



**CRA**

Computing Research  
Association

# Computing Research News

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COMPUTING RESEARCH ASSOCIATION, UNITING INDUSTRY, ACADEMIA AND GOVERNMENT  
TO ADVANCE COMPUTING RESEARCH AND CHANGE THE WORLD.

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# 2016 CRA Conference at Snowbird Recap

By Shar Steed, CRA Communications Specialist

From July 17-19, the Computing Research Association (CRA) held its biennial conference at Snowbird, with more than 300 people in attendance. Every two years, the chairs of computing and information departments from across the country, as well as the leaders of government and industrial laboratories, gather in Snowbird, Utah, to network and discuss common issues concerning the future of the field.

The event kicked off on Sunday evening with welcome reception for attendees. CRA Board Chair Susan Davidson recognized the 25th anniversary of CRA-W, and the winners of the 2016 CRA Awards. CRA-E Co-chairs presented the winners of the [CRA-E Undergraduate Research Faculty Mentoring Award](#), and an engaging and entertaining discussion between Ed Lazowska of University of Washington and John Markoff from *The New York Times* followed. Monday morning, Andrew W. Moore of Carnegie Mellon University gave a keynote talk on the growth of corporate lab culture and how to optimize partnerships.

The highly anticipated “Booming Enrollments: Understanding the Surge” plenary session, which was led by Tracy Camp of Colorado School of Mines, shared some insights based on research on this topic, one that all departments seem to be grappling with. Following the introductory plenary, parallel sessions took an in-depth look at specific issues surrounding the increase in CS enrollments.

Monday evening, the CCC organized Computing Research Futures, thought-provoking dinner sessions focused on “Theory for Society” and the “Computing Alone Doesn’t Solve Social Problems. So, What Next?”

Several parallel tracks dove into community issues such as “Data Science in the 21st Century,” “Department Rankers and Rankings: Truths and Consequences,” “Schools and Colleges of Computing,” and “Humans, Machines, and the Future of Work.”

In “Making a Federal Case for Computing,” CRA’s Peter Harsha helped paint an informed picture of the current state of federal support for computing and science funding, plus CRA’s role in the funding process. He was followed by a panel that discussed research-funding realities given the steady





increases in faculty size, where and whether additional funding might be found, and promotion and tenure criteria if research funding becomes scarce.

## Discussing Books and Building Robots

This year's conference offered some new sessions such as organized book discussions about a number of thought-provoking topics in computing research and the opportunity to build robots.

In addition to the formal sessions, Monday afternoon was dedicated to encouraging networking among the many participants. Some attendees spent time traversing the nearby mountain on both organized and unofficial hikes, while others tinkered with [Kamigami](#) robots.

The final session of the 2016 CRA Conference at Snowbird was a discussion about the Computer Science for All initiative organized by Jan Cuny of NSF. In small group discussions, attendees had the opportunity to talk with faculty from leading CS departments about how they are supporting Computer Science for All, and to also pledge their commitment to this important effort.

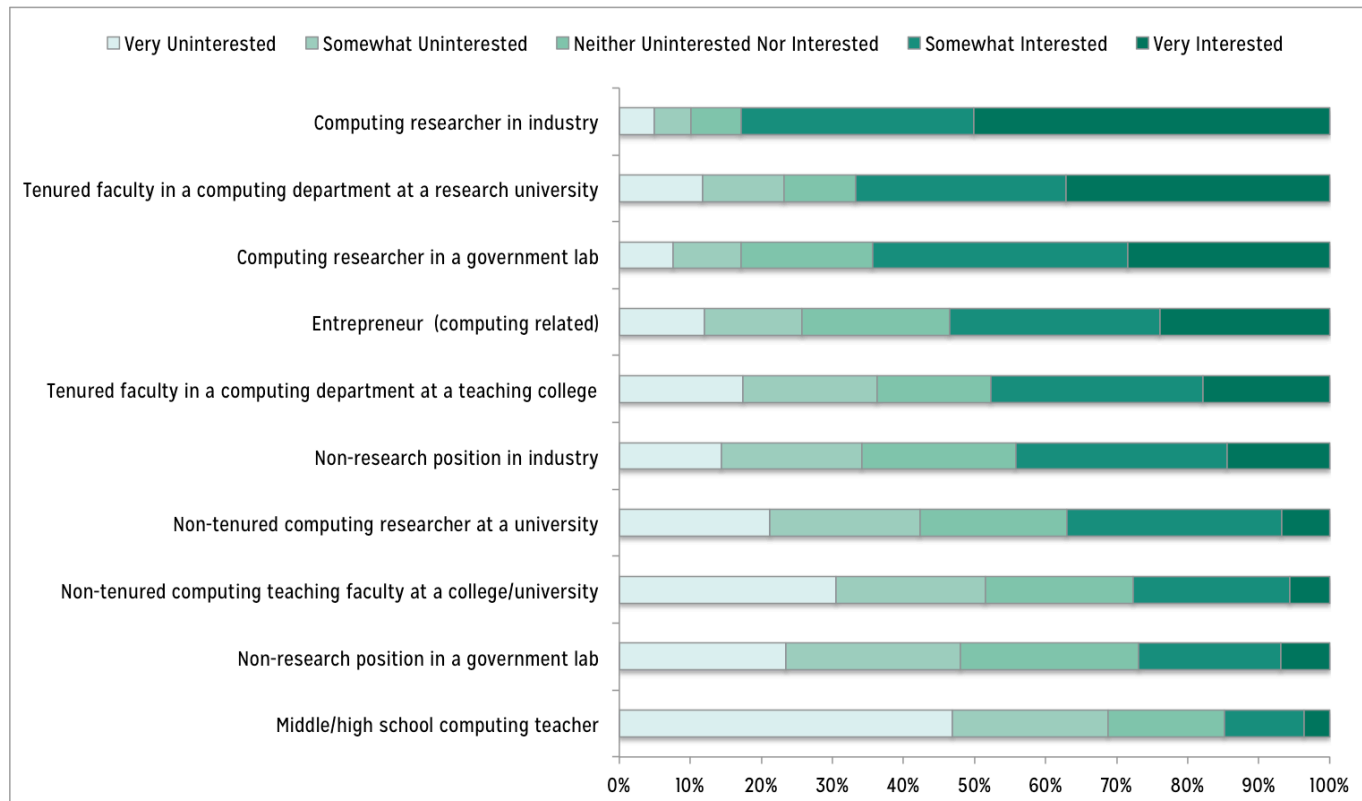
CRA Conference at Snowbird participants used the [#CRASnowbird](#) hashtag to share information and engage with others on Twitter. Excellent photos of the three-day event were captured by CRA's Brian Mosley. (Click [here](#) to view the CRA photostream on Flickr.)

The conference agenda is posted online [here](#) and the available speaker slides are highlighted in blue. Thanks to everyone who contributed to making this year's event a success! We are already looking forward to the 2018 CRA Conference at Snowbird.



# Ph.D. Students' Interest in Computing Career Options

By Jane Stout, CERP Director



In 2015, CERP asked 1,335 students enrolled in Ph.D. programs to report their interest in a variety of computing professions. The distribution of students' year in their program was as follows: 22% first year, 21% second year, 13% third year, 12% fourth year, 10% fifth year, 10% sixth year or greater, and 12% unspecified. As seen in the graphic above, students were most interested in pursuing a computing research job in industry, followed by tenure track computing faculty at a research university, computing researcher in a government lab, and entrepreneurial work in computing. Students were least interested in becoming a middle or high school computing teacher.



**CERP**

Computing Research Association  
Evaluation

This infographic is brought to you by the CRA's Center for Evaluating the Research Pipeline (CERP). CERP provides social science research and comparative evaluation for the computing community. To learn more about CERP, visit our website at <http://cra.org/cerp/>.

# Eben Tisdale Public Policy Fellows Visit CRA Government Affairs Office

By Brian Mosley, CRA Policy Analyst

On Tuesday, July 5, the CRA Government Affairs Office welcomed the 2016 class of [Eben Tisdale Public Policy Fellows](#) to the CRA Washington, D.C. office. These fellows, who are undergraduate students, spent the summer at high-tech companies, firms, or trade associations in Washington, learning the intricacies of technology policy. Additionally, they took two classes worth six credits at George Mason University, and attended briefings at institutions such as the U.S. Capitol, U.S. Department of State, World Bank, and Federal Reserve. The fellows visited the office to attend a presentation by Brian Mosley, policy analyst in the CRA Office of Government Affairs, that covered the policy concerns and issues the association works on and attempts to influence at the federal level.

This year's Tisdale Fellow for CRA is Satoe Sakuma (second from left). Sakuma is a senior at Boston University, pursuing a double major in computer science and international relations with a focus in East Asian economics. She's particularly interested in high-tech public policy, especially cybersecurity, as it allows her to utilize both areas of her

studies. This summer, Sakuma has been tracking key federal legislation and researching current federal cybersecurity policy and how it impacts university researchers. We've been thrilled to have her on staff!



*The Tisdale Fellows in the picture above are, from left to right: Asad Pabani, Hewlett Packard Enterprise; Satoe Sakuma; Rosemond Ho, BSA The Software Alliance; and Teresa Morin, Dell Computers.*



# Expanding the Pipeline – LATiNiTY: Empowering Latin American Women in Technology

by Natalie Gil and Jocelyn Simmonds



The Latinas in Computing (LiC) community was established with the help of The Anita Borg Institute for Women in Technology

(ABI) at the 2006 Grace Hopper Celebration of Women in Computing (GHC). Recognizing the status of Latinas as a double minority in North America, this community defines and implements strategies to improve the participation of the current and next generations of Latinas in technology. These dual strategies complement the work done by the Coalition to Diversify Computing (CDC) that focused on the recruitment and retention of minority students in computing-based fields in North America, and the work done by CRA-W to grow the research pipeline of women in computing. National Science Foundation (NSF) data shows Hispanic or Latino enrollment increased from 7.2% in 2002 to 9.9% in 2012 [1], but the hiring of underrepresented minorities seems to be “stuck in neutral.” [2]

What about Latina participation in computing outside of North America? Recent figures show an overall increase in female

participation in the Latin American labor force, reaching 52.6% in 2015 [2]. However, existing gender stereotypes in the region, like the expectation that women should be primary caregivers, as well as a lack of professional development opportunities, means that women in Latin America are shying away from STEM careers like computing. Compared to North America, [3] we have much work ahead of us in Latin America; our governments have only just started focusing on improving female participation in STEM careers as critical safety issues like violence against women have priority, leaving behind education and other initiatives, especially for women in STEM. Several programs that target the introduction of STEM topics to K-12 girls have appeared, like Digigirlz and Epic Queen. However, these programs have not been systematically applied and adopted within the region. In the case of higher education, some countries and organizations offer scholarships to study abroad, such as CONACYT in Mexico, Colfuturo in Colombia, and Pronabec in Peru, in order to encourage female and male students to pursue their studies abroad and then contribute back to their country.

What can a U.S.-based organization like LiC do to improve the female participation in computing in Latin America?

Like many LiC members, the authors of this article met at

a Grace Hopper Celebration. We are both Latin Americans that decided to continue their graduate studies in North America (Natalie at the Carnegie Mellon University, Jocelyn at the University of Toronto). We both returned to Latin America after completing our studies: Natalie to industry and Jocelyn to academia. This put us in a unique position, allowing us to leverage our personal networks to reach a larger audience within Latin America.





After almost two years of planning, the result was LATiNiTY, the first conference for Latin American Women in Technology, held in Santiago, Chile during November 2015. Our goal as general co-chairs of this conference was to bring together people

and organizations from all over Latin America to discuss the role of women in computing in the region, as well as issues affecting women in technology. Those organizations include Women in Technology, Girls in Tech, Epic Queen, MenTe, Sula Batsu, Ada ITW, Rails Girls, Codies, Mulheres Na Computação, and Technically Speaking, among others. We also wanted to inspire the next generation of Latinas, giving participants a platform to show their work and to network with women in the region that share their interest and passion for technology.

We are quite pleased with our experience in Chile. With more than 100 conference registrants, and more than 400 attendees from 14 countries – including a 6% male representation – the conference was conducted in three different languages (Spanish, Portuguese and English) since we wanted to enhance participation of native Spanish and Portuguese speakers and also expose them to international presenters and help them discover new opportunities in academia and industry, worldwide. Our call for participation was quite successful for a new conference; we accepted 51 talk proposals in three tracks: academic, industry, and society. The purpose of the academic and industry tracks was to give women in these areas an opportunity to present projects that they are leading or working on. The society track let people and organizations showcase initiatives carried out during 2014-2015 to promote the participation of women in computing in Latin America.

A post-conference survey showed that 82% of the surveyed LATiNiTY attendees rated the conference as Very Good/Excellent, and 91% are Likely/Extremely prone to attend future editions of this conference. We believe that our success can be explained by several factors. First, LATiNiTY 2015 was organized as part of a larger conference, Jornadas Chilenas de Computación, an annual conference that has been hosted in

Chile for more than 30 years. This meant that academic and student speakers could send papers to co-located workshops and thus obtain funding from their universities to cover the costs of travel to LATiNiTY. We also had high-quality keynote speakers and panelists, which included renowned women from Microsoft, Facebook, and Oracle.

To enhance the experience of the attendees, we also hosted several additional activities. Our Platinum and Gold sponsors participated in a career fair, and senior women participated in a senior technical women panel, providing insightful advice to students and young professionals. Selected students participated in a student research competition, presenting their work in a plenary session, with an audience award for the best talk. Two renowned entrepreneurs and angel investors hosted a workshop for novice entrepreneurs, answering the type of questions that usually arise during the early stages of new projects. This workshop complemented the Product Visioning Challenge in which students teamed up at the conference to work on devising tech solutions to specific problems that affect Latin American women. We also arranged a screening, for the first time in Latin America, of the documentary “CODE: Debugging the Gender Gap,” which exposes the dearth of American women and minority software engineers.



We could not have accomplished all this without our lead volunteers: Luza Jaramillo (general advisor), Valeria Herskovic (academic chair), Rosa Enciso (industry chair), Cecilia Bastarrica (society chair), Alejandra Acuña (local chair) and Carolina Hadad (scholarship chair). They coordinated the work of approximately 50 female and male volunteers from all over Latin America. We also had the generous support from Microsoft (Bing and Azure), Google, The Anita Borg Institute, Women Techmakers, ThoughtWorks, The Institute for Advanced Analytics, and ACM-W. This funding meant that we could provide scholarships to several outstanding students from the region, as well as offer some travel and registration scholarships to professors and professionals.

We still have a lot of work ahead of us. For starters, we want to make LATiNiTY an annual conference, with each year's event being hosted in a different Latin American country. Leveraging the community that grew around LATiNiTY 2015, reflected in the thousands of hits and hundreds of women and men followers that LATiNiTY has attracted on the various social media platforms, we launched a call for organization. As a result, a team from Arequipa, Peru is already organizing LATiNiTY 2017, and 2018 will find us in Bogota, Colombia. We hope that LATiNiTY will be a rallying point for women in computing, empowering them to use technology to improve the lives of people throughout Latin America.

But we also have to think globally, since there is a high level of migration within Latin American countries and between Latin America and the U.S. CRA-W and ACM-W [4,5] have made important inroads into improving the awareness of gender issues in computing, but have low visibility within the region. For example, there are only 3 active ACM-W student chapters in Latin America (150 active chapters exist worldwide) [6].

How can we work with these organizations to bring programs like the CRA-W Grad Cohort Workshop [7] and ACM-W Student Chapters and Celebrations [8] to Latin America? It is time to transcend geographical boundaries and address these issues as a global community.

The LATiNiTY Organization Committee can be contacted at [www.latinity.info](http://www.latinity.info) and [latinity@latinity.info](mailto:latinity@latinity.info). LATiNiTY aims to provide opportunities for organizations like companies and universities to recruit talent, and to give attendees firsthand information about those opportunities.

Natalie Gil is a Sloan Fellow at the Massachusetts Institute of Technology. Jocelyn Simmonds is an assistant professor of computer science at the University of Chile.

- [1] [NSF Bachelor's degrees awarded in science and engineering, by citizenship, ethnicity, race, and sex of recipients: 2002-12.](#)
- [2] ["Why Some Diversity Thinkers Aren't Buying The Tech Industry's Excuses,"](#) NPR all tech considered, July 19, 2016.
- [3] ["Women at Work Trends 2016,"](#) International Labor Organization, March 8, 2016.
- [4] [ACM's Women International home page.](#)
- [5] [ACM-W Council members at ITiCSE in Arequipa, Peru,](#) ACM-W Connections, June, 2016.
- [6] [International ACM-W Chapters directory.](#)
- [7] [About the CRA-W Grad Cohort Workshop.](#)
- [8] [ACM-W Chapters and Celebrations.](#)



# CCC Welcomes New Council Members and Leadership

By Helen Wright, CCC Senior Program Associate

July 1st starts a new term at CCC!

The new **Computing Community Consortium (CCC)** leadership, **Elizabeth Mynatt** and **Mark Hill** will assume their roles as **Chair and Vice Chair respectively for two-years**, while **Greg Hager** is stepping down after two years as Chair. The other members of the CCC Executive Committee include **Jennifer Rexford, Princeton University**, and **Ben Zorn, Microsoft Research**.

In addition to a new Exec Committee, four **new CCC Council members** will us join us for the start of their three-year terms, **Sampath Kannan, University of Pennsylvania**, **Maja Matarić, University of Southern California**, **Nina Mishra, Amazon Research**, and **Holly Rushmeier, Yale University**.

The CCC and CRA thank Greg Hager and those Council members whose terms ended yesterday for their exceptional dedication and service to the CCC and to the broader computing research community:

- ▶ **Limor Fix, Formerly Intel**
- ▶ **Tal Rabin, IBM Research**
- ▶ **Daniela Rus, Massachusetts Institute of Technology**
- ▶ **Ross Whitaker, University of Utah**



*CCC Council, March 2016*

The CCC Council is comprised of 20 members who have expertise in diverse areas of computing. They are instrumental in leading CCC's visioning programs, which help create and enable visions for future computing research. Members serve staggered three-year terms that rotate every July.

# Sociotechnical Cybersecurity Workshop Call For White Papers

By Khari Douglas, CCC Program Associate

The [Computing Community Consortium \(CCC\)](#) will be sponsoring a visioning activity on [Sociotechnical Cybersecurity](#). As a part of this effort, the [workshop organizing committee](#) has released a call for white papers in order to both assist us in organizing the workshop and in selecting attendees. Authors of informative and well-crafted white papers may be invited to the Sociotechnical Cybersecurity workshop.

## Sociotechnical Cybersecurity Workshop Call For White Papers

We are holding a [Computing Community Consortium](#)-sponsored workshop in the first half of 2017 with the goal of developing a small set of grand challenges to set research directions for the discipline of cybersecurity, with the understanding that the systems requiring cybersecurity are sociotechnical, and so the approaches must be firmly sociotechnical as well. Workshop attendance will be by invitation only and travel expenses will be provided. We seek short white papers to both assist us in organizing the workshop and in selecting attendees.

A sociotechnical approach to cybersecurity recognizes that the science and technology deployed to protect and

defend our information and critical infrastructure must consider human, social, organizational, economic, and technical factors, as well as the complex interaction among them, in the creation, maintenance, and operation of our systems and infrastructure. Furthermore, measuring the efficacy and efficiency of different approaches empirically, economically, or mathematically is often a sociotechnical issue.

This workshop is motivated by the new [federal R&D strategic plan in cybersecurity](#), released in January 2016, that engages the sociotechnical nature of the systems that we are securing and that emphasizes the need for understanding the efficacy of different approaches. To make meaningful progress in sociotechnical cybersecurity requires innovation driven by informational and experiential diversity. Workshop attendees will be drawn from a broad set of disciplines in the social, behavioral, and economic sciences, as well as from computer science and data analytics. Attendees will also be drawn from academics, industry, and the public sector.

To better understand the breadth and nature of sociotechnical cybersecurity issues, we are soliciting **white papers of no more than two pages in length** that describe and motivate a **novel grand challenge in cybersecurity**. Grand challenges are difficult to solve, require major advances in knowledge and capabilities, and often drastically alter the boundaries of established disciplines. Effective cybersecurity grand challenge problems should be sociotechnical, and can consider diverse contexts such as the individual, the organization, or society. We are especially interested in problems that advocate an evidence-based sociotechnical cybersecurity approach, that integrate the best research evidence with diverse cybersecurity expertise, and that broaden the consideration of information and communication technology user characteristics.

White papers should:

- Describe the problem to be solved, and why it is important



- ▶ Articulate why the problem rises to the level of a grand challenge
- ▶ Explain why the grand challenge requires a sociotechnical approach and which communities (academic, policy, industry, etc.) and disciplines need to be engaged in solving it

Sample topics could include but are not limited to:

- ▶ Develop a holistic approach to phishing that takes into account human behavior, social engineering, technology-based approaches, and organizational policy.
- ▶ Study combined behavioral, economic, and technology-based approaches to the Internet of Things that will allow for controlling or closing attack surfaces created by internet-enabled sensors and actuators.
- ▶ Calculate the total costs of cyberattacks, cyberincidents, and data breaches, as well as the total costs to deter such events.
- ▶ Develop methods that deter and defend against attacks waged using social media that create confusion and destabilize societies.
- ▶ Develop economic and legal approaches that can lead to changes in federal and corporate policies that currently reduce our abilities to protect cyberinfrastructure.

A planning meeting before the workshop will develop the workshop agenda, and these white papers will be part of the discussion. Some of the white paper authors may be invited to participate in this planning meeting.

**Please submit your white paper by September 30, 2016.**

We will accept submissions via email to [scsinfo@cra.org](mailto:scsinfo@cra.org).

For more information, please visit [here](#). Should you have any questions, please contact [scsinfo@cra.org](mailto:scsinfo@cra.org).

Thank you,

The organizing committee:

[Lorenzo Alvisi](#), professor of computer science at the [University of Texas, Austin](#)

[Deanna Caputo](#), principle behavioral psychologist, [MITRE](#)

[Paul Dourish](#), professor of informatics, Donald Bren School of Information and Computer Sciences, [UC Irvine](#)

[Stephanie Forrest](#), distinguished professor of computer science, [University of New Mexico](#)

[Qing Hu](#), professor of information systems and associate dean for Academic Initiatives and Innovation in the Zicklin School of Business at Baruch College – the [City University of New York](#)

[Brian LaMacchia](#), director of security and cryptography, [Microsoft Research](#)

[Oded Nov](#), professor, department of technology management and innovation, Tandon School of Engineering, [New York University](#)

[Sasha Romanosky](#), policy researcher, [RAND Corporation](#)

[Stefan Savage](#), professor in the department of computer science and engineering, [UC San Diego](#)

[Timothy Summers](#), professor and director of innovation, entrepreneurship, and engagement in the College of Information Studies, [University of Maryland](#)

[Susan Winter](#), associate dean for research, College of Information Studies, [University of Maryland](#)

[Heng Xu](#), Professor in the College of Information Sciences and Technology, [Pennsylvania State University](#)



# Can Research-Based Innovations in Computing Solve Compelling Societal Problems?

By Greg Hager, Johns Hopkins University

## COMPUTING RESEARCH ADDRESSING NATIONAL PRIORITIES AND SOCIETAL NEEDS



Computing has become a powerful tool for productivity and connectivity. It powers companies, it fuels scientific research, and it delivers entertainment and social engagement for billions of people.

Could research-based innovations in computing also become a catalyst for addressing compelling societal problems?

To explore this question, the [Computing Community Consortium \(CCC\)](#) organized a two-day symposium titled [Computing Research: Addressing National Priorities and Societal Needs](#). This meeting brought together more than 130 in-person participants and more than 1,000 online viewers to raise the visibility of work that connects innovative computing research to major societal needs. The seven panels, two plenaries, and an early-career poster session, all of which are now available on the [CCC website](#), presented numerous ideas that could reshape our world.

Here are just a few thought-provoking examples:

- ▶ The annual cost of healthcare in the U.S. is about \$3 trillion. By some estimates, a third of that total could be saved through more efficient and effective delivery of care – an amount equal to the entire contribution of the IT industry to the national GDP. There is no question that computing will play a large role in achieving these savings.
- ▶ The modern urban environment is increasingly challenged by traffic congestion, aging infrastructure, and socioeconomic disparity. Creating flexible instrumentation at a citywide scale could provide a platform to acquire data resources that could transform the management of all aspects of urban life, such as improving traffic, enhancing air quality, and reducing crime.



- ▶ The world population is expected to exceed 8 billion persons by 2025. Climate variation threatens our ability to grow food even as more than 10% of the world population is malnourished. Better models that increase food production efficiency by just 10% could save tens of millions of lives while sparing the environment from long-term damage.
- ▶ The world's population is aging, leading to both direct and intangible costs in terms of care needs, lost time, stress, and other social burdens. Could technology enable an elderly adult to live more safely and independently at home? Beyond the direct financial savings, the improvement in life quality would be immeasurable.
- ▶ Data will play a key role in nearly all aspects of future society, but how do we realize the benefits of data while ensuring we maintain control of the data and not unnecessarily sacrifice privacy?

Achieving these goals requires finding ways to fund work that spans the gap between basic research and societal needs. The final plenary and panel session, which included representatives from government, industry, and foundations,

discussed how to expand the impact and influence of basic computing research in shaping our society.

The 133 persons in attendance included 38 early-career researchers who participated in a [poster session](#) and more than 25 attendees from federal agencies such as [National Science Foundation](#), [National Institute of Standards of Technology](#), [The Networking and Information Technology Research and Development \(NITRD\) Program](#), [Office of Science and Technology Policy](#), [National Institutes of Health](#), and [U.S. Department of Agriculture](#).

In addition to the [videos](#) and [slides](#) of the symposium, CCC white papers on symposium topics such as [Next Generation Robotics](#), [Industry-Academia Collaborations](#), [Smart Communities Internet of Things](#), and [Next Generation Computing Challenges](#) are available [here](#).

In the end, we are limited only by our resolve and by our creativity to connect computing research to these societal challenges. We hope that you not only enjoy and learn from the symposium resources, but also find new perspectives on how your research may contribute to our collective future.

Please use the links below to read about the symposium's sessions.

[Computing Research Symposium Poster Session](#)

[Learning Health Systems and Successful Aging](#)

[Life Long Learning \(Education and Workforce\)](#)

[Computing in the Physical World](#)

## Join ACM and Shape the Future of Computing!

For over 50 years, ACM has helped computing professionals to be their most creative, connect to peers, and see what's next.

Joining ACM means you dare to be the best computing professional you can be.

**Join ACM today and save 25% at**  
**[www.acm.org/KeepInventing/CRA](http://www.acm.org/KeepInventing/CRA)**

ACM-W supports, celebrates, and advocates internationally for the full engagement of women in all aspects of the computing field.



Association for  
Computing Machinery

[women.acm.org](http://women.acm.org)



**Be Creative. Stay connected. Keep inventing.**

# Announcements

## **Congratulations to David Patterson – 2016 Tapia Award Winner**



Former CRA Board Chair David Patterson was recently named the recipient of the 2016 Richard A. Tapia Achievement Award for Scientific Scholarship, Civic Science and Diversifying Computing.

From the citation:

The Richard A. Tapia Achievement Award for Scientific Scholarship, Civic Science and Diversifying Computing is awarded yearly to an individual who demonstrates significant leadership, commitment and contributions to diversifying computing. Dr. David Patterson has been selected as the 2016 Richard A. Tapia Award recipient.

Dr. David Patterson grew up in Southern California body surfing and listening to the Beach Boys, who were a local band. He was the first of his family to graduate from college, earning three degrees from UCLA before joining UC Berkeley in 1976. Thus, his whole world since he was a teenager has been large public universities.

His most successful projects have likely been Reduced Instruction Set Computers (RISC), Redundant Arrays of Inexpensive Disks (RAID), and Network of Workstations (NOW). All three projects helped lead to multibillion-dollar industries. This research led to many papers and six books, with the best-known book being Computer Architecture: A Quantitative Approach, co-authored by John Hennessy, and the most-recent book being Engineering Software as a Service, co-authored by Armando Fox. His current research is open source computer architecture (RISC-V) and hardware for computer security.

In the past, he served as Director of the Parallel Computing Lab, Director of the Reliable And Distributed Systems

Lab, Chair of UC Berkeley's CS Division, Chair of the Computing Research Association (CRA), and President of the Association for Computing Machinery (ACM). He was General Chair of Tapia 2011, serves on its steering committee, and supports large UC Berkeley contingents that attend the conferences.

Patterson will be presented with the Richard A. Tapia Award at the Tapia Conference on September 16, 2016.

## **Carnegie Corporation of New York Honors Farnam Jahanian**

CRA Board Member Farnam Jahanian, who is provost of Carnegie Mellon University (CMU), was recently recognized the the Carnegie Corporation of New York's "Great Immigrants – The Pride of America Campaign." The CMU news site reported:



Since 2006, the corporation, which was established by CMU founder and Scottish immigrant Andrew Carnegie, has recognized the contributions of naturalized citizens with the "Great Immigrants" campaign. This year's honorees will be saluted in public service announcements appearing in print and on a companion website.

"I thank the Carnegie Corporation for this wonderful honor," Jahanian said. "Immigration has been a cornerstone of the American experiment. The ideals of freedom, equality, and opportunity unify us as a nation while the realization of these values celebrates our diversity. Through his dedication to advancing education, Andrew Carnegie provided opportunities to pursue this American Dream."



# Public Workshop on the Growth of Computer Science Undergraduate Enrollments

On Monday, August 15, the National Academies of Sciences, Engineering, and Medicine will hold a [public Workshop on the Growth of Computer Science Undergraduate Enrollments](#).

This workshop is being convened as an information-gathering session of the Academies' [Study on the Growth of Computer Science Undergraduate Enrollments](#) sponsored by the National Science Foundation and co-chaired by Susanne Hambrusch, professor of computer science at Purdue University, and CRA Board Vice-Chair, and Jared Cohon, president emeritus of Carnegie Mellon University.

The study committee is charged with identifying 1) drivers of recent increases in enrollments in computing courses and future enrollments prospects, 2) institutional strategies for responding to enrollment demands, and 3) the associated implications and opportunities for diversity in the computing disciplines. The study will yield a report containing findings and recommendations, which will be published by the National Academies Press.

The workshop will include discussions with invited experts around themes of importance to the study, including the current importance of computing to a range of fields, computing workforce trends, impacts of enrollment management on diversity, and the role and future of computing in universities.

This workshop is open to the public. If you would like to attend, please register [here](#).

The study committee welcomes additional input (especially that which is data-driven). Computer science, computer engineering, and information science enrollments are all of interest. Comments may be sent to: [csenrollments@nas.edu](mailto:csenrollments@nas.edu).

If you have questions about this activity, please contact Emily Grumbling ([egrumbling@nas.edu](mailto:egrumbling@nas.edu)).

**CALL FOR PAPERS**  
**IEEE Journal of Selected Topics in Signal Processing**  
**Special Issue on Signal Processing and Machine Learning**  
**for Education and Human Learning at Scale**

**Aims and Scope**

The surge in popularity of Massive Open Online Courses (MOOCs) and other online and blended learning platforms has demonstrated the potential of the Internet for scaling education. While advances in technology have enabled content delivery to massive numbers of students, these platforms remain limited in their ability to provide an effective learning experience for each individual.

Recent advances in machine learning and signal processing offer promising avenues to move beyond this “one size fits all” educational approach. The key is that today’s learning technology platforms can capture big data about learners as they proceed through courses. Examples of learning data include performance on homeworks and exams, click actions made while watching lecture videos or interacting with simulations, the social learning networks formed among the students, and the content posted on discussion forums. Going even further, prototype platforms are being built that use cameras and other sensors to continuously monitor students’ affect and engagement. The large volumes of empirical learning data being collected present novel opportunities to study the process of student learning, to design systems that improve learning at scale by closing the learning feedback loop.

This special issue of IEEE J-STSP will showcase the research from the signal processing community that is providing leadership in advancing effective learning at scale. Particularly of interest to this special issue will be novel methods for defining and extracting signals of a student’s behavior and performance from big learning data and using these measures in the design of intelligent algorithms and systems.

**Topics of interest** in the special issue include (but are not limited to):

- Processing and Representing Learning Behavioral Data
- Generative/Low Dimensional Modeling of Student Learning
- Learner Knowledge Tracing and Performance Prediction
- Social Learning Networks
- Algorithms for Identifying Learner Collaborations
- Automating Course/Content Individualization, Automatic Grading Methods, Automatic Feedback Generation
- Learning Analytics with Actionable Intelligence for Instructors
- Algorithms for More Effective Peer Grading Allocation
- Relationships between Learning Behavior, Performance, and Content
- Machine Vision Algorithms for Processing Student Biometric Data
- Trials for Demonstrating Efficacy for Learners and/or Instructors

**Important Dates:**

Manuscript submission due: October 1, 2016  
First review completed: December 15, 2016  
Revised manuscript due: February 1, 2017  
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# Professional Opportunities

## Cal Poly, San Luis Obispo

### *Tenure-Track Position – Cybersecurity*

The Computer Science Department at Cal Poly, San Luis Obispo, invites applications for a full-time, tenure-track Computer Science faculty position at the Assistant or Associate Professor rank beginning as soon as 4/3/2017 but no later than 9/7/2017. Rank and salary are commensurate with qualifications and experience. Qualified candidates with industry experience are encouraged to apply. This position, sponsored for the first three years by Northrop Grumman Corporation, will be named the Northrop Grumman Professorship for the duration of the funding. Duties include teaching undergraduate and master's level courses, enriching the curricula with new courses in computer security, conducting research, and providing service to the department, the university, and the community. A doctorate in Computer Science, Computer Engineering, Software Engineering or a closely related field is required. Particular areas of interest include: software security, malware analysis, mobile security and web security.

Cal Poly emphasizes Learn by Doing which involves extensive lab work and projects in support of theoretical knowledge. To this end, the Computer Science and Software Engineering Department maintains an array of modern computing facilities and specialized labs for instructional and faculty support. In particular, Cal Poly supports two cutting-edge laboratories dedicated to teaching and conducting research in computer security. In addition, a university-wide Center for Cybersecurity has been established for the continued development of the university's capabilities in cybersecurity research and education. A new cybersecurity training facility to be located at Camp San Luis Obispo is in development, which operates

under the auspices of the California National Guard. Cal Poly will serve as a partner in the upcoming facility, and collaborative efforts from computer science faculty will be desirable.

Cal Poly's Computer Science Department offers Bachelor's Degrees in Computer Science, Software Engineering, and Master's Degrees in Computer Science. Also, the Computer Science and the Electrical Engineering departments jointly offer a B.S. degree in Computer Engineering. U.S. News & World Report ranks the Computer Science Department among one of the top primarily undergraduate public programs in the nation. For further information about the department, visit [csc.calpoly.edu](http://csc.calpoly.edu)

For full details, qualifications and application instructions (online faculty application required) visit [www.calpolyjobs.org/applicants/Central?quickFind=165382](http://www.calpolyjobs.org/applicants/Central?quickFind=165382).

Review Begin Date: October 3, 2016.

## Cleveland State University

### *Visiting Professor in Computer Science/Engineering*

**Job Summary:** Cleveland State University is searching for active, culturally and academically diverse faculty of the highest caliber.

The Department of Electrical Engineering and Computer Science at Cleveland State University invites applications for a visiting professor position in the area of computer science/engineering. The position begins in August 2016 and ends in May 2017. Responsibilities include teaching at both the undergraduate and graduate level, and student advising. The teaching requirement is between 12 and 16 credit hours (three or four courses) per semester. Salary will be commensurate with education and experience.

For full consideration, candidates must submit a cover letter, detailed curriculum vitae, teaching portfolio, and names and contact information of at least three references at <http://hrjobs.csuohio.edu/postings/6056>. Review of applications will begin immediately. Full consideration will be given to applications submitted no later than June 1, 2016.

The Department of Electrical Engineering and Computer Science is the largest in the Washkewicz College of Engineering, with over 550 Bachelor's students, over 400 Master's and Doctoral students, 26 full-time faculty members, and over \$5 million in research funding. Current research areas in the department include Artificial Intelligence, Computer Science Education, Embedded Systems, Human Motion and Control, Mobile Computing, Network Security and Privacy, Programming Languages, Software Engineering, Robotics, and Wireless Sensor Networks. Additional information about the department is available at <http://www.csuohio.edu/eecs>.

Cleveland State University is a major university committed to excellence in research and teaching. The August 21st edition of the Chronicle of Higher Education recognizes CSU as #1 in the nation for the greatest percentage increase in total research funding, #1 in the nation for the greatest percentage increase in federal research funding, and #12 in the nation for the greatest percentage increase in corporate research funding.

It is the policy of Cleveland State University to provide equal opportunity to all qualified applicants and employees without regard to race, color, religion, sex, sexual orientation, gender identity and/or expression, national origin, age, protected veteran or disabled status, or genetic information.

**Offer of employment is contingent on satisfactory completion of the University's verification of credentials**

# Professional Opportunities

**and other information required by law and/or University policies or practices, including but not limited to a criminal background check. Hiring is contingent on maintaining existing levels of funding from the state of Ohio.**

[Apply Here](#)

## Georgetown University

*Dean of Georgetown College*

Georgetown University invites inquiries, nominations, and applications for the position of dean of Georgetown College. The dean is the academic leader of Georgetown College, the oldest school within the university, home to 26 academic departments and 12 interdisciplinary programs across the arts and sciences. Inquiries, nominations, and applications are invited. Review of applications will continue until the position is filled.

For fullest consideration, materials should be received by September 23, 2016. Candidates should provide a curriculum vitae, a letter of application that addresses the responsibilities and requirements described in the leadership profile available at <http://www.wittkiewer.com>, and the names and contact information of five references. References will not be contacted without prior knowledge and approval of candidates. These materials should be sent via e-mail to Georgetown's consultants Jean Dowdall, Robin Mamlet and Elizabeth Bohan at [GeorgetownCollegeDean@wittkiewer.com](mailto:GeorgetownCollegeDean@wittkiewer.com).

The consultants can be reached by telephone through the desk of Leslie Donahue at 630-575-6178.

## Harvard University

*Senior Lecturer in Computational Science and Data Science*

The Harvard John A. Paulson School of Engineering and Applied Sciences (SEAS)

seeks outstanding applicants for the position of Senior Lecturer in Computational Science and Data Science in the Institute for Applied Computational Science (IACS), with an expected start date of January 1, 2017. The position is for five years and is renewable contingent upon performance, enrollments, and curricular need.

The Senior Lecturer will have teaching responsibility for three computational or data science courses per year. In addition, the Senior Lecturer will assist in the development and implementation of the Institute's curricular vision through collaboration with faculty partners in Computer Science, Applied Mathematics and Statistics, as well as other areas and institutes across Harvard. The Senior Lecturer will be a member of the IACS team and have an opportunity to shape Harvard University's vision for education and research in the strategically important areas of computational and data science. Home to a master's program in computational science and engineering, IACS is a key member of the group leading the growth and development of computational science and data science education at Harvard University.

**Duties and Responsibilities:**

**Teaching:** teach or co-teach three graduate-level courses per year with a focus on interdisciplinary collaboration that allows students to develop problem-solving skills in computational science and data science.

**Curriculum development:** assist the Institute for Applied Computational Science in the continuing assessment and improvement of the Institute's curriculum in order to stay abreast of the latest developments in computational science and engineering, in particular with respect to the emerging field of data science; assist in development of computational content for existing courses across SEAS, and develop new courses as needed with a focus on hands-on, project-

based classes that allow students to work collaboratively.

**Student advising:** serve as an intellectual mentor and advisor to students; advise master's students in their development of independent study projects and theses, develop proposals for integrated graduate training and faculty activities that provide research experiences and thesis projects for students, serve on admissions committee for master's programs; review and approve student final exams and project presentations.

**Programmatic:** contribute to the Institute's extracurricular program of conferences, student competitions, open houses and workshops, advising sessions, special events, and co-curricular research and academic visits, with a goal of building community, skill and knowledge in computational and data science at Harvard.

**Research:** conduct independent and collaborative research. Participate in the scientific and research communities in your discipline.

Candidates are required to have a doctoral degree in Computer Science, Applied Mathematics, Statistics or another field of science or engineering, as well as programming skills in some programming language. In addition, we seek candidates with a record of teaching at the graduate level and experience developing courses in computational science and engineering or data science. Broad knowledge in the computational methods and approaches required for modeling, exploration and analysis of data, documented through scientific publications, or patents and projects executed in an industrial setting is a benefit. Candidates with documented ability to mentor graduate students, excellent communication, writing, and presentation skills and a strong commitment to education and mentoring are preferred.

# Professional Opportunities

Required documents include a cover letter, CV, a one-page statement of teaching philosophy and interests, and course evaluations for all recently taught courses. Candidates are also required to submit the names and contact information for three references. We encourage candidates to apply by September 1, 2016, but will continue to review applications until the position is filled.

Applicants will apply online at:  
<http://academicpositions.harvard.edu/postings/7028>.

Harvard is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.

## Imperial College London

*Department of Computing*

*Faculty Positions in Computer Science*

The Department of Computing at Imperial College London invites applications for two full-time, permanent position at lectureship level (or exceptionally at senior lectureship level). Lectureships are comparable to American Assistant Professorships. We are interested in applications from outstanding candidates in any area of Computer Science.

The Department of Computing is one of the largest Computing departments in the UK, and is a world leader in academic research in Computer Science. Its research has been ranked in the top three in the UK in the [Research Excellence Framework](#) undertaken by the Higher Education funding Council for England in 2014. [The Complete University Guide](#) ranks the Department's teaching as second in Computer Science.

Imperial College London is a world-leading university whose reputation for excellence in teaching and research attracts students

and staff of the highest international quality. The three Faculties: Engineering, Natural Sciences and Medicine, together with the Business School explore the interface between science, medicine, engineering and management.

You will have a PhD (or equivalent) in Computer Science or a relevant field. You should be able to demonstrate an ability to establish outstanding independent research, to contribute to undergraduate and postgraduate teaching programmes in the Department and to supervise PhD students.

For further information on the Department visit <http://www.imperial.ac.uk/computing/>.

As this post is exempt from the Rehabilitation of Offenders Act 1974, a satisfactory (standard/enhanced/enhanced for regulated activity) Disclosure and Barring Service check will be required for the successful candidate. Further information about the DBS disclosure process can be found at <http://www.homeoffice.gov.uk/agencies-public-bodies/dbs/> or by telephoning 0870 90 90 811.



### SCHOOL OF INFORMATICS AND COMPUTING

INDIANA UNIVERSITY  
Bloomington

#### Intelligent Systems Engineering Department Director of Curriculum and Instruction

The School of Informatics and Computing at Indiana University Bloomington invites applications for a non-tenure track Director of Curriculum and Instruction, who will report to the chair of the Department of Intelligent Systems Engineering and to begin as early as August 2016. The Director's primary responsibilities are two-fold: 1) course preparation and 2) curriculum and instruction management.

The Director of Curriculum and Instruction's primary role is to provide support for the vision and direction for the Intelligent Systems Engineering (ISE) department consistent with the University's mission under the leadership of the Department Chair and Faculty of the School of Informatics and Computing. Working collaboratively in a participative environment, the Director of Curriculum and Instruction provides academic leadership, faculty support, planning, coordination and guidance to the department's curriculum. This position works to support an environment conducive to effective teaching and scholarly achievement. Reports directly to the Department Chair of Intelligent Systems Engineering. Salary will be commensurate with qualifications and experience.

Education Requirements: Master's degree, required; Doctoral degree, preferred

In addition to education requirements, this position requires the following:

- Excellent analytical, quantitative, verbal and written communication skills;
- Ability to collaborate well with students, faculty and institutional leadership;
- Strong project management skills;
- Ability to identify and successfully engage appropriate stakeholders; and
- Attention to detail and timelines.
- Interest in online education.
- Experience in engineering or related curriculum/teaching.

Interested candidates should submit a letter of application, a current CV, and names and contact information for three references using the submissions link at: <http://indiana.peopleadmin.com/postings/2470>

For full consideration completed applications must be received by July 6, 2016. The search will remain open until the positions are filled.

Questions may be sent to [hiring@soic.indiana.edu](mailto: hiring@soic.indiana.edu) or by mail to ISE Curriculum and Instruction Search 901 E 10th Street, Bloomington, IN 47408.

*Indiana University is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity, national origin, disability status or protected veteran status.*



# Professional Opportunities

## How to apply:

Our preferred method of application is online via our website <http://www.imperial.ac.uk/employment> (please select "Job Search" then enter the job title or vacancy reference number **EN20160227LE** into "Keywords"). Please complete and upload an application form as directed.

In addition to the application form, candidates should attach:

- A cover letter of up to 2 pages summarising their key research achievements to date, their research plans,

and a statement indicating how their teaching abilities can contribute to the Department's degree programmes.

- A full CV.
- A publication list in which for each paper the following are clearly listed:
  - Whether the paper is a full paper, short paper, poster or abstract.
  - For any conference papers, the 2014 CORE rating of the event (<http://portal.core.edu.au/conf-ranks/>), should the event be ranked by CORE.

- For any journal paper, the 2015 SJR rating (<http://www.scimagojr.com/journalrank.php?area=1700>) of the journal and its area quartile ranking (Q1-Q4).
- A 100-words statement for up to 4 publications of their choice highlighting the key contributions made by the applicant in that work.

Applicants should contact three referees before applying to ensure their willingness to provide a reference for the present post. Referees should be provided with a copy of the applicant's CV as this will not be forwarded when references are sought.

For queries regarding the application process, applicants should contact Mrs Margaret Hall: [margaret.hall@imperial.ac.uk](mailto:margaret.hall@imperial.ac.uk)

[Imperial Managers lead by example.](#)

**Closing date: 1st September 2016 (Midnight GMT)**

*Committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer, and are working in partnership with GIRES to promote respect for trans people.*

[Imperial College Pay Scales](#)



**SCHOOL OF INFORMATICS  
AND COMPUTING**  
INDIANA UNIVERSITY  
Bloomington

**Intelligent Systems Engineering Department  
Director of Programs**

The School of Informatics and Computing at Indiana University Bloomington invites applications for a non-tenure track Director of Programs position in the Intelligent Systems Engineering department to begin as early as August 2016.

The Director of Programs' primary role is to provide strategic leadership for the Intelligent Systems Engineering (ISE) department and Digital Science Center (DSC) within the School of Informatics and Computing (SOIC) with respect to collaboration both within the university (IUB) and with external institutions. A key goal is to identify, pursue, and manage grants that fit the strategic plan for ISE and DSC. These collaborations would involve working with ISE, DSC, and other faculty and supervisors to identify opportunities and then a variety of outreach activities using in-person and virtual meetings. Leadership of proposal preparation and report writing is required. Experience in state of the art research needed to be able to interact as peer with collaborators. Salary will be commensurate with qualifications and experience.

Specific duties of the Director of Programs include:

- 70% Grant Development: Grant development, writing, and management for Intelligent Systems Engineering and the Digital Science Center. Lead the writing of new grants to state, federal, and international granting agencies to obtain funding for collaborations identified in activities described above. Monitor and evaluate these grants and the processes of both successful and unsuccessful grant applications.
- 30% Strategic Planning: Assist Department Chair and other ISE leadership with the development and implementation of a strategic plan, including setting and achieving specific priorities, objectives, and action items. Assist with the recruitment, appointment, and transition of new faculty scholars into ISE.

Candidates should possess a graduate degree (before August 2016) in Computer Science, Informatics, Information Science, or a related discipline, and must have two academic years' experience (may be part-time).

**Interested candidates should submit a letter of application, a current CV, and names and contact information for three references using the submissions link at: <http://indiana.peopleadmin.com/postings/2436>**

**For full consideration completed applications must be received by July 6, 2016. The search will remain open until the positions are filled.**

Questions may be sent to [hiring@soic.indiana.edu](mailto:hiring@soic.indiana.edu) or by mail to Julie Overfield, 901 E 10th Street, Bloomington, IN 47408.

*Indiana University is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity, national origin, disability status or protected veteran status.*

## Iowa State University

### Postdoctoral Researcher

Applications are invited for a postdoctoral position in the Panini project whose goals are to improve modular reasoning about concurrent software. For details and to apply see <http://www.cs.iastate.edu/~panini/positions/>

Iowa State University is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, or protected Veteran status and will not be discriminated against.

# Professional Opportunities



**SCHOOL OF INFORMATICS  
AND COMPUTING**  
INDIANA UNIVERSITY  
Bloomington

## Lecturer Positions in Intelligent Systems Engineering

The School of Informatics and Computing at Indiana University, Bloomington invites applications for non-tenure track lecturer positions in Intelligent Systems Engineering to begin as early as August 2016.

We are particularly interested in candidates who can prepare and deliver the courses needed in the following areas: Computer Engineering, Cyber-physical Systems, Nanoengineering, Neuroengineering, Environmental Engineering and Bioengineering

In addition to teaching responsibilities, lecturers will be expected to participate in course preparation in collaboration with faculty and the Intelligent Systems Engineering Department Chair.

Lecturers at Indiana University are valued members of faculty and 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. In addition to course responsibilities you will also be responsible for supervising Associate Instructors assigned to your classes, development of laboratory material, grading, and other duties as assigned. After successfully completing a probationary period, Lecturers will be eligible for long-term contracts and promotion to a Senior Lecturer position. Salary will be commensurate with qualifications and experience.

A Master's of Science (MS) or higher degree in a discipline closely related to our engineering specialties is required before the date of hire. Applicants should preferably have two academic years' experience (may be part-time). Qualified candidates must also provide evidence of teaching experience.

**Interested candidates should submit a letter of application with a list of typical courses they are prepared to teach, a curriculum vitae, a statement of teaching interests and accomplishments, and names and contact information for three references using the submissions link at:**

<http://indiana.peopleadmin.com/postings/2487>

**For full consideration completed applications must be received by July 15, 2016. The search will remain open until the positions are filled.**

Questions may be sent to [hiring@soic.indiana.edu](mailto:hiring@soic.indiana.edu) or by mail to ISE Lecturer Search, 901 E 10th Street, Bloomington, IN 47408.

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be teaching undergraduate and graduate courses in the Computer Science and/or Information Science fields. We have several openings and positions will begin in September 2016 or January 2017. Salary is competitive and promotional tracks are available.

## Qualifications

Candidates must have a PhD in Computer and/or Information Science, teaching experience strongly preferred.

## Posting Specific Questions

Would you be interested in teaching for the ALIGN program? The program is designed to teach students from all backgrounds (technical to liberal arts) and transition them to graduate work and successful careers in computer science. The program is also aimed at increasing diversity in the field. Applicants with interest and experience teaching basic CS concepts and commitment to student academic success are preferred.

(Open Ended Question)

## Additional Information

Additional information and instructions for submitting application materials may be found at the following web site: <https://neu.peopleadmin.com/postings/42791>

Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by the law. Northeastern University is an E-Verify Employer.

## Lund University, Sweden

*Associate Professor in Software Technology with starting grant*

The Computer Science department at Lund University, Sweden, invites applications for a faculty position as Associate Professor in Software Technology. The position is supported by the Wallenberg Autonomous Systems Program and includes a starting grant adequate to finance four postdocs/ PhD students over a period of 4 years.

Application deadline: September 15, 2016. For more information, see <https://lu.mynetworkglobal.com/en/what.job/jobID:I054I2/where:4/>

## Northeastern University

*Lecturer*

### Position Summary

The College of Computer and Information Science invites applications for the position of Lecturer(s). Primary responsibilities will

# Professional Opportunities



## Professor in Software Technology

The School of Computer Science and Communication at KTH Royal Institute of Technology invites applications for a newly created professorship in Software Technology supported by the Wallenberg Autonomous Systems Program (WASP), a 10 year research program funded by a 1.300 MSEK donation by the Knut and Alice Wallenberg Foundation, and with additional 500 MSEK funding provided by industry and participating universities.

We are looking for a person capable of leading the development of an industrially well-supported research group in Software Technology at the Department of Theoretical Computer Science.

The successful candidate will have an outstanding research record, demonstrated through a clear and innovative research vision along with research results, including software, and publications in conferences and journals of top quality. She/he should have a documented successful academic leadership, shown through influential research projects and research groups, and through collaboration with and impact on industry and society, including the academic world.

The professorship is part of a larger effort to strengthen software technology across several schools at KTH. This includes new center constructions where the successful applicant is expected to take a leading role, and the likely creation of additional new positions at more junior level over the coming years.

The position is supported by a starting grant of roughly 25 MSEK, adequate to finance a research group core consisting of several postdocs/PhD students over a period of 4 years.

KTH, [www.kth.se](http://www.kth.se), and the CSC school, [www.csc.kth.se](http://www.csc.kth.se), offers excellent working conditions and an attractive research environment, including a rich entrepreneurial tradition and a considerable potential for collaboration with world leading industrial companies across a range of branches. Stockholm is the center of a dynamic and attractive region with excellent living conditions for adults and children alike and a rich cultural scene.

For more information about the WASP program, see <http://wasp-sweden.org>.

For a more detailed announcement including information on how to apply, please visit [www.kth.se/en/om/work-at-kth/lediga-jobb](http://www.kth.se/en/om/work-at-kth/lediga-jobb).

Application deadline: 22 August 2016 11:59 PM CET

# Professional Opportunities

## Northeastern University

### Postdoctoral Research Associate

Northeastern University (Boston, MA) has one open Postdoc position in Networking, Security, and Algorithmic Transparency. We are looking for candidates with experience in empirical methods, measurement, networked systems building, and reverse engineering. The postdoc will work closely with faculty and students to develop research ideas, design experiments, conduct data analysis, and publish results. Initial appointment will be for one year, and will be

renewable for a second year, pending review of performance in the first year.

For more information, visit <https://neu.peopleadmin.com/postings/42972>

## Qatar University and Washington University, Saint Louis

### PostDoc Position in Cloud Networking

Qatar University and Washington University, Saint Louis are seeking a Postdoctoral Research Scientist to work on a joint project

in the field of cloud networking. The project aims to develop algorithms and systems for Inter-cloud Wide Area Networking (WAN) Delivery Platform for distributed Business Applications. The position is based in Doha at Qatar University campus. The team is led by Dr. Aiman Erbad (Qatar University), in close collaboration with Dr. Raj Jain (Washington University in Saint Louis, USA).

Applicants need to have a strong experience in cloud networking, software defined networking, network function virtualization, and/or security. Each applicant should

## Thinking the Future Zukunft denken

# RWTH AACHEN UNIVERSITY

Please send a cover letter stating research aims and a CV to:

**Dekan der Fakultät für Mathematik, Informatik und Naturwissenschaften der RWTH Aachen, Prof. Dr. Stefan Schael, 52056 Aachen.**

You can also send your application via email to [dekan@fb1.rwth-aachen.de](mailto:dekan@fb1.rwth-aachen.de). Please note, however, that communication via unencrypted e-mail poses a threat to confidentiality as it is potentially vulnerable to unauthorized access by third parties.

The deadline for applications is June 30<sup>th</sup> 2016.

This position is also available as part-time employment per request.

RWTH Aachen University is certified as a family-friendly university and offers a dual career program for partner hiring. We particularly welcome and encourage applications from women, disabled people and ethnic minority groups, recognizing they are underrepresented across RWTH Aachen University. The principles of fair and open competition apply and appointments will be made on merit.

## Full Professor (W3) in Data Science

Faculty of Mathematics, Computer Science, and Natural Sciences

We are seeking qualified applicants for teaching and research in the area of Data Science. The starting date is as soon as possible. Recognized expertise in the following areas is particularly welcome: Analysis, organization, storage, and efficient search of information in big heterogeneous data as well as data mining. Moreover experience in data management and scientific workflows for engineering, communication, and life-science applications would be helpful.

A Ph.D. degree is required; additionally, Habilitation (post-doctoral lecturing qualification), an exemplary record of research achievement as an assistant / an associate / a junior professor or university researcher and/or an outstanding career outside academia are highly desirable. Ability in and commitment to teaching are essential. The application should include supporting documents regarding success in teaching. German is not necessary to begin but will be expected as a teaching language within the first 5 years.

The holder of this position is expected to perform fundamental research in the area of storing and processing large and complex datasets and to implement and evaluate the results in application-oriented cooperations. Moreover interdisciplinary cooperation with the engineering departments and the natural sciences within RWTH as well as with the Jülich research center are desired. Within the CS department, this professorship should contribute to the coordination and further development of all data science activities. For detailed questions, please contact Prof. Dr. Leif Kobbelt.



# Professional Opportunities

have PhD in Computer Science or related field, with strong publication record, and excellent communication skills. Applications will be reviewed immediately and the review process will continue until the position is filled. Employment benefits include: Competitive tax-free salary, furnished accommodations or housing allowance, annual round-trip air tickets for the candidate and his/her dependents, educational allowance for candidate's children, health insurance to candidate and family members, and annual leave, all in accordance with Qatar University Human Resource policies.

To apply, candidates should email the following information to Dr. Aiman Erbad ([aerbad@qu.edu.qa](mailto:aerbad@qu.edu.qa)): CV, 1 page research statement, and 2 references.

## Santa Clara University

### *Assistant Professor*

The Department of Computer Engineering at Santa Clara University invites applications for one tenure-track Assistant Professor position starting in the 2017-2018 academic year. Applicants must hold a doctorate in computer science, computer engineering, or in a closely related field; have demonstrated a strong potential for high-quality research in computing; and have a strong commitment and ability to teach at both the undergraduate and graduate levels. To complement expertise of current faculty, address areas of strong interest to students, and enhance collaboration opportunities with local industries, the department is particularly interested in candidates with specialization in machine learning, programming languages, mobile computing, or system security. However, Silicon Valley is an area of broad and ever-changing technical interests and needs, and strong candidates will be seriously considered regardless of area of specialization.

The full-time teaching load is normally seven course equivalents per academic year (including lectures and supervision of labs, theses and projects), distributed across three quarters of ten weeks each. However, course release(s) may be approved for faculty actively involved in research. Salary is based on expertise and experience.

Santa Clara University (<https://www.scu.edu>) is a comprehensive Jesuit, Catholic university, located in the heart of Silicon Valley. Distinguished by the highest retention rate of any US master's university, and ranked second among all master's universities in the West by U.S. News and World Report, Santa Clara University is California's oldest operating institution of higher education. The School of Engineering is committed to improving the human condition through engineering education, practice, and scholarship, promoting the University's mission to 'fashion a more humane, just and sustainable world'.

SCU maintains small class sizes and promotes close faculty/student interaction. The University enrollment is approximately 5,500 undergraduate and 3,700 graduate students. The Department (<http://www.scu.edu/engineering/cse/>) offers B.S., M.S. and Ph.D. degrees, with 19 full-time faculty, and a strong pool of approximately 35 part-time adjunct faculty who instruct about 300 undergraduate majors, and about 450 part-time and full-time graduate students. The School of Engineering maintains strong ties to local industry.

The proposed start date is September 1, 2017.

### *Application Instructions*

Applicants should submit detailed CVs, statements of research interests, statements of teaching interests, and names and contact information of three professional references. All materials should be submitted online at <https://jobs.scu.edu/postings/4444>

Review of applications will begin upon receipt and complete application packets

received by November 1, 2016 will receive full consideration. However, the search will remain open until the position is filled.

### *EEO / AA Policy:*

Santa Clara University is an Equal Opportunity/Affirmative Action employer, committed to excellence through diversity and inclusion, and, in this spirit, particularly welcomes applications from women, persons of color, and members of historically underrepresented groups. All qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, sexual orientation, gender identity or expression, age, status as a protected veteran, status as a qualified individual with a disability, or other protected category in accordance with applicable law. The University will provide reasonable accommodations to individuals with a disability.

Santa Clara University annually collects information about campus crimes and other reportable incidents in accordance with the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. To view the Santa Clara University report, please go to the Campus Safety Services website at <http://www.scu.edu/csl>. To request a paper copy please call Campus Safety at (408) 554-4441. The report includes the type of crime, venue, and number of occurrences.

## Shanghai University

### *Faculty and Postdoc Positions*

The Institute for Theoretical Computer Science (ITCS) is a newly established academic unit at Shanghai University of Finance and Economics (SUFE), aimed at creating a world-class environment for research in broad areas of theoretical computer science.

Shanghai University of Finance and Economics is a top-ranked research

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university specializing in economics, finance and business studies. In recent years, SUFE has been earnestly developing fundamental and closely related disciplines besides finance and economics, among which computer science is at the top of its list. ITCS is one of the key priorities of this high-level mission.

We invite applications from highly-qualified candidates for various position levels in broad areas of theoretical computer science including (but not limited to), Algorithms and Complexity, Algorithmic Game Theory, Machine Learning, Information Theory.

Salary and compensation packages are attractive and competitive. Initial appointments are typically made for a six years fixed-term. Subsequent contract renewal, promotion and tenure follow standard international practices. Each year, the institute also offers two research fellowship positions. The appointment will be for two years with an annual salary of 300,000 RMB.

If you are interested in joining us, please send your CV to Pinyan Lu ([lu.pinyan@mail.shufe.edu.cn](mailto:lu.pinyan@mail.shufe.edu.cn)).

## Swarthmore College

*Computer/Electrical Engineering Faculty (All Ranks) Position*

Swarthmore College invites applications for a tenure-track or tenured position at any rank in the area of Computer/Electrical Engineering, to start during the Fall semester of 2017. A doctorate in Computer or Electrical Engineering or a related field is required. The appointee will pursue a research program that encourages involvement by undergraduate students. Strong interests in undergraduate teaching, supervising senior design projects, and student mentoring are also required. Teaching responsibilities include courses in computer hardware such as computer architecture and digital logic, and electives in the appointee's area of specialization.

Located in the suburbs of Philadelphia, Swarthmore College is a highly selective undergraduate liberal arts institution with 1500 students, whose mission combines academic excellence and social responsibility. Eight full-time faculty members in the Department of Engineering offer a rigorous, ABET-accredited program for the Bachelor of Science in Engineering to approximately 120 students. Sabbatical leave with support is available every fourth year. The department has an endowed equipment budget, and there is support for faculty/student collaborative research.

For program details, see <http://engin.swarthmore.edu/>. Please upload your CV, brief statements describing teaching philosophy and research interests, along with three letters of reference to: <https://academicjobsonline.org/ajo/jobs/7247>.

Applicants should include a cover letter in which they describe their reasons for seeking this position and offer ideas about how they would attract and mentor students, especially those coming from diverse backgrounds. We will begin reviewing candidates on December 1, 2016; applications received before January 1, 2017, will receive full consideration.

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

## UMass Lowell

*One Visiting Faculty*

The Computer Science Department at UMass Lowell invites applications for one Visiting Faculty to start in September 2016. The appointment is for one year.

Applicants must hold a PhD in computer science or a closely related discipline at the

time of appointment. The teaching load will be three courses per semester.

Primary responsibilities are to provide high quality teaching and service to the department.

Responsibilities will consist of teaching existing courses at the undergraduate level. The successful candidate would also be involved in advising undergraduate students, service and outreach activities, and actively participating in continuing efforts to improve the department's educational mission. Examples of courses that candidates are expected to teach include: Computing I (introduction to computing in C), Computing II (data structures in C), Computing III (object orientation in C++), and other undergraduate courses.

UMass Lowell is located about 30 miles northwest of Boston in the high-tech corridor of Massachusetts. Its CS department has 17 tenured and tenure-track faculty and 3 non-tenure-track lecturers serving about 600 BS students, 140 MS students, and 90 PhD students. It also offers bioinformatics options at all levels, a robotics minor, and a PhD in computational mathematics.

The Computer Science faculty received approximately \$6M in the last two years in external research funding from the NSF, DOD, and NIH. For information about faculty research areas and more information about the degree programs please visit <http://www.cs.uml.edu>.

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

Minimum Qualifications:

- An earned doctorate in Computer Science or a closely related discipline (Must have earned doctorate by the time of appointment, September 2016)

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- At least one semester teaching experience required at the time of application (may include experience as a Teaching Assistant) at the undergraduate level
- The ability to work effectively with diverse groups
- Demonstrated excellence teaching at the Undergraduate level

Please submit a current CV, a teaching statement, information about residency status (if appropriate).

Names and email addresses of three references will be required during the application process.

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

Please apply online at [jobs.uml.edu/applicants/Central?quickFind=54972](http://jobs.uml.edu/applicants/Central?quickFind=54972)

## University of Alabama at Birmingham

*Asst/Assoc/Full Professor of Computer Science*

The Department of Computer and Information Sciences (CIS) at the University of Alabama at Birmingham (UAB) is seeking candidates for a tenure-track/tenure-earning/tenured faculty position at the Assistant/Associate/Full-Professor rank beginning Fall 2017. For additional



## University of California, Irvine

*Professor of Teaching in Computer Engineering Position*

The Department of Electrical Engineering and Computer Science at the University of California, Irvine (EECS@UCI) invites applications for a "Professor of Teaching in Engineering" faculty position with potential security of employment. This position parallels the tenure track faculty research series starting Fall Quarter 2016. It will involve coordinating and teaching undergraduate and graduate lecture and laboratory courses in Computer

Engineering (CpE). Teaching responsibilities will include teaching, development, support and assessment of best-practices for Computer Engineering education across the Department; and leadership on undergraduate accreditation initiatives. This position falls under the Lecturer with Security of Employment series at the University of California and requires, in addition to excellent teaching and service, that the candidate makes outstanding and recognized contributions to the development of his or her specific discipline and/or of pedagogy.

EECS@UCI is a vibrant unit with a growing stature offering B.S. degrees in Computer Engineering, Computer Science and Engineering, and Electrical Engineering; and graduate degrees (M.S. and Ph.D.) in Electrical and Computer Engineering. Located centrally within the greater southern California megalopolis, just miles from the Pacific Ocean, we aspire to address grand challenges related to high-performance, low-power, scalable, secure, and evolvable hardware, software, and cyber-physical systems, and to prepare our graduates to be leaders in these fields. We seek outstanding candidates who hold a doctoral degree in Computer Engineering, Computer Science, or a closely related field, and preference will be given to candidates who have innovative ideas for lecture and laboratory instruction. Postdoctoral experience and a proven teaching record at the university level are highly desirable. Relevant teaching and research experience includes peer-reviewed publications of creative work and a passion for engineering education that motivates high-quality educational experiences in laboratory, lecture and field settings. We also seek candidates skilled at coordination with regional partners in industry, government and resource agencies to enhance Department programs, e.g., through internship programs and off-campus learning opportunities. The Department benefits from the active participation of many engineering professionals through its EECS Affiliates program and its research activities. Grant writing in support of innovative instructional initiatives and modernization of educational facilities, while not required, will add to the strength of this position.

Applications should be submitted electronically. Instructions can be found at <https://recruit.ap.uci.edu/apply/JPF03550>. The position will remain open until filled.

Information about the department can be found at <http://engineering.uci.edu/dept/eecs>.

The University of California, Irvine is an Equal Opportunity/Affirmative Action Employer advancing inclusive excellence. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status, or other protected categories covered by the UC nondiscrimination policy.

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information about the Department, please visit: <http://www.cis.uab.edu>.

Candidates with expertise in all core CIS areas are sought, with preference given to: (1) Advanced Computing Systems (broadly defined, including large-scale systems, distributed systems, and software systems), and (2) Data Science (broadly defined, including machine learning, data mining and big data). UAB has made a significant commitment to both research and teaching in Computer Science. Candidates must

consequently have strong research and teaching credentials. Experience and success in funded research is desirable for junior-level candidates, and required for senior-level candidates. UAB is a Carnegie "Very High Research Activity" University.

The CIS Department at UAB offers PhD, MS and BS programs. The Department has a strong research focus, and a strong commitment to teaching, service and outreach. The goal is to grow the PhD, MS and BS significantly over the next several

years. Research funding is expanding significantly, and the Department has a leadership role in a Center focusing on Information Assurance, Security and Computer Forensics. Collaborations with UAB's medical enterprise are strong and growing, with many opportunities for faculty to participate in interdisciplinary work.

A Ph.D. in Computer Science or a closely related field is required. Applications should include a curriculum vitae, a list of publications and scholarly achievements, a statement of future research plans, a statement of teaching experience and philosophy, and at least three reference letters. Applications and all other materials (including reference letters) should be submitted through UAB's portal at People Admin: [uab.peopleadmin.com](http://uab.peopleadmin.com)

Review of candidates will begin November 15, 2016, and the search will continue until the position is filled.

UAB is an Equal Opportunity/Affirmative Action Employer committed to fostering a diverse, equitable and family-friendly environment in which all faculty and staff can excel and achieve work/life balance irrespective of ethnicity, gender, faith, gender identity and expression as well as sexual orientation. UAB also encourages applications from individuals with disabilities and veterans. A pre-employment background investigation is performed on candidates selected for employment.

## University of Florida

### *Postdoctoral Research Associate*

Seeking a postdoc for NSF-funded project. The position requires a PhD degree in Computer Science (usable security, software security, software engineering, data mining/machine learning, or closely related area). The successful candidate is expected to be experienced with performing and analyzing user studies, performing

## TENURED FACULTY POSITION WITH ENDOWED PROFESSORSHIP

The Henry Samueli School of Engineering and Applied Science (HSSEAS) at the University of California, Los Angeles (UCLA) invites applications for the endowed Volgenau Chair in Engineering.

The Chair's position will be in any department within HSSEAS at UCLA, but the Chair is dedicated to exemplify UCLA's mission in teaching and research. The holder of this Chair will be a scholar in engineering who is not only an accomplished researcher, but has also demonstrated excellence in teaching and student mentorship. It is anticipated that the chair holder will provide the credibility and leadership to mobilize resources and personnel to focus on the chosen area of study in engineering.

Candidates are required to have a Ph.D. in a closely related discipline, and qualifications for appointment as a tenured full professor. For consideration, applicants should submit a curriculum vitae to and names of three references to: Search Committee, Volgenau Chair (JPF01929) via online <http://apptrkr.com/815103>, by September 30, 2016.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy, see: UC Nondiscrimination & Affirmative Action Policy.

# UCLA



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## John Derby Evans Professorships in Media Technology (Associate Professors with Tenure)

The School of Information and the Department of Communication Studies in the College of Literature, Science, and the Arts at the University of Michigan invite applications for two tenured faculty positions at the Associate Professor rank focusing on the social implications of digital media. Successful candidates will be appointed to one of two endowed John Derby Evans Professorships of Media Technology, one in each unit. These positions together constitute a cross-disciplinary cluster hire in the area of "digital futures."

The mission of the School of Information is to create and share knowledge to help people use information -- with technology -- to build a better world. The Department of Communication Studies emphasizes the interdisciplinary study of the mass media and digital media.

We welcome applications from scholars in the social or behavioral sciences, computer science, or humanities traditions working on a range of topics and employing diverse methods. We are especially interested in qualified applicants whose research addresses important social problems, opportunities, and questions associated with digital media. Topical areas include computer-mediated communication, social media, mobile media, ethics and policy, socio-technical systems, computational understandings of digital media generation, distribution, and access, and other important and innovative areas of research.

Job duties in both units include research activity, teaching of graduate and/or undergraduate courses, and service to the department, school, university, and profession. A Ph.D. in Communication, Information, or a related field is required. The anticipated starting date for these university-year appointments is September 1, 2017.

All applicants should send a cover letter, a vita, three representative publications, evidence of teaching excellence, a statement of teaching philosophy and experience, a statement of current and future research plans, and contributions to diversity. (Letters of recommendation are not required at this time.) All application materials must be submitted electronically to:  
<https://apply.interfolio.com/35945>

### Qualifications

- Ph.D. in Communication, Information, or a related area.
- A successful teaching record at the undergraduate and/or graduate levels
- Demonstrated scholarly impact
- A strong commitment to teaching, interdisciplinary research, and cultural diversity

### Background Screening

The University of Michigan conducts background checks on all job candidates upon acceptance of a contingent offer and may use a third party administrator to conduct background checks. Background checks will be performed in compliance with the Fair Credit Reporting Act.

The University of Michigan is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply. The University is supportive of the needs of dual career couples.

Review of applications will begin on October 1, 2016 and will continue until the positions are filled. For questions about potential fit and/or your application please contact [UM.DigitalFutures@umich.edu](mailto:UM.DigitalFutures@umich.edu).

empirical data analysis with qualitative and statistical methods, developing algorithms, writing publications, presenting papers at conferences, working with a team of graduate and undergraduate students, and other aspects of academic scholarship.

**\*Contact:\*** Prof. Daniela Oliveira ([daniela@ece.ufl.edu](mailto:daniela@ece.ufl.edu))

Interested candidates should send their CV, two letters of recommendation, and a description of their research interests.

The positions are open immediately. The initial appointment will be for two years, with a possible extension beyond that.

## University of San Francisco

### One Year Full-time Faculty Position for 2016-2017 (Non-tenure track)

The Computer Science Department at the University of San Francisco invites applications for a one-year faculty position starting in August 2016.

For more information, see <http://www.cs.usfca.edu/facultyposition2016.html>

## University of Tennessee, Knoxville

### Non-Tenure-Track Lecturer Position in Computer Engineering or Computer Science

The Department of Electrical Engineering and Computer Science (EECS) at The University of Tennessee, Knoxville (UTK) is seeking applications for one full time, non-tenure-track, 9-month lecturer position in Computer Science and Computer Engineering. EECS is one of the largest departments on campus and currently enrolls more than 750 undergraduate and 250 graduate students, and is housed in one of the newest buildings on campus, the Min H. Kao EECS Building.

The position will teach mostly undergraduate computer science and computer engineering courses. Candidates must possess excellent communication skills, and a solid commitment to innovative teaching methods, both traditional and technology enabled. Demonstrated interest in computer science and engineering education programs is expected. College-level teaching experience and/or industry experience is preferred.

Applicants should have a minimum M.S. degree (and a Ph.D. is preferred) in Computer Engineering, Computer Science, Electrical Engineering, or a related field.

Interested candidates should apply through the departmental web site at [http://www.eecs.utk.edu/fall2016\\_search](http://www.eecs.utk.edu/fall2016_search).

Please include the following: (1) a letter of interest addressing qualifications and teaching interests, (2) a comprehensive curriculum vitae, and (3) the names and contact information (address, phone number, and e-mail address) for at least three professional references. Review of applications will begin July 1, 2016, and continue until the position is filled. Preferred starting date is August 1, 2016.

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All qualified applicants will receive equal consideration for employment and admissions without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, or covered veteran status.

Eligibility and other terms and conditions of employment benefits at The University of Tennessee are governed by laws and regulations of the State of Tennessee, and this non-discrimination statement is intended to be consistent with those laws and regulations.

In accordance with the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, The University of Tennessee affirmatively states that it does not discriminate on the basis of race, sex, or disability in its education programs and activities, and this policy extends to employment by the University.

Inquiries and charges of violation of Title VI (race, color, national origin), Title IX (sex), Section 504 (disability), ADA (disability), Age Discrimination in Employment Act (age), sexual orientation, or veteran status should be directed to the Office of Equity and Diversity (OED), 1840 Melrose Avenue, Knoxville, TN 37996-3560, telephone (865)974-2498 (V/TTY available) or 974-2440. Requests for accommodation of a disability should be directed to the ADA Coordinator at the Office of Equity and Diversity.

## University of Virginia

*PostDoc in Ubiquitous Computing and Machine Learning*

The School of Engineering and Applied Science at the University of Virginia is seeking candidates for a 2-year postdoctoral research associate position in ubiquitous computing and machine learning. The successful candidate will develop innovative

mobile sensing techniques and systems for mental health and develop and apply machine learning to analyze the complex, multimodal data these systems produce. The position will also involve teaching one course per year tied to the project's focus on computing technology in mental health. Highly motivated and qualified candidates are encouraged to apply, particularly those with a papers in CHI, Ubicomp and other relevant conferences and journals. Candidates should demonstrate strong skills in mobile development and have experience with data analysis, signal processing and machine learning. The successful candidate will design innovative mobile sensing techniques, design and apply machine learning techniques, prepare publications, manage ongoing studies, write grants, and serve as a collaborative member of a team of interdisciplinary researchers. A Ph.D. in Computer Science, Information Systems, Systems Engineering, or related field is required.

Review of applications will begin July 18, 2016. To apply, please refer to <https://jobs.virginia.edu> and reference Posting Number 0619165. Please submit a cover letter, curriculum vitae, 2 representative publications and contact information for 3 references.

For more information, please contact Laura Barnes at [lbarnes@virginia.edu](mailto:lbarnes@virginia.edu). The position will remain open until filled.

## University of Virginia School of Engineering and Applied Science

*Full-Time Lecturer positions in Computer Science Department at UVA*

The University of Virginia School of Engineering and Applied Science invites applications for multiple full-time Lecturer positions in the Department of Computer Science for the fall 2016 and spring 2017 semesters. The appointment will be on an

academic-year basis, but there may be the opportunity for summer instruction as well. Renewal for subsequent years is contingent on satisfactory performance and availability of funds. Responsibilities include teaching three sections per semester of a mix of upper- and lower-division courses, with course assignment based on experience and abilities.

For more information, please go to this website: [jobs.virginia.edu/applicants/Central?quickFind=78381](https://jobs.virginia.edu/applicants/Central?quickFind=78381)

## University of Washington, Bothell

*Postdoc Position in Software Engineering*

The University of Washington Bothell has one open **Postdoc Position in Software Engineering**. The successful applicant will engage in research in software engineering (e.g., architecture recovery/reverse engineering, software evolution, etc.) to assist domain scientists with understanding and managing their software and data. Initial appointment will be for one year, and will be renewable, pending review of performance in the first year. Opportunities for career advancement also available. Complete applications received prior to July 1, 2016 will receive priority consideration.

For more information, see <http://ap.washington.edu/ahr/academic-jobs/position/nn18643/>

## University of Washington, Bothell

*Post Doctoral Research Associate - Software Engineering*

The University of Washington Bothell has one open **Postdoc Position in Software Engineering**. The successful applicant will engage in research in software engineering (e.g., architecture recovery/reverse engineering, software evolution,

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etc.) to assist domain scientists with understanding and managing their software and data. Initial appointment will be for one year, and will be renewable, pending review of performance in the first year. Opportunities for career advancement also available. Complete applications received prior to July 1, 2016 will receive priority consideration.

For more information, see <http://ap.washington.edu/ahr/academic-jobs/position/nn18643/>

## Washington State University

*Assistant/Associate/Full Professor in Machine Learning*

The School of Electrical Engineering and Computer Science (EECS) at Washington State University (WSU) in Pullman, WA invites

applications for a full-time tenured/tenure-track faculty position in Computer Science with core research emphasis in machine learning or related fields. Applicants at the assistant, associate or full professor level will be considered.

For specific requirements, duties and application requirements, visit <https://www.wsujobs.com/postings/22397>. Application review is ongoing and will continue until the position is filled. It is anticipated that the successful candidate will begin the appointment in January 2017 or August 2017.

For more information about WSU and the School of EECS, visit [school.eecs.wsu.edu](http://school.eecs.wsu.edu).

WSU is an EEO/AA/ADA educator and employer.

## Worcester Polytechnic Institute

*Assistant Teaching Professor/Lecturer of Interactive Media & Game Development*

The Interactive Media & Game Development Program ([imgd.wpi.edu](http://imgd.wpi.edu)) at WPI is seeking a candidate with expertise in the design and evaluation of immersive media, such as VR, interactive projection, augmented reality, and mobile media.

Please visit <https://careers.wpi.edu/hr/postings/3498>