successful candidate will have exceptional competence in teaching and superior academic credentials will carry responsibility for teaching computer science courses and laboratories. Applicants must have a Ph.D. in Computer Science or a related field and have experience teaching Computer Science at the College level.

Applicants must apply on line to the University of Chicago Academic Careers website at <http://tinyurl.com/bkda22h>. Applicants must upload a curriculum

vitae with a list of publications and a one-page teaching statement. In addition, three reference letters will be required. Screening of applications will begin March 15, 2013, and will continue until the position has been filled.

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

## University of Chicago

### Multiple Openings for Postdoctoral Scholars

The Systems Group ([systems.cs.uchicago.edu](http://systems.cs.uchicago.edu)) in the Department of Computer Science has multiple openings for Postdoctoral Scholars in Computer Architecture and Systems Software. Computer architecture research explores design, implementation, and evaluation energy-efficient heterogeneous architectures. System software research will encompass monitoring and adaptation frameworks for runtime optimization of energy, performance, and resilience tradeoffs. Candidates should also be comfortable with performance analysis and workload characterization. Work will be performed under the direction of Professors Andrew A. Chien and Henry Hoffmann.

Requirements:

PhD in computer science, computer engineering, or a related field. Drive and teamwork skills are essential for pioneering new generations of computer systems to achieve new levels of performance in an era of power constrained computing.

To apply, contact Professors Chien or Hoffmann at: [achien@cs.uchicago.edu](mailto:achien@cs.uchicago.edu) or [hankhoffmann@cs.uchicago.edu](mailto:hankhoffmann@cs.uchicago.edu).

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## University of Massachusetts Lowell

### Assistant/Associate Professor - Computer Science

The University of Massachusetts Lowell Department of Computer Science invites applications for one faculty position to start in September 2013. This is a tenure-track or tenured position and ranks are open. Appointments at the rank of Associate Professor or higher could be made tenured based on qualifications. Salary is commensurate with qualifications and experience.

The Computer Science faculty has received approximately \$6M in the last two years in external research funding from the NSF, DARPA, DOD, DHE, NIH, and corporations. The department has 5 NSF CAREER Award recipients. More information about the department can be found at [www.cs.uml.edu](http://www.cs.uml.edu).

#### Minimum Qualifications:

- Applicants must hold a PhD in computer science or a closely related discipline and must be committed to developing and sustaining externally funded

research programs.

- The ability to work effectively with diverse groups.
- All applicants should have participated in significant federal grant writing. Having current US federal funding as PIs is highly desirable.

**For appointment at the rank of Assistant Professor, applicants must either have:**

- (a) At least one year of post-doctoral teaching and research experience as an assistant professor in a US university, or;
- (b) At least one year as a post-doctoral researcher in a US university or research lab.

**For appointment at the rank of Associate Professor or higher:**

- Substantial research, teaching, and service experience.
- Have made significant contributions to their fields with strong ongoing research projects, and be PIs of substantial current funding from major US funding agencies.

#### Other Consideration:

- Preference will be given to outstanding candidates in Cloud Computing, Data Mining and Modeling, Operating and Storage Systems, or Visualization
- The ability to teach the theory of computation class at the graduate level is a plus
- Outstanding candidates in other major computer science research areas may also be considered
- In addition to developing a research program, the successful applicant will be encouraged to contribute to the collaborative research of the existing departmental groups
- The successful candidate will be expected to teach undergraduate and graduate courses, including department core and specialty areas based on the candidate's expertise

To apply, visit <https://jobs.uml.edu>. Please submit cover letter, curriculum vitae, teaching philosophy, writing sample, research interest and research statement, teaching evaluations, and the names and contact information of three references. Review of applications will begin February 1, 2013 and will 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.

# Professional Opportunities

## University of Missouri-Columbia

### Teaching Professor/ Instructor of Computer Science

The University of Missouri-Columbia (MU) invites applications for the position of non-tenure track Teaching Professor or Instructor in the Department of Computer Science. We are seeking candidates with excellent knowledge in core CS areas who are comfortable teaching and managing high-enrollment classes. Applicants must have a graduate degree in Computer Science or in a closely related field. Ph.D. degree is required for the rank of Teaching Professor (either at the assistant or associate level; depending on qualifications).

The position responsibilities include:

- Instruct core CS courses including introductory programming with a teaching load of up to four courses per semester.
- Participate in curriculum development with the CS Undergraduate Committee.
- Serve on departmental, college, and/or university committees.

Start of this position is fall semester 2013. Salary is competitive and commensurate with qualifications.

MU is the first state university west of the Mississippi River and recognized as one of the most comprehensive schools in the United States. Columbia has consistently been ranked by Money magazine as one of the nation's top places to live because of its excellent education system, economy, health care, housing opportunities and general quality of life.

Additional information about the Department of Computer Science can be found at <http://engineering.missouri.edu/cs> which contains direct links to the College and University for detailed information. The starting date for this position will be fall semester 2013. Review of applications will begin immediately, and will continue until the position is filled.

Please apply online at <http://hrs.missouri.edu/find-a-job/academic/>. A letter of application, teaching statement, and the names and contact information of at least three professional references need to be uploaded in the Attachment section of the application. A curriculum vitae must be provided in the Resume/CV section. Contact [muhrs@missouri.edu](mailto:muhrs@missouri.edu) with questions about the application process. Questions regarding the position should be directed to:

Chair of CS Instructor Search Committee  
201 Engineering Building West  
University of Missouri-Columbia  
Columbia, MO 65211  
Email to [blumerj@missouri.edu](mailto:blumerj@missouri.edu)

The University of Missouri-Columbia is an equal opportunity/affirmative action employer and is designated a Doctoral/Research Extensive Institution

by the Carnegie Foundation for the Advancement of Teaching.

## University of New Orleans

### Computer Science Assistant Professor

The Department of Computer Science at the University of New Orleans invites applications for a tenure track position to start in Fall 2013. Qualifications include a Ph.D. in Computer Science or a closely related field and strong practical skills in digital forensics, network security, cryptography, or a related area in computer security.

Applicants should email a resume and the names of at least three references to the Search Committee: [search@cs.uno.edu](mailto:search@cs.uno.edu).

A full description of the position can be found online at: [http://www.cs.uno.edu/news/facultyposition\\_IA.php](http://www.cs.uno.edu/news/facultyposition_IA.php)

## USC Viterbi

### School of Engineering - Computer Science

#### Lecturer Position

The Computer Science Department (<http://cs.usc.edu>) at the USC Viterbi School of Engineering (<http://viterbi.usc.edu>) seeks candidates for teaching positions (Lecturer) to teach undergraduate and graduate courses. These are full time, benefits eligible faculty positions on the non-tenure track. Competitive candidates will have the training and experience necessary to teach effectively in a highly-ranked Computer Science department that advances undergraduate students through an accredited BS degree program and graduate students enrolled in MS and PhD programs. Candidates will have a background (or specific interest) in one or more of the following areas: Agents, Algorithms, Artificial Intelligence, Complexity, Databases, Games, Graphics, Information Management, Multimedia, Natural Language Processing, Networks, Programming, Robotics, Software Systems and Engineering, Systems, and Vision.

These are primarily teaching positions; all candidates are expected to have a strong commitment to teaching. Lecturers will spend the majority of their time on teaching and teaching-related duties with reduced obligation for research and University service. Qualified candidates should have a doctoral degree in Computer Science (or equivalent) by the date of appointment. Salary and benefits are competitive. While we seek applications at the level of Lecturer, in exceptional cases, applicants with longer teaching experience may also be considered for a commensurate position (e.g., Senior Lecturer).

Applicants should submit their applications online at: <http://viterbi.usc.edu/facultyapplications/csfaculty2013/>

Applications must include a cover letter, a detailed curriculum vitae, a teaching statement, and names of at least three professional references, at least two of whom must be familiar with, and able to comment on, the applicant's teaching experience. Applicants may also optionally include a research statement. Applications should be received by March 1, 2013. Later applications will be considered to the extent possible.

The USC Viterbi School of Engineering is among the top tier engineering schools in the world. It counts 174 full-time, tenure-track faculty members, and it is home to the Information Sciences Institute, two National Science Foundation Engineering Research Centers, a Department of Energy EFRC (Energy Frontiers Research Center), and the Department of Homeland Security's first University Center of Excellence, CREATE. The school is affiliated with the Alfred E. Mann Institute for Biomedical Engineering, the Institute for Creative Technologies and the USC Stevens Institute for Innovation. Research expenditures typically exceed \$180 million annually. With 33 tenure-track, 42 research faculty, and 6 teaching faculty, the USC Department of Computer Science is one of the nation's leading centers of research and education in the field.

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

## The University of Tennessee

### Electrical Engineering and Computer Science Tenure-track Faculty Position in Computer Engineering

The Department of Computer Science at the University of Virginia seeks to fill multiple tenure track faculty positions at all levels. Candidates should hold a Ph.D. in computer science or a related discipline. We are interested in candidates from all areas who are committed to excellence in research and teaching.

The Department of Electrical Engineering and Computer Science at The University of Tennessee, Knoxville (UTK) is seeking applications for a tenure-track junior-level faculty position in Computer Engineering. Successful candidates will be expected to teach at both undergraduate and graduate levels, to establish a vigorous funded research program. The Department currently enrolls approximately 500 undergraduate and 225 graduate students.

The EECS Department is in the midst of a growth phase thanks to gifts from alumnus Dr. Min Kao and other donors, in addition to state funding, totaling over \$50M. These funds have been directed to the new building which opened in Fall 2011, as well as various endowments. The University of Tennessee and Battelle manage the nearby Oak



# Professional Opportunities

Ridge National Laboratory, which provides further research opportunities. Information about the EECS Department can be found at <http://www.eecs.utk.edu>.

Applicants should have an earned Ph.D. in Computer Engineering, Computer Science or related field. Applicants should have outstanding potential for establishing an independent research and teaching program in their field and should be capable of working with other faculty to further strengthen the department's existing research programs.

## Application Instructions

Interested candidates should apply through the departmental web site at <http://jobs.eecs.utk.edu/> CSE\_Fall12 and submit a letter of application, a curriculum vitae, a statement of research and teaching interests, and contact information for three references. Review of applications will begin on January 15, 2013, and continue until the position is filled.

The University of Tennessee is an EEO/AA/Title VII/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services.

## University of Waterloo

### David R. Cheriton School of Computer Science

### Canada Excellence Research Chair in Security & Privacy

We invite expressions of interest for the position of Canada Excellence Research Chair (CERC) in Security and Privacy for the New Digital Economy, to be held at the tenured full professor or associate professor level in the David R. Cheriton School of Computer Science at the University of Waterloo <https://cs.uwaterloo.ca>

The CERC program awards world-class researchers up to \$10 million over seven years to establish ambitious research programs at Canadian universities. Further details are offered at [www.cerc.gc.ca](http://www.cerc.gc.ca). An overall package worth more than twice this amount will fund the CERC, additional faculty and staff, and their required infrastructure.

The mandate of this CERC is to create novel solutions for usable security and privacy-enhancing technologies, in an environment that is increasingly connected through the use of mobile devices (such as smartphones and tablets) and social networking. Included is a focus both on producing highly talented graduates and on launching research that will drive solutions for tomorrow's organizations and individuals. The Chair's research will build on strengths in the University of Waterloo's Faculty of Mathematics in the areas of cryptography, security, privacy, mobile devices, networks and distributed systems.

The applicant will be an unequivocally outstanding researcher, well-recognized as exceptional within the subfield of security and privacy. It will also be essential

for the candidate to demonstrate remarkable promise in leadership and the mobilization of talents of others to deliver successful outcomes. In particular, we are looking for an individual who is expert in security solutions for networked and mobile environments and who also has a critical appreciation for how the topic of privacy is intricately linked to the required solutions. The CERC needs to align with the hallmark of the University of Waterloo's computer science researchers: demonstrating exceptional talent in conducting research that leads to industrially-relevant practical applications. As it will be important to engage both organizations and citizens in adopting the novel technological solutions that are developed, the CERC must also have an aptitude in working well with public policy experts. The leadership qualities of the applicant will include an essential talent in seeing through to completion a dramatic vision for the training of students and postdocs, who will emerge with a unique skillset to become tomorrow's leaders of industry, government and academia.

To apply, send a cover letter and a curriculum vitae by e-mail: [deanmath@uwaterloo.ca](mailto:deanmath@uwaterloo.ca)

or by regular mail:

Ian Goulden  
Dean, Faculty of Mathematics  
200 University Avenue West  
University of Waterloo  
Waterloo, Ontario, Canada N2L 3G1

Applications received by May 30, 2013 will receive full consideration. Selection of the candidate is subject to final oversight by the government's CERC Selection Committee.

The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native people and persons with disabilities. We are especially proud to offer organizations for Women in Computer Science ([cs.uwaterloo.ca/~wics](http://cs.uwaterloo.ca/~wics)) and Women in Mathematics ([women.math.uwaterloo.ca](http://women.math.uwaterloo.ca)) as well as an AccessAbility Services Office for persons with disabilities ([uwaterloo.ca/disability-services](http://uwaterloo.ca/disability-services)) that serve to offer a progressive, welcoming environment. All qualified candidates are encouraged to apply; Canadians and permanent residents will be given priority.

The University of Waterloo has been rated as the most innovative university in Canada for the 21st year in a row. We offer an enlightened intellectual property policy, which vests rights with the inventor; this policy has encouraged the creation of many spin-off companies. Located 100km from metropolitan Toronto, the University of Waterloo is in the region of Waterloo with a population of 500,000. The area is in the heart of Canada's technology triangle and offers a wealth of outdoor and indoor recreational activities, as well as an extensive performing arts community.

## Virginia Commonwealth University - VCU

### Computer Science Faculty, Tenure-Track, Richmond, Virginia

The Computer Science Department at Virginia Commonwealth University (VCU) invites applications for a tenure-track/tenured position at the rank of Assistant/Associate/ Professor.

Candidates must have a Ph.D. in computer science, or in the related area. Junior faculty will be required to have an established research agenda and a clear potential for external funding, and potential for scholarship or creative expression to complement and expand existing expertise in the department and the School of Engineering, especially in the field of cyber security, broadly defined. For Associate/Professor level, faculty member will be required to have a well developed scholarly/research portfolio with evidence of multidisciplinary applications and external funding appropriate to complement and expand existing expertise within the department, especially in the field of cyber security. Successful candidates are expected to teach courses in Computer Science at both the undergraduate and graduate level. Additionally, candidate must have demonstrated experience working in and fostering a diverse faculty, staff, and student environment or commitment to do so as a faculty member at VCU is required.

VCU, the largest urban university in Virginia, is a Carnegie research I extensive institution ranked in the top 100 universities in the U.S. in federal R&D expenditures, with a richly diverse community and commitment to multicultural opportunities.

For best consideration, applications should be submitted by March 1, 2013. Candidates are to submit applications electronically to [cmscsearch@vcu.edu](mailto:cmscsearch@vcu.edu) as a single PDF file that includes (in this order) a cover letter, resume, research and teaching statement, and the names and e-mail addresses of three references. (Reference letters should be provided only upon the request of the search committee).

Virginia Commonwealth University is an equal opportunity, affirmative action university providing access to education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran's status, political affiliation or disability.

## Professional Opportunities



### **TANDY ENDOWED CHAIR IN CYBER SECURITY** **TANDY SCHOOL OF COMPUTER SCIENCE**

The Tandy School of Computer Science at the University of Tulsa is seeking a candidate to fill the Tandy Endowed Chair in Cyber Security. Applicants should have a distinguished record in research, education, and service in Cyber Security, Information Assurance, or a related area at the rank of full professor. The applicant should be open to collaborative and multi-disciplinary research activities. Responsibilities will include spearheading the development of new research and curriculum areas within the school and continuing to advance the international recognition of the University of Tulsa in this field. Applicants should possess a PhD or equivalent in a closely related field for this tenure track position.

The University of Tulsa is a private university with approximately 4500 undergraduate, graduate, and law students. The Tandy School of Computer Science occupies the second floor of the new J. Newton Rayzor Hall dedicated in Nov. 2011. The School offers a B.S., M.S. and Ph.D. in Computer Science. The National Security Agency and U.S. Cyber Command have designated The University of Tulsa as a National Center of Academic Excellence in Cyber Operations. The University of Tulsa's information security programs have previously received similar nods of approval from the NSA, National Science Foundation, Department of Defense and U.S. Secret Service. The Tandy School of Computer Science houses TU's Cyber Corps Program which currently has 60 students from a variety of backgrounds including computer science, mathematics, electrical engineering, chemical engineering, mechanical engineering, law and business.

Tulsa is located in northeast Oklahoma in "Green Country," a region of rolling hills, lakes and wooded landscapes. With a metropolitan population of approximately one million, the city offers cosmopolitan amenities while maintaining the livability of a more modest urban center. Tulsa offers diverse arts, entertainment, and recreation venues appealing to young adults and families.

To apply, please send CV, teaching statement and research statement, and contact information for four references as a single PDF by e-mail to **Dr. Rose Gamble, Chair of the Search Committee** at [gamble@utulsa.edu](mailto:gamble@utulsa.edu).

*The University and Tandy School of Computer Science share a strong commitment to achieving diversity among faculty and staff. We particularly encourage applications from underrepresented groups. The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.*