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

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Generation CS: Report on CS Enrollment Coming Soon

By CRA Enrollment Committee Institution Subgroup

Across North America, universities and colleges are facing a significant increase in enrollment in both undergraduate computer science degree programs and courses. The current enrollment surge has exceeded previous booms, and there is a general sense that the current growth in enrollment is substantially different than the growth in the mid-1980s and late 1990s.

In early 2015, the Computing Research Association (CRA) created a committee to investigate increasing enrollments. As part of this effort, an institutional subgroup of this committee developed a CRA Enrollment Survey, which was sent in fall 2015 to academic units with a computer science undergraduate degree program, in parallel with the annual CRA Taulbee (for doctoral-granting units) and ACM NDC (for non-doctoral granting units) surveys. The goal of the survey was to better understand enrollment trends and their impact.

The survey addressed these high-level questions:

1. Are all units seeing a similar degree of growth?
2. Does the growth exist at all levels of the curriculum?
3. Are non-majors/minors having a significant impact on enrollment?
4. How is the current growth impacting diversity in our student population?
5. What are units doing to respond to the growth?

We are grateful to the 134 doctoral-granting units and 93 non-doctoral granting units that responded to the CRA Enrollment Survey. The collected data is extremely rich, and allows us to consider a unit's context (e.g., size, public or private, etc.) and available resources when studying the impact from enrollment growth.

One section of the survey requested that responders provide detailed demographic data on students enrolled in four representative CS courses: an intro-level course mainly for non-majors, an intro-level course mainly for CS

majors, a mid-level course, and an upper-level course. Data was requested on these courses across three different time periods (2005, 2010, and 2015). We are not aware of any other national data set offering this level of detail on changes in computer science enrollments. The CRA Taulbee survey has added questions to its survey in order to continue collecting this type of data.

The enrollment growth in the mid-1980s is sometimes referred to as the "PC boom" and the enrollment growth in the late 1990s is sometimes referred to as the "dot-com boom." CRA Conference at Snowbird attendees in 2016 suggested that we are currently in "Generation CS" where CS enrollments across the country are surging due to the pervasiveness of computing in today's society. We, therefore, gave this name to the CRA enrollment report. *Generation CS: CS Undergraduate Enrollments Surge Since 2006* will be available from the CRA website soon, and comments will be supported for those interested in discussing the report and its implications.



This report consists of six sections and three appendices, as we present and analyze the data collected from the CRA Enrollment Survey. Section A provides a project overview. Section B considers the phenomenal growth of computer science majors since 2006 in North America (e.g., the number of CS majors enrolled at North American doctoral-granting units has more than tripled since 2006); furthermore, the data indicates that continued growth is likely. Section C considers the phenomenal growth of nonmajors taking computer science courses and discusses the data units reported on the increase in computer science minors.

We discuss diversity in Section D. Many members of the computer science community are very concerned about the impact of the current enrollment surge on diversity, as we learned several hard lessons regarding diversity in previous enrollment booms. While more data is needed, there appears to be some good news regarding both the numbers and percentages of women and underrepresented minority students involved in computer science as majors and as students in CS courses. Unfortunately, this good news does not exist for all units that responded to the survey.

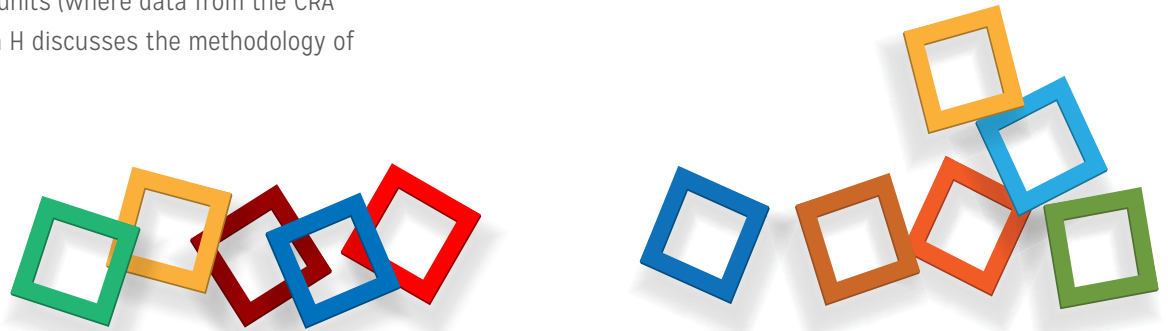
In Sections E and F, we consider the impact of the current enrollment surge on the unit (e.g., challenges with space and instructional staff) as well as how units are responding to the current surge (e.g., increasing section sizes or number of sections taught). Lastly, this report includes three noteworthy appendices. Section G considers degree completions in computer science from the Integrated Postsecondary Education Data System (IPEDS) data. This section helps advance our understanding of the data collected in the CRA Enrollment Survey, and provides more information about the current surge in computer science at non-doctoral granting units (where data from the CRA survey is limited). Section H discusses the methodology of

the CRA survey and Section I provides access to all figures individually, as well as the data that makes up the figures in this report. Finally, Section J acknowledges everyone who has assisted with the survey, data, analysis, or report.

Please contact any member of the CRA Enrollment Committee Institution Subgroup with questions about this report. The committee members are:

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We also encourage those interested in more details and analysis about the current enrollment surge in computer science to obtain an upcoming report from the National Academies of Sciences, Engineering, and Medicine: Committee on the Growth of Computer Science Undergraduate Enrollments. The report is expected to be published later this year.



¹ Our report mainly focuses on doctoral-granting units, as more data is available on doctoral-granting units than non-doctoral granting units. We strongly encourage non-doctoral granting units to complete the annual ACM NDC!

2017 CRA-E Undergraduate Research Faculty Mentoring Award Winners Announced



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The Education Committee of the Computing Research Association (CRA-E) is proud to announce three winners of the CRA-E Undergraduate Research Faculty Mentoring Award. Congratulations to the 2017 award recipients: Margaret Burnett from Oregon State University, Nayda Santiago from the University of Puerto Rico, Mayaguez Campus, and Margo Seltzer from Harvard University.

These outstanding individuals are recognized for providing exceptional mentorship, undergraduate research experiences, and, in parallel, guidance on admission and matriculation of their students to research-focused graduate programs in computing.

The 2017 selection committee includes Nancy Amato (Texas A&M University), Jeff Forbes (Duke University), Pat Morreale (Kean University), Manuel Pérez Quiñones (UNC Charlotte), and Barbara Ryder (Virginia Tech, committee chair).

Margaret Burnett



Margaret Burnett, Ph.D., is a distinguished professor in the School of Electrical and Computer Engineering at Oregon State University (OSU), a member of the ACM CHI Academy, and an ACM Distinguished Scientist. Burnett has contributed pioneering research on how ordinary users interact with

software and optimizing that interaction. This resulted, in part, in the development of a new subarea, which is at the intersection of human-computer interaction and software engineering, called end-user software engineering.

Throughout her academic career, Burnett has continuously worked with undergraduate researchers and even accommodated high school students in her lab. She has mentored 39 undergraduate students in research; 21 were from underrepresented groups in computing, 32 co-authored published research papers, and 25 went on to graduate

studies. A selection of the honors of her highly accomplished mentees includes three Google Scholarships, three NSF Graduate Fellowships, and two National Physical Sciences Consortium Graduate Fellowships. In her nomination, several mentees attested to her personal influence on and involvement in their lives and careers.

Impressively, Burnett influenced the culture of faculty undergraduate research mentoring in her school, increasing it to 50% participation. She has also led efforts to better support a diverse undergraduate population through trips to the Grace Hopper Celebration of Women in Computing, the adoption of a diversity plan, and new experimental scholarships for incoming freshmen women in computing. She has received awards from NCWIT, Microsoft, and OSU for her mentoring and research.

Nayda Santiago



Nayda Santiago, Ph.D., is a professor of electrical and computer engineering at the University of Puerto Rico, Mayaguez Campus. Her research areas are computer performance evaluation and engineering education. Santiago is a founding member of the Computing Alliance of Hispanic Serving Institutions (CAHSI). For the past 12 years, she has been promoting undergraduate research and the Affinity Research Group model among the Hispanic Serving Institutions (HSIs) and in her own department. She also is active in FemProf, an organization aimed at encouraging undergraduate female computer science and computer engineering students to attend graduate school. Santiago has been recognized as a Distinguished Computer Engineer by the Puerto Rico Society of Professional Engineers and Surveyors, and has received honors for her educational achievements from the Hispanic Engineer National Achievement Awards Conference.

Santiago has an impressive record of caringly mentoring of undergraduate researchers into high-quality computing graduate programs at Research I institutions. She communicates the possibilities for graduate study and

a research career to her students, and since 2004, 21 of her 56 undergraduate research mentees have entered graduate school.

In fall 2015, there were 35 undergraduate researchers working with her on 6 different projects, a department record. Santiago co-authors papers with her mentees and has them present their work at technical venues. These achievements are extraordinary because she is mentoring in a Hispanic-serving Masters I institution with limited internal resources for research support.

Margo Seltzer



Margo Seltzer, Ph.D., is the Herchel Smith professor of computer science and the faculty director of the Center for Research on Computation and Society in Harvard's John A. Paulson School of Engineering and Applied Sciences. Her research in computer systems, broadly defined, includes systems for data provenance, transaction processing, new architectures for parallel execution, and healthcare

informatics. Seltzer also conducts research in pedagogy and the retention of women in computer science. Seltzer is an ACM Fellow, a Sloan Foundation Fellow in computer science, and has won awards for mentoring and teaching from Harvard. She is a member of the Computer Science and Telecommunications Board of the National Academies, and a past president of the USENIX Association.

Seltzer has thoughtfully mentored 49 undergraduate students over her career, 16 of whom have matriculated into computing graduate studies. And many of these students have entered academia. She has co-authored 29 papers with her undergrad mentees, and has included them in her research team as full-fledged members. Seltzer takes deep personal interest in her mentees and interacts with them and their families beyond the research relationship. She serves as a role model and an effective advocate for the women undergraduates in the Harvard program. One of her mentees remarked, "I credit my undergraduate experience with Margo as the genesis of and essential training for my research career."

Undergraduate Research Opportunity Listing Service



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The Computing Research Association's Education Committee (CRA-E) is pleased to announce the "Undergraduate Research Listing Service." This free service is now available for faculty and other researchers to advertise undergraduate research opportunities and for undergraduates to find such opportunities. The site can be found here: <http://conquer.cra.org/research-opportunities>.

This site can be used to advertise individual summer positions, research programs, and any other opportunities for undergraduates to engage in research in the computing field. If you have a research opportunity available, please post it here: <http://conquer.cra.org/post-a-research-opportunity>.



Expanding the Pipeline: Characteristics of Male and Female Prospective Computer Science Majors – Examining Four Decades of Changes

By Linda J. Sax, UCLA

Several years ago, after devoting many years to the study of the gender gap in STEM fields using nationwide data on first-year college students, it became clear to me that the study of STEM in the “aggregate” was no longer a realistic or useful way to examine women’s progress in these fields.

Not only does women’s representation in undergraduate STEM vary dramatically by field (constituting as many as 58% of bachelor’s degree earners in the biological sciences and only 18% of degree earners in computer science and engineering [NCES, 2015]), but STEM fields are distinct from each other in many other ways, including curriculum, career paths, and the types of students they attract.

With support from the National Science Foundation (HRD #1135727), my colleagues and I embarked on a study to understand how the gender gap varies by STEM subfield, how that has changed over the last several decades, and how the nature of individual student characteristics has shaped the observed trends. We examined these key questions separately for the biological sciences, computer science, engineering, math/statistics, and the physical sciences, producing several discipline-specific publications in the process.

Of all the fields that we examined, we were most captivated by computer science. While other STEM fields reveal a gender gap that has evolved in a fairly consistent manner over time (either shrinking, growing, or remaining stable), the gender gap in CS has fluctuated wildly over the years (Figure 1). The unique ebb and flow of men’s and women’s interest in computing reflects, on the one hand, an issue of supply and demand (i.e., fluctuations in job opportunities in computing and the growing or shrinking of computer science

departments), but on the other hand reflects broader societal shifts (i.e., opportunities available to women and the changing perceptions of what it means to be a computer scientist).

A New Approach to Understanding Students’ Interest in Computer Science

Beyond simply tracking the proportion of women and men who plan to major in CS in college—something that has already received significant attention in research and policy circles—we focused on the gender gap in computing in a more nuanced way. That is, we sought to understand the differences in the *characteristics* of men and women planning to major in CS and whether these characteristics had *changed* in any significant way in recent decades. The complete study was recently published in *The Journal of Higher Education* (Sax, et al., 2016), with selected findings reported here.

The study relied on nationwide survey data collected over the past several decades from first-year college students entering four-year colleges and universities. These students completed the well-known Cooperative Institutional Research Program “Freshman Survey” administered by the Higher Education Research Institute at UCLA. The survey asks students a wide range of questions, including their demographic background, high school experiences, college expectations, value, life goals, and self-concepts. The survey also asks students to indicate their intended undergraduate major, and our research focused on distinguishing those intending to major in computer science from those seeking degrees in another field.



Because we were interested in how the characteristics of men and women seeking CS degrees may have changed over time, we selected the following five time points as the focus of our analysis: 1976, 1986, 1996, 2006, and 2011. These particular years were chosen because they provided the most consistent set of survey items at evenly spaced decade intervals, including an additional half decade to include data through 2011.¹ Ultimately, our multivariate dataset across these selected years included 18,830 intended computer science majors (14,703 men and 4,127 women) and 904,307 students (408,910 men and 495,397 women) intending to major in other fields at more than 1,000 four-year colleges and universities.

To address our research questions, we used logistic regression analysis to identify the significant predictors of majoring in computer science (versus any other field) for men and women across all years, along with interaction terms (variable x time) to assess whether the predictive power of any independent variables had become more or less salient over the years.

Why Some Students Major in CS

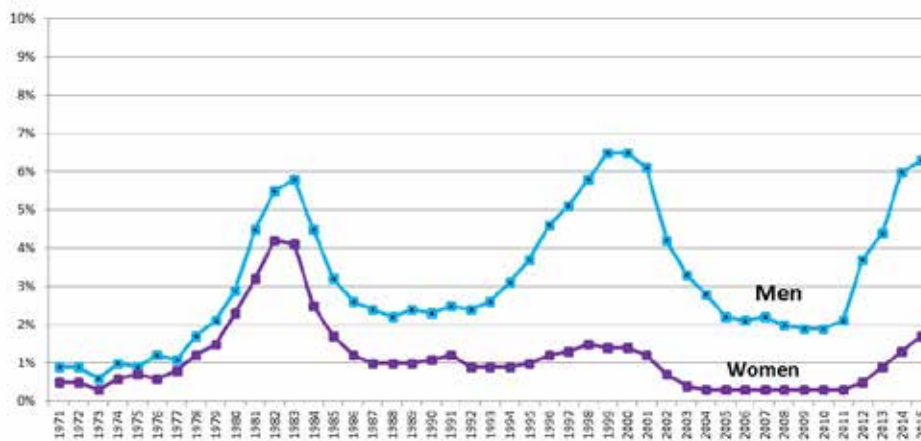
Of the variables that emerged as significant predictors of majoring in computer science, about a quarter are similar for

men and women and have remained steady predictors over the years. For example, men and women whose father has or had a career in STEM are more likely to pursue computer science as a major, and the predictive power of this variable has remained consistent over time. Similarly, across recent decades, men and women who intend to be a computer science major are more likely to be Asian/Pacific Islander or Black/African American (and less likely to be White/Caucasian) than are students pursuing other majors. CS majors are also more likely than non-CS majors to be Latina/o. This fact has held steady over time for women, but has become less true over time for men (i.e., the positive predictive power of being Latino on the decision to major in CS has become weaker over the years).

...despite growing efforts to emphasize the broader impacts of computing, students seeking to “change the world” are continuing to seek other fields of study in college.

Our results also show that students of either gender who place a greater value on working toward social activist goals (e.g., helping others in difficulty, participating in community actions or influencing social values) tend not to pursue a major in computer science, and these effects are consistent over the years. In other words, despite growing efforts to

Figure 1. Proportion of entering students who plan to major in computer science, by gender (1971-2015)



Source: Cooperative Institutional Research Program Freshman Survey, Higher Education Research Institute, UCLA

¹The analyses for this study were completed prior to the recent surge of interest in computer science; selected findings up through 2015 are discussed in Lehman, Sax, and Zimmerman (2016).

emphasize the broader impacts of computing, students seeking to “change the world” are continuing to seek other fields of study in college.

Some predictors of majoring in computer science have changed in their predictive power over the years. For example, the survey has long shown that men and women who place a greater personal importance on “raising a family” tend to have majors *other* than computer science, and this negative relationship has become significantly stronger over the years. In other words, undergraduate computing departments are even less likely than they were in the past to recruit students who see raising a family as an important life priority.

Another example of a variable becoming more salient over time relates to one’s scientific orientation. Students of either gender who express a stronger commitment to making a “theoretical contribution to science” are more likely to pursue a computer science major, but over time this variable has become a significantly stronger predictor for women while remaining a steady predictor for men. In other words, it is increasingly the case that computer science attracts women who see themselves as committed to scientific inquiry. While at face value that seems like positive news for the field of computer science, the fact is that women are much less likely than men to report having a strong scientific orientation upon entering college; thus, many potential female computing majors may be deterred from the field if they simply don’t “see” themselves as the scientific type.

*...women with more creative and artistic orientations are increasingly **less likely to avoid** majoring in computer science.*

Still, there is some positive news when it comes to attracting women to computing. The first relates to the role of mathematical self-concept. Specifically, even though women rate their math abilities lower than

men do—and perceptions of one’s math ability is one of the strongest predictors of a major in computer science—the fact is that the importance of mathematical self-concept in determining who will pursue computer science has weakened over time. Thus, despite the fact that women tend to have lower math confidence than men do, this differential has become less consequential over time in determining who will major in computer science.

Perhaps the most encouraging finding from the study relates to changes in the likelihood of artistically oriented women to pursue computer science in college. To be sure, relative to other fields, computing tends to not attract students who are interested in creating artistic work or have high confidence in their artistic abilities. However, over time an artistic orientation has become a less salient deterrent to women’s decision to major in computer science. Put another way, women with more creative and artistic orientations are increasingly **less** likely to **avoid** majoring in computer science. Time will tell whether this trend will continue as the computing field evolves and becomes increasingly connected to creative work in the arts and humanities.

...the nature of who pursues computing is neither consistent across student subgroups nor static over time.

Implications for the Future of Computer Science

Our research on the evolution of students’ interest in computer science shows us that the nature of who pursues computing is neither consistent across student subgroups nor static over time. While some student attributes do consistently correlate with the selection of a computer science major, most do not. As student populations evolve over time, and as the field of computing itself changes over the years, certain predictors become more or less prominent in predicting whether college students will express an interest in majoring in the field. Further, such shifts do not always occur in the same way for men and women. These findings are perhaps especially critical today given the current surging interest in undergraduate computing. Knowing, for example, that CS tends not to attract activist-minded students or those who prioritize raising a family raises the question of how the field should rebrand itself so that students can better understand how innovation and flexibility in computing careers can actually *enable* them to contribute to positive social change and/or balance the demands of work and family. Similarly, awareness that the field is now doing a better job of attracting women from a range of perceived math abilities and artistic orientations suggests that there is growing opportunity for faculty and administrators to appeal to a wider swath of women than in the past. There is no doubt that computing departments that

aspire to both grow *and* diversify would benefit from more information on the changing backgrounds and interests of the different populations enrolling in their programs.

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About the Author

Linda J. Sax is a professor of higher education in the Graduate School of Education & Information Studies at UCLA. Her research focuses on gender differences in college student development, with an emphasis on women in STEM fields. She is the principal investigator for the research component of the BRAID initiative aimed at diversifying the computer science major. Her research has been funded by the National Science Foundation, the U.S. Department of Education, the Alfred P. Sloan Foundation, the Computing Research Association, and the Anita Borg Institute, among others. She is the author of more than 100 publications, including the book *The Gender Gap in College: Maximizing the Developmental Potential of Women and Men*.

Research Highlight: CRA Board Member Mary Czerwinski

By Mary Czerwinski, Microsoft Research



My research revolves around tracking and understanding users' emotional states and leveraging that information as additional context for the design of emotionally sentient systems. Some of the systems we have built have been designed for a user's own personal reflection. Our first application, AffectAura, provided users with their own behavior patterns over time, such as what they were doing, where they were, who they were with and how they felt. This information could be used to make personal decisions about behavior change – if certain activities usually result in your feeling good or bad, perhaps you want to increase or decrease those behaviors.

We have also built wearables that allow other people to see how you are feeling in real time. These systems are more controversial. While it can be useful for others, such as work colleagues or family members, to know how you're feeling, not everyone is comfortable divulging this kind of personal information.

We have also designed systems to help people learn how to regulate their emotions – either with just-in-time interventions or through prolonged use of a skills app as a complement to therapy. For these systems, we either rely on physiological emotion signals from wearable computers or through self-reporting by the user. Machine learning can then be used to determine which psychological interventions make sense for that particular user at that time and in that context. We are referring to this latter line of research as “precision psychology” – where we are monitoring a user 24x7 in order to understand which psychological treatments are most effective for them at which moments. Our preliminary studies have shown that using machine learning to target interventions in this way leads to positive changes in behavior, with users learning new skills that they enjoy using and reducing their reported negative behaviors. However, it is very important that the content that is provided to users, when targeted in this manner, is

diverse enough so it isn't boring or tedious. Our PopTherapy and ParentGuardian systems were good research vehicles for exploring these topics.

More recent research efforts have moved toward designing emotionally sentient conversational agents that partner with the user to improve their health and well-being. Our studies have shown that, just like in human conversations and interactions, design parameters like attractiveness, personality type, and speaking style are all important for a user to trust the agent and want to keep interacting with it. We have also seen success in using a known personality as the conversational agent. Of course, gamifying behavior-change applications can also help to ensure that people use the agent for a longer period of time. Our latest app, Pocket Skills, was designed with this philosophy in mind. PocketSkills delivers Dialectical Behavior Therapy (DBT) training skills to users who are already in DBT, but need an app to help them practice their new skills when they aren't at their doctor's office.

Another research avenue of mine centers around stress, focus, and control in the workplace. Together with my colleagues Gloria Mark (University of California, Irvine) and Shamsi Iqbal (Microsoft Research), we have spent years examining what factors contribute to stress, or the lack of it, at the office. There are many factors that we've identified as related to stress, including email overload, work deadlines, poor dietary habits, and even personality type. One notable factor that is associated with less stress in the workplace appears to be a sense of control over your day. A sense of control can allow a worker to see stressful events more as opportunities or challenges. We have also observed that those workers with a higher sense of control over their multitasking (e.g., accessing non-work related websites or social media) tend to be able to focus more readily and don't need tools or technologies to assist them with concentrating. Employees who don't control their access to social media and non-work related websites might benefit from technology that limits access until a work break is truly needed or enough focus time has been achieved. Future work will be

to combine what we've learned about behavior change and conversational agent interaction technology with ways to reduce stress and improve focus throughout the workday.

About the Author

Mary Czerwinski is a research manager of the Visualization and Interaction Research Group at Microsoft Research. Mary's research focuses primarily on emotion tracking, information worker task management, health and wellness for individuals

and groups. Her background is in visual attention and multitasking. She holds a Ph.D. in cognitive psychology from Indiana University in Bloomington. Mary was awarded the ACM SIGCHI Lifetime Service Award, was inducted into the CHI Academy, and became an ACM Distinguished Scientist in 2010. Mary became a Fellow of the ACM in 2016. She also received the Distinguished Alumni award from Indiana University's Brain and Psychological Sciences department in 2014.

Research Highlight: CRA Board Member Dan Grossman

By Dan Grossman, University of Washington



Since I started graduate school in 1997, I have considered myself a member of the programming languages research community – and I continue to attend and publish in the annual conferences of this vibrant computing subfield. But over the last 5-10 years, I have also found myself increasingly passionate about opportunities for computing researchers to focus on ways to influence computing education beyond, for those of us who are academics, our own classrooms and independent studies. Let me share some of the projects I have enjoyed (seriously!) and others I wish I had more time to pursue.

First, several years ago I led my department's first multicourse curriculum revision in many years. It is a fascinating engineering exercise to design a set of courses together. In our case, we did not change our introductory programming courses nor our senior-year electives, but we completely revamped and modernized everything in between them. Each step of this multiyear process, from the first meeting to last course rollout, can be described in computing terms: There was iterative top-down design, logical dependencies, cost tradeoffs, and more. Since having students "reboot" halfway through a degree program is not an option, there was also the complexity of "hot swapping" the system in a consistent way without dropping any packets (err, students).

Second, I was proud to serve on the steering committee for the [ACM/IEEE Computer Society 2013 Computer Science Curriculum Guidelines](#) for undergraduate degree programs in computer science. The roughly once-a-decade effort to update curriculum guidelines goes back to 1968, so the evolution of the guidelines is interesting in and of itself. Moreover, trying to make something that will be "at least mostly valuable" 10 years into the future requires a subtle mix of conjecture and conservatism. It is also challenging to write descriptions that make sense in a variety of cultural and institutional contexts, as well as to write sections (in my case, programming languages) in a way that both experts and non-experts can gain value from them. Finally, these efforts are deeply collaborative, requiring consensus from dozens of helpful volunteers and processing hundreds of public comments. While surely such a process is not for everyone, it is an interesting complement to my usual work of building a research prototype with a handful of colleagues.

Third, when Massive Open Online Courses (MOOCs) went viral in fall 2011, I sat somewhat jealously on the sidelines for the first several months before jumping in the following summer, offering [my own MOOC in programming languages](#), starting in January 2013. I also subsequently mentored colleagues on their own MOOC creations, and helped my university navigate the changing landscape of online education.

Creating and maintaining a MOOC was far more work than I had expected, but it is also immensely satisfying. As an author and instructor, I have consistently viewed it as a

modern analogue of a textbook combined with multimedia and a social and interactive component. It is safe to say the impact of the MOOC has exceeded that of most of my research – and that the perspective I gained from my research community is infused throughout the course I have shared with the world.

Finally, last summer, in addition to my other CRA board roles, I joined the [CRA Education committee](#) (CRA-E). CRA-E is tasked with “addressing society’s need for a continuous supply of talented and well-educated computing researchers,” which operationally means working to ensure research opportunities are widely available, both while students are undergraduates and by encouraging young researchers to pursue graduate school.

Toward that end, please be sure to provide nominations for the [awards](#) that CRA-E administers, take advantage of the [resources](#) that CRA-E provides, and let us know if you have suggestions for helping generate future generations of computing researchers.

Alas, there are never enough hours in the day, or days in the week, so there are important computing education questions to which I have not yet seen satisfying answers. I hope my fellow computing researchers will help answer them.

Here are some examples:

- ▶ What are best practices for a minor in computer science?
- ▶ If vibrant efforts to get computer science to become a standard part of American high schools succeed over the next decade, how should universities adjust?
- ▶ As the field of computing research continues to expand, with applications to all of society’s most pressing challenges, how should computing education adapt?

- ▶ Even as we work urgently to better scale undergraduate computing education, is training in computing research inherently less scalable?
- ▶ Can we make curriculum-evolution more agile, or will rare Herculean revamps remain necessary?

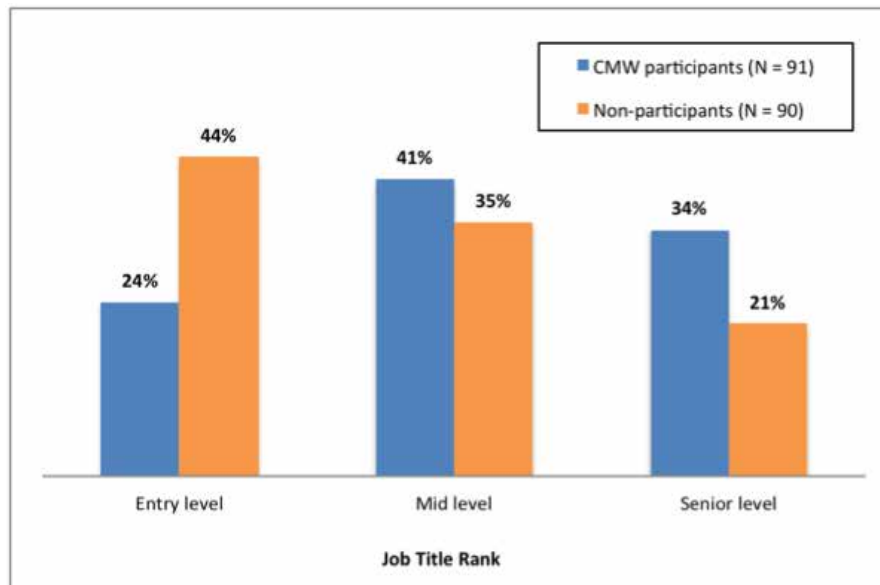
About the Author

Dan Grossman is a professor in the Department of Computer Science & Engineering at the University of Washington where he has been a faculty member since 2003. Grossman holds the J. Ray Bowen Professorship for Innovation in Engineering Education, and is his department’s associate chair for education. Grossman completed his Ph.D. at Cornell University and his undergraduate studies at Rice University. His research interests lie in the area of programming languages, ranging from theory to design to implementation. In recent years, Grossman has focused on better techniques for expressing, analyzing, and executing multithreaded programs. He has collaborated actively with researchers in several other disciplines of computer science, particularly computer architecture on problems at the interface between hardware and software including approximate programming.

Grossman has served on roughly 30 conference and workshop program committees and will serve as Program Chair for PLDI 2018. He currently serves on the CRA Board, the ACM Education Board, and is the instructor for a popular MOOC on undergraduate topics in programming languages and functional programming.

Nearly 10 Years Later, CRA-W Career Mentoring Workshop Participants are More Advanced in their Careers Than Non-Participants

By Jane Stout, CERP director, and Burçin Tamer, CERP research scientist



CERP recently extracted Web data to observe the career progression of women who had participated in the CRA-W's 2008 or 2009 Career Mentoring Workshops (CMWs) compared to a sample of women who had never participated in CMWs. We obtained the comparison sample from a population of women who earned their Ph.D.s in computer science during the same time period as the participants. We collected current career information including job titles (e.g., associate professor) and job setting (e.g., academia vs. industry/labs) for both groups. We then categorized job titles as entry level (e.g., assistant professor, software engineer), mid level (e.g., associate professor, senior engineer), and senior level (e.g., professor, principal program manager), collapsed across job setting. To test for a systematic difference in job rankings between workshop participants and the comparison group, we ran a 2 (Group) x 3 (Job Title Rank) Chi-squared test and found a statistically significant difference in rankings across the two groups, $\chi^2(2, N = 181) = 8.46, p < 0.05$. Specifically, CMW participants were less likely than non-participants to be in an entry level position, $p < .05$, and more likely to be in a senior level position than non-participants, $p < .05$.

Notes. It is possible that our findings are explained by factors outside of the CMWs. For instance, our analysis did not account for the rigor/prestige of the institutions where women obtained their Ph.D. This concern is alleviated to some degree by the fact that our comparison sample was randomly selected from the complete list of Ph.D. programs in the field of computer science during a given period of time in the United States. This list was obtained from the ProQuest Dissertations and Theses Database, which covers almost all North American Ph.D.-granting institutions. As a result, we do not expect there to be a systematic bias toward a given type of institution in the way that there would be if we were using a convenience sample of a subset of institutions. Also, compared to non-participants, CMW participants may be more proactive in taking steps to advance their career (e.g., by attending a career mentoring workshop), which could explain the pattern of results reported here. Further, the people in the comparison group were only those we were able to find via current job information on the Web. This means women who did not have any public information online were excluded from our data. That said, we suspect this may actually

increase the validity of our conclusions, assuming it is easier to find public information on people who are in more versus less prominent positions in their field. Given these and other possible forms of bias in our data collection method, the current finding should be interpreted with caution. A detailed report of our Web data extraction and categorization method is available upon request.



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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/>.

Thank You Data Buddies!

By CERP Staff

CRA wishes to thank the computing departments who distributed CERP's Data Buddies survey during the fall of 2016! The collective effort of these departments provides data for CERP's research on students' experiences and successes in computing degree programs.

Special thanks to **Elite Data Buddies Departments**, who obtained at least a 20% response rate from their students!

Baldwin Wallace University	Johns Hopkins University	University of Maryland-Baltimore County
Beloit College	Miami University-Oxford	University of Massachusetts-Amherst
Bethune-Cookman University	Montana State University	University of Michigan-Ann Arbor
Boston University (Computer Science Department)	New Mexico State University-Main Campus	University of North Carolina-Charlotte
Brown University	Northeastern University	University of Notre Dame
Calvin College	Oberlin College	University of Pennsylvania
Colorado School of Mines	Princeton University	University of Puget Sound
Cornell University	Purdue University	University of Rochester
Drexel University	Saint Joseph's University	University of Utah
Duke University	SUNY College-Plattsburgh	University of Washington
Fisk University	Texas State University	Virginia Tech
George Mason University	The Ohio State University	Washington and Lee University
Grinnell College	Tufts University	Washington University-St Louis
Harvard University	Union College	Wellesley College
Harvey Mudd College	University of Alabama	Western Washington University
Howard University	University of Hawaii-Hilo	Winston Salem State University
Illinois Wesleyan University	University of Illinois-Chicago	

A big thank you to the rest of the Data Buddies departments who distributed CERP's surveys to students!

Arizona State University	New York University-Polytechnic School of Engineering	University of Illinois-Springfield
Augustana College	North Carolina A&T State University	University of Illinois-Urbana Champaign
Boise State University	Radford University	University of Madison-Wisconsin
Boston University (Bioinformatics Department)	Rensselaer Polytechnic Institute	University of Maryland-College Park
California State University- Dominguez Hills	Rochester Institute of Technology	University of Michigan-Flint
California State University-Long Beach	Rutgers University-New Brunswick Campus	University of Minnesota-Twin Cities
Carnegie Mellon University	Smith College	University of Missouri-Columbia
Clemson University	Sonoma State University	University of Nebraska-Kearney
Columbia University	Syracuse University	University of Nebraska-Lincoln
Connecticut College	Texas A&M University	University of Pittsburgh
CUNY-Graduate Center	The College of New Jersey	University of South Carolina-Columbia
Gallaudet University	University of California-Berkeley	University of South Florida-Main Campus
Georgia Institute of Technology	University of California-Los Angeles	University of Texas-Austin
Kean University	University of California-San Diego	University of Texas-Dallas
Landmark College	University of Colorado-Boulder	University of Texas-Rio Grande Valley
Loyola Marymount University	University of Delaware	University of the District of Columbia
Morehouse College	University of Florida	Wayne State University
Mount Holyoke College	University of Houston	Western Oregon University
		Worcester Polytechnic Institute
		Yale University

Is your department listed? If not, help the computing community by volunteering your department to become a Data Buddy today! Visit CERP's website to sign up: <http://cra.org/cerp/data-buddies/>



CERP

Computing Research Association
Evaluation

2016 Robotics Roadmap and the National Robotics Initiative 2.0

The following is a blog post by *Computing Community Consortium (CCC) Council Member and contributor to the Robotics Roadmaps Maja Matarić.*



In 2009, the CCC published a report, *A Roadmap for US Robotics, From Internet to Robotics* (a.k.a. the Robotics Roadmap), which explored the capacity of robotics to act as a key economic enabler, specifically in the areas of manufacturing, healthcare, and the service industry, 5, 10, and 15 years into the future.

An updated version of the Robotics Roadmap was released in November 2016; it expands on the topics discussed in the 2009 roadmap and addresses the areas of public safety, earth science, and workforce development. It also emphasizes robotics as a validated STEM education and career recruitment tool and calls for additional research in this promising area. This direction is particularly important as it not only aids in training the 21st century workforce, but also helps to address concerns about job loss to automation.

You can read the full 2016 Roadmap [here](#).

The original Robotics Roadmap was the basis for the 2011 *National Robotics Initiative (NRI)*, which was designed to support fundamental research to accelerate the development and use of robotics technologies in the US, focusing on technologies that work cooperatively with people. In November 2016, the *National Science Foundation (NSF)* released the

National Robotics Initiative 2.0: Ubiquitous Collaborative Robots (NRI-2.0) program solicitation.

“This solicitation significantly extends the scope and aims of the original National Robotics Initiative (NRI) program, which was focused on collaborative robots (co-robots). In particular, the NRI-2.0 program expands the co-robot theme in terms of the **scale** and **variety** of collaborative interactions that are the focus of this program – important new themes of the NRI-2.0 program include collaborative teams of humans and robots, easily customized and personalized robots, and infrastructure to lower the barriers to entry into the field of co-robots.”

NRI 2.0 has broader inter-agency support than the original NRI. It includes NSF, DARPA, NASA, and the Department of Agriculture. This expansion of federal agency participation further strengthens the pipeline from basic research to transition to deployment and use.

The CCC also released a white paper earlier this year, titled *Next Generation Robotics*, which examines the past five years of the NRI and provides recommendations for the future.

White House Report on AI, Automation, and the Economy

The following is a blog post by *Computing Community Consortium (CCC) AI Task Force Co-Chair Gregory D. Hager, Mandell Bellmore Professor of Computer Science at The Johns Hopkins University and CCC Director Ann Drobnis.*

The past year has seen an incredible amount of ink spilled on a singular topic: what does the future of AI portend for the nation and the world? Will AI technologies enhance productivity and *quality of life*, or will it *disrupt labor markets* and accelerate growth in income disparity and wealth

concentration? Will AI research be used for the common good, or will it be “*bought up*” by the private sector and exploited for commercial gain? Is this another AI research bubble, or are we truly on the verge of a paradigm shift that could change the nature of computing itself?



In previous posts, we've written about efforts by the research and science policy community to predict and shape the future of the AI research community through [Artificial Intelligence and Life in 2030](#), a report of the AI 100 study committee, recommendations from [Preparing for the Future of Artificial Intelligence](#), a report

written by the White House Office of Science and Technology Policy, informed by a series of five [public workshops](#) and [public responses](#) to a Request for Information, as well as priorities for federally funded research in Artificial Intelligence as recommended by the [National Artificial Intelligence Research and Development Strategic Plan](#), a report by the National Science and Technology Council Networking and Information Technology Research and Development (NITRD) [Task Force on Artificial Intelligence](#).

Recently, the White House released a new report, [Artificial Intelligence, Automation and the Economy](#), which draws on many of these threads, but turns an important corner by articulating how actions by government could help to shape the future of the economy and the workforce to maximize the benefits of AI for all.

To quote from the executive summary:

Accelerating artificial intelligence (AI) capabilities will enable automation of some tasks that have long required human labor. These transformations will open up new opportunities for individuals, the economy, and society, but they have the potential to disrupt the current livelihoods of millions of Americans. Whether AI leads to unemployment and increases in inequality over the long-run depends not only on the technology itself but also on the institutions and policies that are in place. This report examines the expected impact of AI-driven automation on the economy, and describes broad strategies that could increase the benefits of AI and mitigate its costs.

The report goes on to articulate a set of three broad strategic policy directions designed to connect AI research and technology advances to broader societal and economic themes.

Those strategies are:

Strategy #1: Invest in and develop AI for its many benefits

Strategy #2: Educate and train Americans for jobs of the future

Strategy #3: Aid workers in the transition and empower workers to ensure broadly shared growth

Particularly relevant to our community, the first recommendation further articulates the importance of continuing to invest in AI research and development, development of AI for cyberdefense and fraud detection, development of a larger, more diverse AI workforce, and support for market competition.

While it is tempting for our community to just focus on this aspect of the report, we would advocate that this is a report we should read and consider in its entirety. It is incumbent upon us, as a community, to be part of the conversation around difficult questions of economics, ethics, and fairness as AI (and other) computing technologies are developed. Several recent symposia, including the [Computing Research: Addressing National Priorities and Societal Needs Symposium](#), the [Artificial Intelligence for Social Good Symposium](#), and the [De Lange Conference X: Humans, Machines, and the Future of Work](#), have begun to embrace these themes. Let's not just wait for the future to happen, but rather let's work together to shape it!



White House Report on Ensuring Long-term U.S. Leadership in Semiconductors

The following blog post is by CCC Vice Chair and Executive Council member and University of Wisconsin-Madison Professor Mark D. Hill.



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In December, the US White House released [Ensuring Long-Term U.S. Leadership in Semiconductors](#). The report recognizes the importance of semiconductors – and semiconductor leadership – to modern life in a competitive world. While much of the report deals with policy issues – see a recent [CRA Policy blog post](#) – I focus on some of the

technical recommendations in Chapter 4.

Importantly the report recognizes the future leadership in semiconductors – wit broadly – will need to move beyond Moore’s Law (twice the transistors every two years) to exploit innovations from applications down through computing’s software-hardware-technology “stack.” To stimulate such cross layer activity, the report advocates that US government

invest one or more “moonshots.” Example possible moonshots provided by report include implantable bioelectronics for chronic conditions, biological/chemical/nuclear threat detection, disturbed electric grid, and global weather forecasting.

In these technical recommendations, this reports echoes issues pointed to by recent CCC and IEEE work, including:

- ▶ [Executive Summary of the Visioning Workshop on Nanotechnology-inspired Information Processing Systems of the Future](#)
- ▶ [Arch2030: A Vision of Computer Architecture Research over the Next 15 Years](#)
- ▶ [Whistling Past the Graveyard: What the End of Moores’s Law Means to All of Computing](#)

OSTP Exit Memo

The following is a guest blog post by CCC Chair [Beth Mynatt](#), CCC Vice Chair [Mark D. Hill](#), CCC Council Member [Debra J. Richardson](#), and CCC Director [Ann Drobnis](#).



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In January, the White House Office of Science and Technology Policy (OSTP) released an [Exit Memo](#) that highlights the impact that the administration has had in “reinvigorating the American scientific technological enterprise.” Dr. John Holdren, Director of OSTP, and Megan Smith, U.S. Chief Technology Officer, offer actions that are needed in the near term to

broaden participation in science, technology, and innovation to continue driving prosperity. The first action identified is:

Investing in fundamental research, the fundamental, curiosity-driven inquiry that is a hallmark of the American research enterprise and a powerful driver of new

technology and innovation in the medium and long term.

Holdren and Smith also highlight 20 science and technology frontiers to continue driving US innovation and address major societal needs. The computing research community plays a significant role in many of these frontiers, and the CCC has been actively working on several of these frontiers, including:

Investing in neuroscience and neurotechnology. Since April 2013, the BRAIN Initiative[®] – Brain Research through Advancing Innovative Neurotechnologies – has catalyzed more than \$1.5 billion in public and private funds for novel neurotechnologies aimed at revolutionizing understanding of the human brain.

- ▶ The CCC held the [BRAIN](#) workshop to bring together researchers to further explore the Interfaces between Brain Science and Computer Science. The final workshop report can be found [here](#).

Building smart communities and the Internet of Things.

The [White House Smart Cities Initiative](#) has invested nearly \$350 million from multiple Federal agencies in research and technology deployment in communities, with over 70 participating communities.

- ▶ The CCC has produced two white papers, [System Computing Challenges in the Internet of Things](#) and [Smart Communities Internet of Things](#).

Understanding the potential of AI, machine learning, and big data. The Administration published a public report on AI, [Preparing for the Future of Artificial Intelligence](#), accompanied by a [National Artificial Intelligence Research and Development Strategic Plan](#).

- ▶ The CCC also has an active [AI and Robotics Task Force](#), which provides a mechanism for articulating both the state of the art and technical limitations of AI. The CCC co-hosted an [AI Workshop, Artificial Intelligence for Social Good](#), with OSTP and AAAI. In this workshop, the successful deployments and the potential use of AI in various topics that are essential for social good were discussed, including but not limited to urban computing, health, environmental sustainability, and public welfare. An initial report can be found [here](#), with a full version to be released soon.

Developing robotics and intelligent systems. Robotics and intelligent systems are technologies that seek to advance physical computational agents that complement, augment, enhance, or emulate human physical capabilities or human intelligence, and have the capacity to improve lives and advance the Nation's economy. The National Robotics Initiative

(NRI) was launched in 2011 and renewed in 2016, as a multi-agency initiative.

- ▶ In 2009, the CCC released [A Roadmap for US Robotics, From Internet to Robotics](#) (Robotics Roadmap). The Robotics Roadmap explored the capacity of robotics to act as a key economic enabler, specifically in the areas of manufacturing, healthcare, and in the service industry, 5, 10, and 15 years into the future and was influential in developing 2011's [National Robotics Initiative](#) (NRI). An updated version of the Robotics Roadmap was released in November, 2016 and it expands on the topics discussed in the 2009 roadmap as well as addressing the areas of public safety, earth science, and workforce develop. You can read the full 2016 roadmap [here](#).

Investing in strategic computing. The [National Strategic Computing Initiative](#) (NSCI) was created in July 2015, at President Obama's request, to ensure continued U.S. leadership in high-performance computing (HPC) and to maximize the benefits of HPC for the economy, scientific discovery, and national security.

- ▶ [This CCC whitepaper](#), titled Opportunities and Challenges for Next Generation Computing, articulates some opportunities and challenges for dramatic performance improvements of both personal to national scale computing, and discusses some "out of the box" possibilities for achieving computing at this scale.

The CCC will continue to drive innovation by catalyzing shared interests among the public, industry, government, and computing research community. We welcome opportunities to work with these stakeholders to advance science and technology frontiers that meet the needs of our nation and society at large.

Announcements

Nominations Open for Borg Early Career Award

CRA-Women invites nominations for the **Borg Early Career Award (BECA)**. The award honors the late Anita Borg, who was an early member of CRA-W and an inspiration for her commitment in increasing the participation of women in computing research.

This annual award is given to an individual who has:

- ▶ made significant research contributions,
- ▶ had positive and significant impact on advancing women and diversity in the computing research community,
- ▶ is relatively early-career (at-most 8 years post-PhD) faculty member or researcher in an industry or government lab, and
- ▶ is affiliated with an institution, industry lab, or government lab in the United States, its territories, or Canada.



The deadline for nominations is February 15, 2017.

Distributed Research Experiences for Undergraduates (DREU)

Are you a faculty member interested in being a research mentor or do you know students interested in exploring research? The DREU program matches students with faculty mentors for summer research experiences at the faculty mentor's home institution. Applications are currently open for both students and mentors. **The application deadline is February 15, 2017.**

National Academy of Engineering Announces New Members

Recently, the National Academy of Engineering (NAE) announced it has [elected](#) 84 new members and 22 foreign members. Among those elected were Julia Hirschberg, CRA-W co-chair and former CRA board member, and Katherine Yelick, CCC council member. Several of the members elected have a background in computing research; congratulations to all.



► **Julia Hirschberg:** Percy K. and Vida L.W. Hudson Professor of Computer Science, and chair, department of computer science, Columbia University, New York City. *“For contributions to the use of prosody in text-to-speech and spoken dialogue systems, and to audio browsing and retrieval.”*



► **Katherine A. Yelick:** associate laboratory director, computer science, Lawrence Berkeley National Laboratory, and professor, electrical engineering and computer science, University of California, Berkeley. *“For software innovation and leadership in high-performance computing.”*

From the [NAE press release](#):

“Election to the National Academy of Engineering is among the highest professional distinctions accorded to an engineer. Academy membership honors those who have made outstanding contributions to “engineering research, practice, or education, including, where appropriate, significant contributions to the engineering literature” and to “the pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering, or developing/ implementing innovative approaches to engineering education.”

Individuals in the newly elected class will be formally inducted during a ceremony at the NAE’s annual meeting in Washington, D.C., on Oct. 8, 2017. A list of the newly elected members and foreign members follows, with their primary affiliations at the time of election and a brief statement of their principal engineering accomplishments.”



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Column Editor

Expanding the Pipeline
Patty Lopez, Intel

Professional Opportunities

Allegheny College

Assistant Professor of Computer Science

The Department of Computer Science at Allegheny College invites applications for a tenure-track position beginning August 2017. All candidates with a demonstrated excellence in the field of computer science are encouraged to apply; individuals who combine computer science with fields such as art, communication arts, and economics are invited. Qualifications for the position include a Ph.D. in computer science or a related field. Review of applications will begin December 1, 2016 and continue until the position is filled.

The teaching load is six courses per academic year, with a laboratory course in computer science counting as one-and-a-half courses. All faculty will participate in both the teaching of college-wide first-year/sophomore seminars that emphasize writing and speaking and the supervision of innovative research projects. Beyond providing evidence of the ability to effectively teach and an interest in advising diverse undergraduates, applicants must demonstrate a commitment to ongoing scholarship in the field of computer science.

The successful candidate will join a vibrant and growing community comprised of innovative teachers, active researchers, and diverse learners. Computer science faculty, students, and alumni have strong connections to top-tier academic institutions and industry-leading corporations. The chosen candidate will receive laboratory space for teaching and research and access to renewable funding for research with students. The selected applicant will join an entrepreneurial institution that supports cutting-edge teaching and values a variety of scholarly deliverables, including software development, community engagement, and paper publication.

Additional details about the Department of Computer Science's students, faculty, staff, facilities, and this position are available at <http://www.cs.allegheny.edu>. Interested candidates should send a letter of application, curriculum vitae, statement of teaching and research interests, applicable transcripts, and arrange to have three letters sent from references to: Gregory M. Kapfhammer, Associate Professor and Chair, care of Pauline Lanzine, cssearch@allegheny.edu.

Located in picturesque northwestern Pennsylvania, Allegheny College is a highly selective private liberal arts college about ninety minutes from Cleveland and less than two hours from Pittsburgh, a city recently described as having a viable path to becoming one of America's leading hubs for technology startups. Allegheny College is an Equal Opportunity Employer, with a strong commitment to diversity, inclusion, and equity. Women, veterans, individuals with disabilities, and members of other underrepresented groups are encouraged to apply. Allegheny College does not discriminate on the basis of race, color, religion, gender, gender identity, gender expression, sexual orientation, age, socioeconomic status, or national origin.

The Allen Institute for Artificial Intelligence

Research Scientist

The Allen Institute for Artificial Intelligence (AI2) is a non-profit research institute in Seattle founded by Paul Allen and headed by Professor Oren Etzioni. The core mission of (AI2) is to contribute to humanity through high-impact AI research and engineering. We are actively seeking post docs and Research Scientists at all levels who are passionate about AI and who can help us achieve this core mission by teaming to construct AI systems with reasoning, learning and reading capabilities.

Position Summary

AI2 currently has projects in the following areas:

- Language and Vision
- Information extraction and semantic parsing
- Question answering
- Language and reasoning
- Machine learning and theory formation
- Semantic search
- Natural language processing
- Diagram understanding
- Visual knowledge extraction and visual reasoning

And more....

AI2 Research Scientists will have a primary focus in one of these specific areas but will also have the opportunity to contribute and engage in a variety of other areas critical to our research and mission. These include opportunities to participate in or lead select R&D projects, work with management to develop the long term vision for knowledge systems R&D, take a leading role in overseeing and implementing software systems supporting AI2's research, author and present scientific papers and presentations for peer-reviewed journals and conferences, and help develop collaborative and strategic relationships with relevant academic, industrial, government, and standards organizations.

Applicant

Applicants for Research Scientist at AI2 should have a strong foundation (typically PhD level) in one or more of the following areas: natural language processing, machine reading, automatic knowledge base construction, large-scale textual inference and entailment, knowledge representation and reasoning, computer vision and machine learning, or question answering and explanation. We look favorably upon extensive work experience and publishing demonstrating application of your research.

Professional Opportunities

Why AI2

In addition to AI2's core mission of being a leader in the field of AI research, we also aim to create a superb team environment and to invest in each team member's personal development. Some highlights are:

- **We are a learning organization** – because everything AI2 does is ground-breaking, we are learning every day. Similarly, through weekly AI2 Academy lectures, a wide variety of world-class AI experts as guest speakers, and our commitment to your personal on-going education, AI2 is a place where you will have opportunities to continue learning right alongside us;
- **We value diversity of thought** – we seek Research Scientists who can bring novel experiences and modes of problem solving to our leading-edge mission. If you are creative and efficient in your approach and insightful in your questioning, AI2 could be a great environment for you;
- **We emphasize a healthy work/life balance** – we believe our team members are happiest and most productive when their work/life balance is optimized. While we value powerful research results which drive our mission forward, we also value dinner with family, weekend time, and vacation time. We offer generous paid vacation and sick leave as well as family leave;
- **We are collaborative and transparent** – we consider ourselves a team, all moving with a common purpose. We are quick to cheer our successes, and even quicker to share and jointly problem solve our failures;
- **We are in Seattle** – and our office is on the water! We have mountains, we have lakes, we have four seasons, we bike to work, we have a vibrant theater scene, we have the defending Super Bowl champions, and we have so much else. We even have kayaks for you to paddle right outside our front door;

• **We are friendly** – chances are you will like every one of the 50+ (and growing!) people who work here. We do!

TO APPLY: <http://grnh.se/lubxan1>

The Allen Institute for Artificial Intelligence

Allen AI Young Investigator Program

Duration: 1-3 years

Start date: Flexible

Candidates: Are within one year of completing their PhD, or already have a PhD

The Allen AI Young Investigator program is a postdoctoral program offering unique benefits. The program will enable you to balance working collaboratively on an AI2 project while pursuing an independent research agenda.

Benefits

- Dedicated AI2 mentor: Mentorship in research, grant writing, and more
- 50% collaborative work on an AI2 project
- 50% work on your own projects
- Generous travel budget
- AI2 provides support for obtaining a visa through its immigration attorney, and pays the necessary expenses
- Access to AI2's data, AWS infrastructure, and other resources as needed
- No grant writing, teaching, or administrative responsibilities
- \$100K research funding from AI2 after completion (based on proposal)

TO APPLY: <http://grnh.se/u7gvl3l>

Auburn University

Department of Computer Science and Software Engineering

Auburn Cyber Research Center Postdoctoral Position

The Department of Computer Science and Software Engineering (CSSE), situated within the Samuel Ginn College of Engineering, invites applications

for a postdoctoral researcher in Cyberinfrastructure, Security, and Critical Infrastructure Protection to begin in Spring or Summer of 2017. Salary will be commensurate with the candidate's qualifications. Responsibilities include research, graduate student co-supervision, teaching of one course in the applicant's specialty area, and offering one course in the core CSSE curriculum. The Ph.D. degree must be completed by the start of appointment. Excellent communication skills are required. The position is for one year, renewable up to two additional years based on performance and availability of funds.

The Department currently has 17 full-time tenure-track faculty members and supports strong graduate (M.S. and Ph.D.) and undergraduate programs in computer science, software engineering and wireless engineering. Enrollment for Fall 2016 is 765 undergraduate and 142 graduate students. Faculty research areas include artificial intelligence, computer architecture, computer science education, database systems, energy-efficient systems, high performance computing, human-computer interaction, internet of things, learning science, machine learning, modeling and simulation, multi-agent systems, networks, security, software engineering, software visualization and wireless engineering. Further information may be found at the Department's home page (www.eng.auburn.edu/csse).

The Department is home to the Auburn Cyber Research Center (cyber.auburn.edu), and is affiliated with the newly established McCrary Institute for Critical Infrastructure Protection and Cyber Systems (mccrary.auburn.edu). The postdoctoral candidate will be associated with both of these organizations, which will jointly fund the position.

Auburn University is one of the nation's premier land, sea, and space grant

Professional Opportunities

institutions. Auburn is both highly research-active and committed to maintaining teaching excellence, offering Bachelor's, First Professional, Master's, Educational Specialist, and Doctoral degrees. In a recent U.S. News and World Report ratings of undergraduate, graduate and online programs, Auburn was ranked 31st, 39th, and 17th among public universities, respectively. It enrolls more than 28,000 students and employs 1,216 full-time faculty members distributed across nine Colleges and three Schools, with degrees offered in more than 200 academic programs. The College of Engineering has an enrollment of 4,963 undergraduates and 899 graduate students in eight departments.

Auburn University is also one of 14 universities nationwide currently recognized for all three cyber designations by the Federal government: as a Center of Academic Excellence in Cyber Security by the Department of Homeland Security (DHS) and National Security Agency (NSA) for Cyber Defense Education (CAE-CD) and Cyber Defense Research (CAE-R), as well as by NSA for Cyber Operations (CAE-Ops).

Auburn is located 100 miles southwest of Atlanta and 50 miles northeast of Montgomery, the State Capital. The picturesque main campus covers 1,875 acres, and includes the entire southwest quadrant of the city of Auburn. The Auburn-Opelika community has a population of about 100,000, an excellent public school system, and has been nationally ranked as one of the "best small towns in America."

Applicants should submit a cover letter, curriculum vita, research vision, teaching philosophy, and three references to: <http://aufacultypositions.peopleadmin.com/postings/1915>. Application review process will begin October 1, 2016 and continue until successful candidates are identified. Selected candidates must be able to meet eligibility requirements to work

legally in the United States at the time of appointment for the proposed term of employment.

Auburn University is an EEO/Vet/Disability Employer.

Berry College

One-Year Faculty in Computer Science

The Department of Mathematics and Computer Science at Berry College invites applications for a one-year faculty position in Computer Science. Teaching responsibilities include introductory programming courses, data structures, discrete math, and/or web programming. The ideal candidate will demonstrate aptitude and enthusiasm for teaching in a liberal arts environment and desire to contribute to the culture and development of a small program. Ability and interest in teaching an applied math course, while not a requirement, is welcome.

Applicants should hold a Ph.D. (for appointment as Visiting Assistant Professor) or Master's (for appointment as Instructor) in Computer Science or closely related field. Review of applications will begin February 6, 2017 and continue until the position is filled. The starting date for this position is August 2017.

Applicants should send a letter of application, current vitae, evidence of teaching effectiveness, and three letters of reference by e-mail to BerryCS@berry.edu or by post to:

Computer Science Search Committee
Department of Mathematics and Computer Science
Berry College
Box 495014
Mount Berry, GA 30149-5014

Brandeis University

Assistant Professor in Machine Learning and Data Science (Reviewing from Jan 16, 2017 until filled)

The Computer Science Department at Brandeis University invites applications for a full-time, tenure-track assistant professor, beginning Fall 2017, in the broad area of Machine Learning and Data Science, including but not limited to deep learning, statistical learning, large scale and cloud-based systems for data science, biologically inspired learning systems, and applications of analytics to real-world problems. Of interest are persons with collaborative potential or experience with other strong areas at Brandeis such as life sciences, international finance, and social policy. Applicants must have a Ph.D. in Computer Science or a closely related field, and must have completed all requirements for the doctoral degree by the start of the position.

Brandeis hosts world-class research in the setting of a small liberal-arts university located only 7 miles from Boston. It is part of the vibrant industrial and research community of the greater Boston/Cambridge area and a member of the Association of American Universities, ranked in the top 35 by US News. The Computer Science department has 12 regular faculty members who have a teaching load of one course per semester and diverse research interests. Our outstanding undergraduates, currently 50 per year, attain positions across industry as well as elite graduate schools. The department benefits from collaborative opportunities within the University and the greater Boston area. It offers a Ph.D. degree in Computer Science and several Master's degree programs that collectively produce another 60 graduates per year. The department also hosts the Linguistics major, and our Master's program in Computational Linguistics is nationally recognized.

Brandeis University is an equal opportunity employer, committed to building a culturally

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diverse intellectual community, and strongly encourages applications from women and minorities. Diversity in its student body, staff and faculty is important to Brandeis' primary mission of providing a quality education. The search committee is therefore particularly interested in candidates who, through their creative endeavors, teaching and/or service experiences, will increase Brandeis' reputation for academic excellence and better prepare its students for a pluralistic society.

To apply, please submit a cover letter, a curriculum vitae, a research and a teaching statement, up to three publications, and at least three letters of reference, to AcademicJobsOnline at <https://academicjobsonline.org/ajo/jobs/8683>. First consideration will be given to applications received by January 16, 2017.

Butler University

Postdoctoral Assistant

The Computer Science and Software Engineering Department at Butler University seeks a Postdoctoral Teaching Assistant.

For details, please see <https://www.butler.edu/hr/faculty-openings>.

For inquiries and to submit an application, please contact us at cs-se@butler.edu.

Cal Poly Pomona

Assistant Professor, Computer Science

Cal Poly Pomona Cybersecurity Cluster Hire Announcement

Over the last decade, our lifestyles in social, political, financial and healthcare arenas have gone through extensive digitization. However, such massive digitization opens up a new domain of risk, as inappropriate access control of these information can lead to data breaches and violation of privacy. To address the critical national need of securing digitized information, Cal Poly

Pomona is conducting a cluster hire for three positions at the Assistant Professor ranks; one in each of the departments of Computer Science (CS), Computer Information Systems (CIS) and Electrical & Computer Engineering (ECE) starting in the fall of 2017.

Successful candidates are required to have a PhD in related areas by September 1, 2017 with a specialization in software and mobile application security (CS), cloud and network

security (CIS) or hardware and embedded systems security (ECE). Successful candidates are expected to work as a part of the campus wide cybersecurity cluster members in the department of CS/CIS/ECE to mentor and ensure student success across disciplines, develop interdisciplinary courses in cybersecurity and participate in the accreditation activities of the cybersecurity curriculum, and submit internal and external grants in collaboration with



Butte College
Start Here...Go Anywhere!

Support Engineer-California Community Colleges Technology Center (2 Positions)

Department: Planning and Information

OVERVIEW

Under the general direction of, and in coordination with an assigned administrator, troubleshoots and develops technical solutions for the California Community Colleges Technology Center's (CCCTC) software application solution efforts. Positional emphasis will be on the application of technical diagnostic techniques to resolve statewide college-staff reported issues in support of individuals of varying technical expertise. Provides high-quality technical support while delivering solutions to both technical and non-technical users. Investigates current and future technologies to ensure the CCCTC support base leverages the full capabilities of solutions provided.

MINIMUM QUALIFICATIONS: EDUCATION AND EXPERIENCE:

Bachelor's Degree in Computer Science, Electrical Engineering or a related field or the equivalent*; AND Two (2) years of experience directly related to the duties and responsibilities of this position. (Experience must include scripting and deployment of XML and Perl files.) Graduation from high school, G.E.D. or the equivalent**. * Bachelor's Degree education equivalency equals two (2) years of increasingly responsible work experience for each full year (24-30 units) of college. (College and experience may be combined, but may not replace, the required Minimum Qualifications.) ** High School education equivalency equals an adult education diploma or four (4) years of full-time, paid work experience.

CERTIFICATES, LICENSES, REGISTRATION AND OTHER REQUIREMENTS:

Hold and maintain a valid driver's license throughout duration of employment with the District. Travel is required.

DESIRED QUALIFICATIONS: Four (4) years of experience in a technical support position covering information design, information architecture, Web service API use and data transfer via import/export techniques. Experience with SQL databases, particularly PostgreSQL and the development of SQL queries. Experience with XML, XSL, HTML and CSS. Experience with reporting tools, particularly Jasperreports.

The Butte-Glenn Community College District is an Equal Opportunity Employer.

For full position details & to apply, visit: <http://aptrkr.com/905843>

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cluster members to promote cybersecurity research, education and outreach activities.

The current Cal Poly Pomona cybersecurity cluster members are very active in cybersecurity community through multimillion dollar federal grants from National Science Foundation (NSF), Department of Homeland Security (DHS) and National Security Agency (NSA). Cal Poly Pomona is a NSA/DHS accredited Center for Academic Excellence in Cyber Defense, participant in nationally recognized programs such as Cybercorps Scholarship for Service (SFS), Collegiate Cyber Defense Competition (CCDC), GenCyber and CyberPatriot. The university's commitment of learn-by-doing is supported by on-campus research facilities in smartphone and IoT security and cross-disciplinary cloud and big data infrastructure.

A Student Success Statement about your teaching or other experiences, successes, and challenges in working with a diverse student population (approximately one page, single-spaced) is required. For more information and application procedures, visit <https://www.cpp.edu/~faculty-affairs/open-positions/college-unit/sci/CyberSecurity.shtml>. Each applicant must identify their preferred department (CS/CIS/ECE) on their package. Full consideration will be given to applications received by February 24, 2017. General inquiries for this cluster hire should be sent to cybersecurity@cpp.edu.

Cal Poly State University

Assistant/Associate Professor in Computer Graphics/Vision/Gaming

The Computer Science and Software Engineering Department within the College of Engineering at Cal Poly State University, San Luis Obispo, CA invites applications for a full-time, academic year, tenure-track Computer Science faculty appointment in the area of computer graphics, vision, HCI, or gaming, at a rank and salary commensurate

with the applicant's background and experience. Particular areas of interest include: computer graphics, interactive media, animation, and data visualization. The anticipated start date is September 7, 2017.

Duties include teaching undergraduate computer graphics courses, teaching master's level courses in the areas of computer graphics or closely related field, pursuing research in these areas, and providing service to the department, the university, and the community. Candidates who can contribute teaching and research in computer graphics and interactive entertainment (i.e. game development, animation and effects, virtual reality, or creative computation, etc.), are encouraged to apply. Areas of interest include: computer graphics, interactive media, animation, computer vision, HCI, video game related disciplines and data visualization. A doctorate in Computer Science, Software Engineering, or a closely related field is required.

Applicants are encouraged to submit materials by February 3, 2017 for full consideration; however, the position will remain open until filled.

To apply (online faculty application required), visit: <https://www.calpolyjobs.org/applicants/Central?quickFind=165455>

Cal Poly's commitment to diversity informs our efforts in recruitment, hiring and retention. California Polytechnic State University is an affirmative action/equal opportunity employer.

Clemson University

Cluster Faculty Search for Tenure-Track Faculty Positions in the School of Computing with a Power and Energy Analytics Focus

Applications and nominations are sought for multiple faculty positions in the School of Computing at the Assistant or Associate Professor rank. The positions are intended

to focus on the application of computer science, visualization, or visual analytics to problems in electric power. Areas of interest include, but are not limited to, energy analytics, cyber and physical security, IT-OT, load and resource forecasting. The positions will be located at Clemson's innovation campus in Charleston, South Carolina, at the Zucker Family Graduate Education Center. Persons filling the positions may also hold a joint appointment with the Holcombe Department of Electrical and Computer Engineering. More information and application procedures may be found at <https://apply.interfolio.com/39736>

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

CMU's Heinz College

Postdoc position

A postdoctoral scholarship is available for an outstanding researcher in data mining and machine learning at Carnegie Mellon University's Heinz College of Information Systems and Public Policy.

Application information is at: <http://www.andrew.cmu.edu/user/lakoglu/postdoc@Heinz.html>

Position will remain open until filled.

College of William & Mary

Assistant Professors of Computer Science

The Department of Computer Science at William & Mary seeks applications for two tenure-track positions at the Assistant Professor level to begin in Fall 2017. We are interested in exceptional applicants from all areas of computer science, and have

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a particular interest in cybersecurity and privacy. Applicants must hold a Ph.D. in computer science or a related field at the time of appointment (August 10, 2017) and must have a strong research record and an interest in teaching.

William & Mary is consistently ranked in the elite group of the Best National Universities-Doctoral by U.S. News and World Report and is committed to a multi-year effort to strengthen and expand its computer science research program. With a teaching load of two courses per year and institutional support, the department has been rising in national rankings of graduate CS departments, and has been the home of multiple NSF and DOE Career Awards. The department offers B.S., M.S., and Ph.D. programs. More information about the department can be obtained at <http://www.cs.wm.edu>.

Applicants must apply online at <https://jobs.wm.edu> (follow the link for instructional faculty). Please submit a curriculum vitae and a cover letter including a statement of research and teaching interests. Applicants will be prompted to submit online the names and email addresses of three references who we will contact with instructions for submitting letters of recommendation. For full consideration, please submit application materials by the review date, January 9, 2017. Applications received after the review date will be considered if needed.

The College of William & Mary values diversity and invites applications from underrepresented groups who will enrich the research, teaching and service missions of the university. The College is an Equal Opportunity/Affirmative Action employer and encourages applications from women, minorities, protected veterans, and individuals with disabilities. The College conducts background checks on applicants for employment.

Connecticut College

Computer Science Tenure-Track Assistant Professor

The Department of Computer Science at Connecticut College seeks a full-time tenure-track assistant professor to join our department in August 2017 with expertise in the areas of web technologies, mobile computing, and cybersecurity.

Please see <http://cs.conncoll.edu/job.html> for additional information.

Davenport University

Computer Science Faculty and Professional Outreach

Davenport University is a private, non-profit university focused on offering a practical curriculum and the latest degree programs. Visit www.davenport.edu

The college of technology faculty member will engage in significant professional outreach to build strategic relationships with business and industry. This position will develop and teach academic curriculum designed to meet the present and future demands of computer professionals in business, industry and the corporate sectors.

KEY QUALIFICATIONS:

- Master's Degree in Computer Science or closely related field. Doctoral Degree or commitment to pursue institutionally-funded doctoral studies post-hire is desirable.
- Five+ (5) years of professional experience in business or industry in an applied computer technology field.
- Experience in secure software development (including threat modeling), operating system design, low-level programming languages (i.e.: x86 or ARM), and computer architecture (x86 or ARM) is required.
- Ability to teach university-level undergraduate and graduate courses in C++/C#, Java, and R.

Knowledge/Experience with the following is preferred:

1. Applied data analytics and data science;
2. Computer networks and data communications with an emphasis in Cisco networking and equipment.
3. Information Security with an emphasis on secure coding.
4. Machine learning techniques, including computer vision.

To Learn more and Apply: jobs.davenport.edu/applicants/Central?quickFind=54400

ETH Zürich

Professor of Computer Science (Media Technology)

The Department of Computer Science (www.inf.ethz.ch) at ETH Zurich invites applications for a professorship in Computer Science in the area of Media Technology.

The professorship is embedded in a vibrant research and teaching community in Computer Science at ETH Zurich with a high potential for close collaboration with existing faculty in machine learning, graphics, vision, security, and systems. The future professor is expected to build-up and lead a research group in the Department of Computer Science and to take an active role in the establishment of a Media Technology Center at ETH Zurich. The center aims at driving research and technological innovation in media technology in close collaboration with partners from industry including top Swiss media, publishing, and television houses. The position is further expected to complement on existing strategic initiatives in Data Science at ETH Zurich and within Switzerland.

Candidates should have an excellent record of internationally recognized research, which demonstrates a strong link to other areas of computer science (machine learning, artificial intelligence, data science, visual computing) with applications

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in media and publishing. Examples for the computer science expertise of the successful candidate include, but are not limited to social media analytics, profiling and sentiment analysis, text and natural language understanding, semantic analysis, story understanding, metadata extraction, virtual and augmented realities, and video processing. The new professor is expected to supervise graduate students, to teach undergraduate level courses (German or English) as well as graduate level courses (English) in Computer and Data Science.

The expectation is to fill the position with a tenured full professor, but excellent applications at the (tenure track) assistant professor level will also be considered.

Please apply online at:
www.facultyaffairs.ethz.ch

Florida Institute of Technology

Software Engineering Faculty Position

The School of Computing at the Florida Institute of Technology invites applications for an open faculty position in Software Engineering, beginning Fall 2017. We are ABET accredited in both Computer Science and Software Engineering.

Required qualifications for the position include an earned Ph.D. with a specialization in software engineering, evidence of the ability to develop and sustain an active research program and a sincere interest in quality teaching, at both the undergraduate and graduate levels.

Our current software engineering strengths are in testing, requirements, maintenance and evolution, design and formal specification. However, we welcome applicants from all areas. Our preference is for faculty members who conduct research that is both pragmatic and academically rigorous.

The School has significant active research funding from multiple government agencies and commercial companies.

New faculty will have the opportunity to work with the Harris Institute for Assured Information. Florida Tech is a NSA/DHS designated Center for Academic Excellence in Information Assurance Research.

Florida Tech is located in Melbourne on Florida's Space Coast, one of the nation's fastest-growing high-tech areas. The campus is 5 minutes from the Indian River estuary, 10 minutes from the Atlantic Ocean and 50 minutes from Kennedy Space Center and Orlando. For more information on the School of Computing please visit our website (<http://soc.fit.edu>). Information on the Harris Institute is also available online (<http://harris-institute.fit.edu/>).

Applicants should send letters of intent, curriculum vitae, research and teaching summaries and full contact information for at least three references, via email (se@fit.edu).

Review of applications will begin in January and continue until the position is filled.

Official transcripts of all collegiate work must be sent directly from the attended institution to the Human Resources Office prior to the first day of employment. All international degrees must have a course-by-course official evaluation and translation sent to the Human Resources Office directly from an evaluation company affiliated with the National Association of Credential Evaluation Services, Inc. (NACES).

Equal Opportunity Employer Minorities/
Women/Veterans/Disabled

We are an E-verify employer
EEO is the Law
http://www.fit.edu/hr/documents/eeoc_law.pdf

The George Washington University

Computer Science Tenure Track Assistant or Associate Professor

The Department of Computer Science at The George Washington University is seeking applicants for a tenure track position at the Assistant or Associate Professor level beginning as early as Fall 2017. The rank of assistant or associate professor will depend on the applicant's qualifications.

The George Washington University is the largest academic institution in the nation's capital with close access to many Federal funding agencies and research laboratories. The University offers comprehensive programs of undergraduate and graduate liberal arts studies as well as degrees in engineering, law, medicine, public health, education, business and international affairs. A private institution, GW prides itself on excellent research, quality education, and low student-teacher ratio. The exceptional location affords the GW community unique cultural and intellectual opportunities. In the high-tech sector, the Washington, DC Metropolitan area is one of the largest technology areas in the nation.

The Department of Computer Science, recently housed in a new \$275M building for science and engineering, offers an accredited Bachelor of Science program, a Bachelor of Arts program, and Master's and Ph.D degrees. The Department has 14 faculty members spread across various research areas, with plans for significant growth in the coming years. For further information please refer to <https://www.cs.seas.gwu.edu>.

Minimum Qualifications:

All applicants must have or will have by August 15, 2017, a Ph.D. degree in Computer Science or a closely related field. Applicants must demonstrate potential

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for developing a quality research program and for attracting research funding. All applicants must have demonstrated teaching excellence or potential at both the undergraduate and graduate levels.

Responsibilities:

Faculty hired into this position will be expected to develop and grow their research, teaching and service contributions consistent with the mission of the School of Engineering & Applied Science, and towards building a portfolio suitable for promotion to the next rank.

Enquiries and Application:

To enquire, please email to cssearch@gwu.edu or call 202-994-7181. To apply, complete the online faculty application, at <http://www.gwu.jobs/postings/39971> and upload: (1) a detailed CV or resume; (2) a research statement; (3) a teaching statement; and (4) a cover letter that could describe your goals and why you are applying to this position. Please have at least three references email their letters directly to cssearch@gwu.edu. References will be expected to address research and teaching skills necessary for this appointment. Only complete applications will be considered. Review of applications will begin on February 13, 2017 and will continue until the position is filled.

EEO/AA Policy:

The university is an Equal Opportunity/Affirmative Action employer that does not unlawfully discriminate in any of its programs or activities on the basis of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity expression, or on any other basis prohibited by applicable law.

BACKGROUND SCREENING STATEMENT:

Employment offers are contingent on the satisfactory outcome of a standard background screening.

Georgetown University

Department Chair, Professor of Computer Science

The Department of Computer Science at Georgetown University in Washington, DC seeks applications for a Department Chair, to be appointed at the rank of full professor. Information about the position, the department and application instructions may be found at <http://cs.georgetown.edu/jobs>. Applications and requests for information should be sent to cs_chair_search@cs.georgetown.edu. Review of applications will begin on February 1, 2017 and continue until the position is filled.

Georgetown University is an Equal Opportunity, Affirmative Action employer fully dedicated to achieving a diverse faculty and staff. All qualified candidates are encouraged to apply and will receive consideration for employment without regard to race, sex, sexual orientation, age, religion, national origin, marital status, veteran status, disability or other categories protected by law.

Harvard University

Harvard Data Science Postdoctoral Fellows

The Harvard University Data Science Initiative is seeking applications for its inaugural Harvard Data Science Postdoctoral Fellows Program for the 2017-2018 academic year. The normal duration of the Fellowship is two years. Fellows will receive a generous salary as well as an annual allocation for research and travel expenses.

TO SEE FUNDING PRIORITIES AND APPLY FOR THIS POSITION PLEASE VISIT:

[HTTPS://DATASCIENCE.HARVARD.EDU/FUNDING-OPPORTUNITIES](https://datascience.harvard.edu/funding-opportunities)

We seek researchers whose interests are in data science, broadly construed, and including researchers with both a methodological and applications

focus. Fellows will be provided with the opportunity to pursue their research agenda in an intellectually vibrant environment with ample mentorship. We are looking for independent researchers who will seek out collaborations with other fellows and with Harvard faculty.

Hawai'i Pacific University

Associate Professor - Computer Science

Required: earned doctorate in Computer Science or related field; two years full-time CS teaching experience. Desired: enthusiasm for teaching variety of Computer Science courses; experience in cybersecurity; software/systems engineering; full-stack web apps; mobile apps; ability to bring into the classroom state-of-the-practice competencies, such as software engineering, mobile applications, cybersecurity, cloud computing. Full description and application at: <https://www.governmentjobs.com/jobs/1617879/assistant-associate-professor-computer-science/agency/hpu>

HPU is an Equal Opportunity Employer committed to fostering a diverse, equitable environment where faculty and staff can excel irrespective of ethnicity, gender, faith, age, color, disability or genetic information.

Indiana University School of Informatics and Computing

Assistant Professor of Data Science

The Indiana University School of Informatics and Computing, Indianapolis, invites applications for a tenure-track assistant professor position in data science, beginning August, 2017 in the Department of Human-Centered Computing. Candidates must demonstrate an outstanding scholarly record of research, exhibited by high-impact peer-reviewed publications and a research agenda that will secure competitive, external funding.

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We seek an exceptional researcher in data science. All areas of data science will be considered including data mining, statistical machine learning, descriptive, predictive, and prescriptive analytics, cloud computing, distributed databases, high performance computing, data visualization, or other areas involving the collection, organization, management, and extraction of knowledge from massive, complex, heterogeneous datasets.

Qualifications

- Ph.D. in Computer Science, Information Science, Statistics, Data Science, or related discipline.
- Demonstrated ability to develop a record of outstanding research productivity and impact. The ability to secure external funding is required.
- Effective teaching for classroom, online, or blended learning.

The department is home to a dynamic and interdisciplinary group of faculty and students across its Data Science, Human-Computer Interaction, Informatics, and Media Arts and Science degree programs.

The department has a strong emphasis on the human-centered aspects of data science, including interactive and multimodal visualizations, usable information representation and data manipulation, interactive tools for



FACULTY POSITIONS IN VISUAL COMPUTING

The Computer, Electrical, and Mathematical Sciences and Engineering Division at King Abdullah University of Science and Technology (KAUST) invites applications for faculty positions in visual computing. We particularly encourage applications by female candidates as well as applications for junior positions (Assistant professor rank), although we will consider outstanding candidates of any demographic.

KAUST is seeking candidates with an established track record of research in one of the subareas of visual computing, with visualization being a topic of particular interest. Successful candidates will have a PhD in Computer Science or related fields, as well as a strong publication record in top-tier conferences and journals. Senior candidates must have demonstrated strong leadership in the field. Successful candidates will be appointed within the Computer Science program, and are expected to engage with the KAUST Visual Computing Center (VCC).

The VCC is KAUST's hub for research activities spanning all areas of visual computing, ranging including imaging, computer vision, computer graphics, and visualization, as well as interdisciplinary applications of visual computing. The VCC offers a unique combination of an intellectually stimulating environment and access to superb facilities, including large-scale virtual reality installations in the KAUST Visualization Core Lab (KVL) and KAUST's 5 Petaflop/s Shaheen-2 supercomputer.

KAUST is an international, graduate research university dedicated to advancing science and technology through interdisciplinary research, education, and innovation. Located on the shores of the Red Sea in Saudi Arabia, KAUST offers superb research facilities, generous assured research funding, and internationally competitive salaries, attracting top international faculty, scientists, engineers, and students to conduct curiosity-driven and goal-oriented research to address the world's pressing scientific and technological challenges related sustainability in energy, water, food, and the environment.

Please apply via the <http://cemse.kaust.edu.sa> employment site. Please include the names of three references for Assistant Professor positions and at least six for senior positions. Applications will be considered until the positions are filled but not later than April 15, 2017. Prospective candidates are advised to apply as soon as possible.

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next-generation knowledge discovery, interactive environments for big data, human factors in data science, and human-computer interaction issues surrounding data science applications and decision-making processes. The Data Science program is uniquely positioned to drive research in big data around health information, both from the patient's side and from the provider's side. Two major growing areas include predictive population analytics for health monitoring and prevention and novel paradigms for health literacy and information delivery based on user's data searches and online behavior.

Faculty conduct groundbreaking, externally-funded research in a variety of areas, including emerging media technologies, human-computer interaction design, ubiquitous computing, accessibility, human-robot interaction and android science, and healthcare user interfaces.

Visit <http://indiana.peopleadmin.com/postings/3077> for full application instructions.

Please submit your application materials by **January 1, 2017**. However, the positions will remain open until filled.

Questions can be directed to Dr. Davide Bolchini at dbolchin@iupui.edu

The School of Informatics and Computing is eager to consider applications from women and minorities. Indiana University is an Affirmative Action/Equal Opportunity Employer. IUPUI is an Affirmative Action/Equal Opportunity Institution M/F/D/V.

Iowa State University

Assistant Professor - Multiple

The Department of Computer Science at Iowa State University seeks outstanding applicants for two tenure-track faculty positions at the rank of Assistant Professor.

Responsibilities include teaching undergraduate and graduate courses, mentoring and engaging undergraduates, as well as, prospective students, developing and sustaining a strong, externally funded research program, publishing in top tier venues, developing collaborative research, mentoring graduate students, and enhancing Iowa State University's existing strengths through professional and institutional service.

For more information on this position or to apply, follow this link: <http://www.iastatejobs.com/postings/21920>.

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries regarding non-discrimination policies may be directed to Office of Equal Opportunity, 3350 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. 515 294-7612, email eooffice@iastate.edu.

Kansas State University

Instructor

The Department of Computer Science at Kansas State University (KSU) seeks applicants for Instructor with an MS in Computer Science or related field. PhD and relevant teaching/industry experience preferred.

Go to <http://careers.k-state.edu/cw/en-us/job/500181/instructor-computer-science> for position description and application procedures or call 785-532-6350.

KSU actively seeks diversity among its employees. KSU is an EOE of individuals with disabilities and protected veterans. Background check required.

Kent State University

Faculty Tenure-Track - 9 Month, Computer Science

*[Job #999557 & Job #999622]
Kent Campus - Kent, OH*

Opportunity for two tenure-track positions in the Department of Computer Science. The successful candidate will join a growing and thriving department with excellent research and educational programs.

We seek applicants whose expertise focuses on multiple areas. We have high interest/need in computer engineering and smart devices, network and data security, augmented/virtual environment and game, and data sciences. We are also interested in internet-of-things, green computing, social and complex networks, bio-medical informatics, and visualization. Exceptional candidates in all closely related areas are encouraged to apply.

The successful applicants will be expected to establish an extramurally funded research program, engage in collaborative research, direct theses and dissertations, and exhibit a commitment to excellence in undergraduate and graduate education.

Qualifications include a Ph.D. degree in Computer Science or a related field. We also invite applicants with related industrial and/or post doctoral experience.

The positions are available at the Assistant or Associate Professor ranks; candidate for the associate rank is expected to have record of significant sustained funding, national or international recognition and/or significant scholarly contribution. Salary and startup funds are competitive and commensurate with academic qualification and prior experience. Information about the department can be found at www.kent.edu/cas/cs/.

Review of applications will begin March 30, 2017 and continue until the positions are filled.

Our department offers the B.S., B.A., M.S., M.A., and Ph.D. degrees and has 20 full

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time faculty, over 400 undergraduates and over 200 graduate students. Kent State University is eight campus system located in northeastern Ohio and has a student population of approximately 46,000. The beautiful park-like Kent campus is walking distance from downtown Kent. The city has recently undergone a major rejuvenation and has a vibrant town center with many new restaurants and shops.

Applicants should clearly identify which of the focus area(s) their expertise aligns with in a cover letter of application and should send their curriculum vitae, statements of research and teaching interests, and three letters of recommendation by email to cssearch@cs.kent.edu or by mail to:

Chair, Faculty Search Committee
Department of Computer Science
Kent State University
PO Box 5190
Kent, OH 44242-0001

For a complete description of this position and to apply online, visit our jobsite at <https://jobs.kent.edu>.

Equal Opportunity/Affirmative Action
Employer / Disabled / Veterans

Korea Advanced Institute of Science & Technology

Faculty Positions

The School of Computing at KAIST (Korea Advanced Institute of Science & Technology) seeks outstanding tenure-track faculty in all areas of computer science at the Assistant Professor level. Exceptional candidates at the Associate and Full professor levels will also be considered.

Our School of Computing is home to about 50 faculty and 1000 students. In addition, our school offers graduate programs in cybersecurity and web science technology, and runs special programs on mobile and software systems. Our undergrad students

can enroll in Software Intensified Program funded by MSIP (the Ministry of Science, ICT, and Future Planning). Also we collaborate closely with the Cyber Security Research Center (CSRC).

Applicants must demonstrate superior research and scholarship potential as well as teaching ability. Candidates should complete their PhD's and obtain the degree before the official appointment, if not by the time of application.

We accept and review applications all year around. For additional information and to apply, please see: <https://cs.kaist.ac.kr/Soc-facultysearch>.

If you have any question regarding the application process, please email us at facultysearch@cs.kaist.ac.kr.

Lakeside School

Upper School Computer Science/ Mathematics Teacher 2017-2018

Lakeside School, an independent coeducational day school located in North Seattle, is currently recruiting for an Upper School Computer Science and Mathematics Teacher, starting late August, 2017.

Our computer science program includes an introductory semester course, an AP level course, and a series of advanced electives. In addition, many of our math classes include units that focus on computational thinking and computer programming as a lens to explore some aspects of mathematical thinking in a more relevant, 21st century way. In addition, the department is in the midst of redesigning the curriculum to deliberately quantitative analysis skills to enhance students' ability to understand their world and communicate effectively with real data.

For a more detailed job description, please visit our website at www.lakesideschool.org

Lehman College, CUNY

Associate or Full Professor (Chair) - Computer Science

Performs teaching, research and guidance duties in area(s) of expertise. Shares responsibility for committee and department assignments including administrative, supervisory, and other functions.

Ph.D. degree in Computer Science or a related academic field is required at the time of appointment. The candidate should have a published record of research and scholarship. The successful candidate must be eligible to be appointed as a Associate or Full professor with tenure.

A publication record in high quality journals and conferences, administrative experience, and a history of grant funding will be preferable.

Review of CVs will continue until a candidate is identified.

Visit www.cuny.edu to apply.

EEO/AA/Vet/Disability Employer.

Massachusetts College of Liberal Arts

Assistant Professor of Computer Science

The Computer Science Department invites applications for a full-time, tenure track appointment. The successful candidate will teach courses in our Information Technology (IT) Concentration, in one or more of the following:

- Network Security, Administration and Theory
- Web Design and Development
- Database Design and Development
- Hardware/Software Administration and Troubleshooting

Faculty responsibilities also include: recruitment; advising; engaging students in undergraduate research, internship and related opportunities; participating

Professional Opportunities

in departmental work; and maintaining a scholarly agenda.

For full posting and to apply: <http://mcla.interviewexchange.com/jobofferdetails.jsp?JOBID=79563>

Missouri S&T

Department Chair

The Computer Science Department at Missouri S&T invites applications from dynamic and visionary individuals for the position of Department Chair. The successful candidate will guide the department in directions that will further elevate its national and international

stature as well as enhance the success of its students, faculty, and staff by achieving departmental and campus strategic visions. The successful candidate should demonstrate exceptional skills in recruiting and retaining a diverse group of faculty, promoting collaboration and superior written and oral communication with all stakeholders on and off campus, creating the conditions necessary for faculty and student development and creativity, acquiring campus resources essential for department growth, and seeking external resources for program enhancement through fund-raising efforts. A PhD in Computer Science, or a closely related area, with a demonstrated track record

of scholarly accomplishments, effective teaching, and overall leadership is required. Further details on required and desired attributes, skills and characteristics of the successful candidate, and the department's visions and strategic plan, activities, and research may be found at: <http://cs.mst.edu/departmentchairsearch/>

The Computer Science Department has a proud 50-year history of advancing the quality and breadth of its educational mission, and grants ABET-accredited BS, as well as MS and PhD degrees. An active recruitment strategy has resulted in the department now being one of the largest on campus, with over 700 students (607 BS,

West Long Branch, NJ

MONMOUTH UNIVERSITY

Assistant Professor

Department: Computer Science/Software Engineering

Position Summary:

The Department of Computer Science and Software Engineering at Monmouth University welcomes applications for a tenure-track Assistant Professor position to begin in the fall 2017 semester.

Successful candidates will be enthusiastic educators ready to embrace Monmouth University's commitment to transformative learning, engage students in shared learning and research opportunities, and challenge students to think critically. They will be expected to: teach 9 credits per semester of undergraduate and graduate courses in computer science or software engineering (12 credits with a 3 credit course load reduction for graduate faculty); serve on various committees at the Department, School and University levels; maintain an active research program shared with undergraduate and graduate students; and actively mentor and advise students.

We invite applicants with a passion for teaching and sharing the excitement of research with students and across disciplines, and/or professionals with industrial/research experience anxious to return to academia and enrich the next generation.

Candidates with expertise in all areas of computer science and software engineering are welcome, especially those who can demonstrate research expertise in: cyber security, cloud computing, data science, networks, or user experience.

The Department of Computer Science and Software Engineering offers undergraduate degrees in Computer Science and Software Engineering (two undergraduate programs are ABET -accredited), and Master of Science degrees in Computer Science, Software Engineering and Information Systems.

Applications will be reviewed on a rolling basis. All applications received by January 1, 2017 will receive our fullest consideration, and the application process will remain open until the position is filled. Women and individuals from groups underrepresented in computing are encouraged to apply.

Required Degree, License or Certifications:

Doctoral degree, ABD candidates may be considered with degree completion expected by date of employment

Required Skills or Software:

Excellent interpersonal, organizational and communication skills

Other Requirements:

Ph.D. in Computer Science, Software Engineering, or other related discipline.

Log in to <http://apptrkr.com/931753> to apply and see the job duties for this position no later than the deadline date.

Posting Date: 12/12/2016

Monmouth University is a private, mid-sized, residential university that is comprehensive in scope, supported by a broad commitment to the liberal arts. Founded in 1933, Monmouth offers 32 undergraduate and 23 graduate degree programs, and a doctoral program in Nursing Practice. Students benefit from a rigorous academic experience, small classes, and professors who meet the highest standards for scholarship and teaching. They participate in more than 90 active clubs and organizations including 14 fraternities and sororities, six media organizations, and an NCAA Division I athletics program fielding 21 teams, expanded to include swimming in 2015.

Monmouth's beautiful coastal campus is convenient to New York City and Philadelphia, in a vibrant economic region with dynamic arts programming, American Revolution history sites, and nationally recognized parks and golf courses. The 159-acre campus features 54 buildings, which include a blend of historic landmarks and state-of-the-art facilities.

Through its academic offerings in liberal arts, science, and professional programs, Monmouth provides a highly personalized education that prepares students to realize their potential and to become engaged citizens in a diverse and increasingly interdependent world. Within its student body, 29 states and 28 foreign nations are represented.

Five centers of distinction work to promote awareness of specific issues and meet the needs of local and global communities. Our Centers, run by top experts and professors, provide important services in areas including the environment, global affairs, public policy, the arts, and real estate.

For an eleventh consecutive year Monmouth University has been included in The Princeton Review's roster of "Best 380 Colleges," and "Best 296 Business Schools," and recognized for the fourth consecutive year as a top-40 school (Master's North) in U.S. News & World Report's list of "Best Colleges" rankings. Monmouth regularly receives top rankings in veteran-friendly schools and was recently included in Money magazine's list of "Best Colleges for Your Money."

Monmouth University is deeply committed to the principles of equity, diversity, and inclusiveness. The University's policy is to afford equal employment opportunities for all persons without regard to their race, religion, color, national origin, nationality, ancestry, age, sex (including pregnancy and sexual harassment), marital status, domestic partnership or civil union status, affectional or sexual orientation, gender identity or expression, atypical hereditary cellular or blood trait, genetic information, liability for military service, protected veteran status, or mental or physical disability, including AIDS and HIV related illnesses. Additionally, Executive Order 11246, as amended, protects applicants and employees from discrimination based on inquiring about, disclosing, or discussing their compensation or the compensation of other applicants or employees.

AA/EDE

Professional Opportunities

70 MS, and 38 PhD). Special emphasis on recruiting female and under-represented minority students has been highly successful. A productive, experienced set of 19 TT/NTT faculty are engaged in the advancement of knowledge in key growth areas including computational intelligence & computer vision, mobile & distributed systems, cyber security, social-cyber-physical systems, pervasive computing, and big data & internet of things, and they have more than doubled their research expenditures in the last 5 years. The department has 3,957 successful and engaged alumni, and is strongly supported by an active Academy of Computer Science and Industrial Advisory Board.

Interested candidates should electronically submit an application consisting of a cover letter, a curriculum vitae, a statement of leadership philosophy and research and teaching interests, and complete contact information for five references to the Missouri University of Science and Technology's Human Resources Office at: <http://hr.mst.edu/careers/academic/> (position # 67756). Application review will begin on January 15, 2017, and will continue until the position is filled. For more information prior to submitting an application, please contact the Search Committee Chair, Prof. Wayne Huebner, at: huebner@mst.edu.

Missouri S&T is an AA/EEO employer and does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age, disability or status as a protected veteran. Females, minorities, and persons with disabilities are encouraged to apply. The university participates in E-Verify. For more information on E-Verify, please contact DHS at: 1-888-464-4218.

NEC Laboratories America

Researcher - Big Data Analytics

NEC Laboratories America (<http://www.nec-labs.com/>) conducts research in support of NEC's US and global business. Our lab has a broad research program that covers many areas and maintains a balance of fundamental and applied research.

The Data Science Department (<http://www.nec-labs.com/research-departments/data-science/data-science-home>) performs research on all aspects of data analytics and mining. We are creating innovative analytics from big data to simplify and automate the operation of complex physical systems (e.g., automobiles, power plants, smart city etc.), as well as large-scale IT systems and services. We have several ongoing big data analytics projects including massive time series modeling, heterogeneous data analysis, and large scale graph mining etc. Our group brings together experts in machine learning, data mining, statistics, signal processing, pattern recognition and big data processing systems. We build technologies to solve real world problems and grow NEC's business. Our research leads to both award-winning NEC products/solutions and numerous publications in top conferences.

Our group is looking for multiple researchers to work in the area of data analytics and mining. The ideal candidates must have expertise in data mining and statistical learning, and can develop algorithms to analyze massive amount of data to build innovative analytics applications. He/she must have a PhD in CS/CE with a strong publication record in at least one of the following areas:

- Data mining and statistical learning
- Time series analysis and prediction
- Text mining and information retrieval
- Graph and information network mining
- Large scale optimization and learning
- Signal processing and information theory

NEC Laboratories America is located in Princeton, NJ, home of the Princeton University and one of New Jersey's most beautiful and idyllic towns. The area offers many exciting cultural, entertainment and outdoor activities. The office is minutes away from Princeton University and an hour from New York, Philadelphia, and the Atlantic Ocean. For more information about NEC labs, access <http://www.nec-labs.com/>, and submit your CV and research statement through our career center at https://www.appone.com/MainInfoReq.asp?R_ID=1483423.

EOE-M/F/V/D

NEC Laboratories America, Inc.

Researcher - Computer Security

The Computer Security (CS) Department at NEC Labs America in Princeton, NJ, is seeking outstanding researchers who have passion to build systems that solve challenging real-world security problems. We are looking for candidates in the areas of security, systems, database, and big-data platforms with a strong publication record.

The CS Department has been developing innovative security solutions and grown NEC's business. We provide a vibrant environment that has produced very strong research results. We value creative research ideas, solid system building experience, and the passion to make research results impact the industry and our society. We also value interdisciplinary research.

Qualifications:

- PhD in Computer Science or Engineering
- Strong publications or system building records
- Experience with real-world system building is a plus
- Experience with big-data platforms such as database or data streaming is a plus
- Experience with security data visualization is a plus

Professional Opportunities

Experience with using security data analytics with AI or machine learning to build innovative security applications is a plus

NEC Laboratories America is located in Princeton, NJ, home of the Princeton University and one of New Jersey's most beautiful and idyllic towns. The area offers many exciting cultural, entertainment and outdoor activities. The office is minutes away from Princeton University and an hour from New York, Philadelphia, and the Atlantic Ocean. For more information about NEC Labs, please access www.nec-labs.com and submit your CV and research statement through our career center https://www.appone.com/MainInfoReq.asp?R_ID=1475426.
EOE-M/F/V/D

New Jersey Institute of Technology

Tenure-track Assistant Professor

The Department of Computer Science at New Jersey Institute of Technology seeks candidates to fill multiple tenure-track positions at the Assistant Professor rank in any area of computer science starting from Fall 2017. Areas of special interests are:

Area 1: Operating systems, networking/ Internet of Things, and cybersecurity.

Area 2: Algorithms, computer graphics, and virtual reality.

While we expect that the hiring will be at the rank of Assistant Professor, exceptional candidates at higher ranks will be considered.

The successful candidate will contribute to and enhance existing research and educational programs that relate to the areas of our special interests. The ability to secure external funding is critical.

The successful candidates will (1) teach undergraduate and graduate classes as directed by the Department Chair, (2) develop

an externally funded and internationally recognized research program; (3) supervise graduate students; (4) develop and teach new graduate and/or undergraduate classes and (5) provide service to the Department, the College and the University.

Applicants must have a Ph.D. degree by summer 2017 in a relevant discipline with outstanding academic credentials that demonstrate their ability to conduct independent and successful world-class research, and a commitment to both undergraduate and graduate education.

At the university's discretion, the education and experience prerequisites may be excepted, where the candidate can demonstrate to the satisfaction of the university, an equivalent combination of education and experience specifically preparing the candidate for success in the position.

To apply, please visit <https://njit.jobs> and search for the corresponding posting:

Area 1: Posting # 0603534

Area 2: Posting # 0603535

To build a diverse workforce, NJIT encourages applications from individuals with disabilities, minorities, veterans and women. EEO employer.

North Carolina State University

Security/Privacy Faculty Position

The Department of Computer Science at North Carolina State University (NCSU) seeks to fill a tenure-track faculty position in the area of Security and/or Privacy starting August 16, 2017.

Successful security and/or privacy candidates must have a strong commitment to academic and research excellence, and an outstanding research record commensurate with the expectations of a major research university. Required credentials include a doctorate in Computer Science or a related

field. Candidates with exceptional research records of all levels are encouraged to apply. The department is one of the largest and oldest in the country. It is part of a top US College of Engineering, and has excellent and extensive ties with industry and government laboratories. The department's research expenditures are amongst the top in the nation with recognition of our impact in the areas of security, systems, software engineering, educational informatics, networking, and games. For example, we have one of the largest concentrations of NSF Early Career Award winners (24 of our current or former faculty have received one).

NCSU is located in Raleigh, the capital of North Carolina, which forms one vertex of the world-famous Research Triangle Park (RTP). RTP is an innovative environment, both as a metropolitan area with one of the most diverse industrial bases in the world, and as a center of excellence promoting technology and science. The Research Triangle area is routinely recognized in nationwide surveys as one of the best places to live in the U.S. We have the diversity normally associated with a much larger city, while enjoying outstanding public schools, affordable housing, and great weather, all in proximity to the mountains and the seashore.

Applications will be reviewed as they are received. The positions will remain open until suitable candidates are identified. Applicants are encouraged to apply by January 1, 2017. Applicants should submit the following materials online at <http://jobs.ncsu.edu> (reference position number 00001093) cover letter, curriculum vitae, research statement, teaching statement, and names and complete contact information of four references, including email addresses and phone numbers. Candidates can obtain information about the department and its research programs, as well as more detail about the position advertised here at <http://www.csc.ncsu.edu/>. Inquires may be sent via email to security-search@csc.ncsu.edu.

Professional Opportunities

NC State University is an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, gender identity, age, sexual orientation, genetic information, status as an individual with a disability, or status as a protected veteran.

Individuals with disabilities requiring disability-related accommodations in the application and interview process, please call 919-515-3148.

Final candidates are subject to criminal & sex offender background checks. Some vacancies also require credit or motor vehicle checks. If highest degree is from an institution outside of the U.S., final candidates are required to have their degree verified at www.wes.org. Degree must be obtained prior to start date.

NC State University participates in E-Verify. Federal law requires all employers to verify the identity and employment eligibility of all persons hired to work in the United States.

Northwestern University

Computer Science Faculty of Instruction

The Department of Electrical Engineering and Computer Science at Northwestern University invites applications for a non-tenure-track Professor of Instruction position in Computer Science. The successful applicant will be one who is an extraordinary teacher and mentor. They will bring not only strong and deep knowledge of Computer Science but also passion in their desire to convey that knowledge to a broad variety of Northwestern students. They will go well beyond delivering entry level service courses to create a learning environment that motivates students to enroll, to work, to learn, and to find new applications of Computer Science that shape their careers and the world beyond.

Applicants should have earned a Ph.D. in Computer Science or a closely related

field. Candidates will be considered at the Assistant or Associate level depending on experience. Faculty of Instruction typically teach two courses per term and are involved in advising students and in departmental curriculum development.

Applicants should submit (1) a cover letter, (2) a curriculum vitae, (3) three to five references who will offer letters of recommendation which can speak to the applicant's teaching abilities, (4) statement of teaching philosophy, (5) recent teaching evaluations (if available), (6) a teaching demonstration video (if available). Upload instructions are found at <http://www.mccormick.northwestern.edu/eecs/careers.html>.

For general questions about the search or application assistance post submission, contact facsearch@eecs.northwestern.edu. Review of materials will begin on November 15, 2016, and applicants are strongly encouraged to submit their materials before that date. Applications received after that date will be considered on a rolling basis.

Minorities and women are urged to apply. Northwestern University is an Equal Opportunity, Affirmative Action employer. Hiring is contingent upon eligibility to work in the United States. Northwestern University is located in an attractive lakefront community adjacent to Chicago. For more information about the McCormick School of Engineering and Applied Science at <http://www.mccormick.northwestern.edu/>.

Northwestern University

Assistant or Associate Professor of Computer Science

Northwestern University has recently announced a substantial commitment to grow and transform Computer Science. We will add twenty new tenure-track faculty in the next five years—ten in core Computer Science, and ten collaboratively with other disciplines (CS + X)—as well as a number of non-tenure track teaching faculty. We seek outstanding

candidates, in all areas and at all levels, with a clear passion to shape the future of Computer Science, and who are excited by the opportunity to help build that future at a great University.

As part of this plan, the Computer Science Division / EECS Department at Northwestern invites candidates to apply for a new position as Professor of Computer Science at the Assistant or Associate Professor level. We seek outstanding young faculty in all areas of Computer Science. Priority will be given to applicants with pathbreaking research interests that have the potential to transform both Computer Science and other disciplines.

Northwestern is a world leading research and teaching university with an unrivaled combination of excellent schools that provide extraordinary opportunities for collaboration across a wide range of disciplines. Located just outside of Chicago – a diverse and culturally vibrant world-class city – Northwestern faculty have ample opportunities to connect with the city's growing technology sector.

We encourage candidates to submit applications as soon as possible. Applications received by January 1, 2017 will be given full consideration. However, the positions will remain open until filled. Applicants should submit (1) a cover letter indicating rank applied for, (2) a curriculum vitae, (3) three to five references (4) statements of research and teaching interests, and (5) two representative publications. For general questions about the search or application assistance post-submission, contact facsearch@eecs.northwestern.edu.

Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women, underrepresented racial and ethnic minorities, individuals with disabilities, and veterans are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

Professional Opportunities

Northwestern University

*Peter & Adrienne Barris Professor of
Computer Science*

Northwestern University has recently announced a substantial commitment to grow and transform Computer Science. We will add twenty new tenure-track faculty in the next five years—ten in core Computer Science, and ten collaboratively with other disciplines (CS + X)—as well as a number of non-tenure track teaching faculty. We seek outstanding candidates, in all areas and at all levels, with a clear passion to shape the future of Computer Science, and who are excited by the opportunity to help build that future at a great University. As part of this plan, the Computer Science Division / EECS Department at Northwestern invites candidates to apply for a new position as the Peter and Adrienne Barris Professor of Computer Science at the Full or Associate Professor level. We seek candidates in all areas with a strong track record of intellectual leadership and a clear future research agenda. Priority will be given to applicants with pathbreaking research interests that have the potential to transform both Computer Science and other disciplines. Northwestern is a world leading research and teaching university with an unrivaled combination of excellent schools that provide extraordinary opportunities for collaboration across a wide range of disciplines.

Located just outside of Chicago – a diverse and culturally vibrant world-class city – Northwestern faculty have ample opportunities to connect with the city's growing technology sector.

We encourage candidates to submit applications as soon as possible. Applications received by January 1, 2017 will be given full consideration. However, the position will remain open until filled. Applicants should submit (1) a cover letter indicating rank applied for, (2) a curriculum vitae, (3) three to five references (4)

statements of research and teaching interests, and (5) two representative publications. For general questions about the search or application assistance post-submission, contact facsearch@eecs.northwestern.edu.

Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women, underrepresented racial and ethnic minorities, individuals with disabilities, and veterans are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

Northwestern University

*Assistant or Associate Professor of Computer
Science & Statistics*

Northwestern University has recently announced a [substantial commitment to grow and transform Computer Science](#). We will add **twenty** new tenure-track faculty in the next five years—ten in core Computer Science, and ten collaboratively with other disciplines (CS + X)—as well as a number of non-tenure track teaching faculty. We seek outstanding candidates, in all areas and at all levels, with a clear passion to shape the future of Computer Science, and who are excited by the opportunity to help build that future at a great University.

As part of this plan, the Computer Science Division / EECS Department and the Statistics Department at Northwestern invite candidates to apply for a new joint position as **Professor of Computer Science and Statistics** at the Assistant or Associate Professor level. We are collaborating, together with Industrial Engineering and Management Sciences (IEMS), to create a multidisciplinary research group in the areas of machine learning and data science. Building on existing strengths in applied AI, applied statistics, and optimization, as well as the

recent creation of a Center for Optimization & Statistical Learning, the University is seeking to hire up to three new faculty in these areas this year.

Northwestern is a world leading research and teaching university with an unrivaled combination of excellent schools that provide extraordinary opportunities for collaboration across a wide range of disciplines. Located just outside of Chicago – a diverse and culturally vibrant world-class city – Northwestern faculty have ample opportunities to connect with the city's growing technology sector.

We encourage candidates to submit applications as soon as possible. Applications received by January 1, 2017 will be given full consideration. However, the positions will remain open until filled. Applicants should submit (1) a cover letter indicating rank applied for, (2) a curriculum vitae, (3) three to five references (4) statements of research and teaching interests, and (5) two representative publications. For general questions about the search or application assistance post-submission, contact facsearch@eecs.northwestern.edu.

Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women, underrepresented racial and ethnic minorities, individuals with disabilities, and veterans are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

Oberlin College

*Faculty of Computer Science, 2 Full-time
Tenure Track*

The Department of Computer Science at Oberlin College invites applications for 2 full-time, tenure-track faculty positions starting in the Fall of 2017. We are seeking candidates with teaching and research interests specific

Professional Opportunities

to Software Systems (Compilers, Operating Systems, Networks, Databases, or a related field). For a second position, we are seeking candidates with teaching and research interests in any area of Computer Science. Applicants at all ranks will be considered. Review of applications will begin immediately and will continue until the positions are filled. Completed applications received by November 10, 2017 will be given full consideration. For full job descriptions and to apply go to Academicjobsonline.org at following links:

- Systems Position: <https://academicjobsonline.org/ajo/jobs/8233>
- Open Area Position: <https://academicjobsonline.org/ajo/jobs/8235>

Oberlin College is an EEO/AA Employer for more information, go to <http://new.oberlin.edu>.

Oberlin College

Faculty of Computer Science, Theory and Algorithms

The Department of Computer Science at Oberlin College invites applications for a full-time, tenure-track faculty position starting in the Fall of 2017 with teaching and research interests specific to Theory and Algorithms. Applicants at all ranks will be considered. Review of applications will begin immediately and will continue until the position is filled. Completed applications received by January 8, 2017 will be given full consideration.

For full job description and to apply go to: <https://academicjobsonline.org/ajo/jobs/8500>

Oberlin College is an EEO Employer. For more information, go to <http://new.oberlin.edu>

Plymouth State University

Assistant Professor

Plymouth State University, Computer Science and Technology Department, Plymouth, NH.

We seek one tenure-track Assistant Professor starting Fall 2017. Reference <https://jobs.usnh.edu/postings/24855> for details.

Portland State University

Maseeh College of Engineering & Computer Science

Assistant Professor of Computer Science

The Computer Science Department at Portland State University (PSU) invites applications for a tenure-track faculty position at the assistant professor level, to begin Fall 2017. Exceptional applicants at other ranks will also be considered.

The department currently has twenty-two tenure-track faculty members, including three NSF CAREER Award winners and two ACM Fellows. The department offers an ABET-accredited B.S., both a thesis and a non-thesis M.S., and a Ph.D. in Computer Science. The department currently serves approximately 800 undergraduates and 130 graduate students. Our teaching loads give faculty time to maintain funded research programs. Further information about the department is available at <http://cs.pdx.edu>.

PSU is the largest urban university in Oregon and is known nationally for its community engagement and sustainability initiatives. Its campus in downtown Portland is well served by public transit and offers proximity to world-class restaurants, cultural venues and outdoor activities. PSU's urban setting provides a living laboratory for research and easy access to collaborations in industry, academia and government. Current local collaborations include Intel, Oregon Health & Science University, and Oregon Department of Transportation. Portland is the home of a burgeoning software industry, including Puppet Labs, Urban Airship, Elemental Technologies, Janrain, and Webtrends.

Qualifications

Specific areas of computer science under consideration are: machine learning; data mining; data intensive systems; or more generally data science. Applicants are expected to hold or be near completion of a Ph.D. in Computer Science or other relevant field. Non Ph.D. applicants will be required to have completed the Ph.D. by September 01, 2017.

Job Specifications

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

To Apply

For more information and for instructions on how to apply, please visit <https://jobs.hrc.pdx.edu/postings/21489>. For inquiries about this position, please contact cssearch@cs.pdx.edu. Review of applications will begin immediately and will continue until finalists are identified.

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

Purdue University

Department of Computer Science Tenure-Track/Tenured Faculty Positions

The Department of Computer Science at Purdue University is in a phase of significant growth. Applications are solicited for seven tenure-track and tenured positions at the Assistant, Associate and Full Professor levels. Outstanding candidates in all areas of computer science will be considered. Review of applications and candidate interviews will begin in October 2016, and will continue until the positions are filled.

Professional Opportunities

The Department of Computer Science offers a stimulating academic environment with research programs in most areas of computer science. Information about the department and a description of open positions are available at <http://www.cs.purdue.edu>.

Applicants should hold a PhD in Computer Science or a related discipline, have demonstrated excellence in research, and strong commitment to teaching. Successful candidates will be expected to conduct research in their fields of expertise, teach courses in computer science, and participate in other department and university activities. Salary and benefits are competitive, and Purdue is a dual-career friendly employer. Applicants are strongly encouraged to apply online at <https://hiring.science.purdue.edu>. Alternatively, hardcopy applications can be sent to: Faculty Search Chair, Department of Computer Science, 305 N. University Street, Purdue University, West Lafayette, IN 47907. A background check will be required for employment in this position.

Purdue University is an EEO/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.

Purdue University

Faculty Openings in Next Generation Manufacturing and Enabling Methodologies

Purdue University has identified Next Generation Manufacturing as a major thrust for cross-disciplinary research and education. Our effort is in consonance with the national initiative to re-invigorate American manufacturing industry, stimulate economic development, and accelerate innovation. We are currently accepting applications for tenure-track and tenured positions at the Assistant/Associate/Full Professor levels in areas related to next generation manufacturing and enabling methodologies.

Purdue's Next Generation Manufacturing initiative aims to combine latest advances in tailored materials and novel manufacturing processes; multi-scale modeling of products, services and systems; and, on-demand, customer-driven product and supply-chain design enabled by ubiquitous cyberinfrastructure to sustainably deliver personalized products, anywhere, anytime, with the efficiency of mass production. This effort builds on Purdue's core strengths in the Colleges of Engineering and Science, the Purdue Polytechnic Institute, the Krannert School of Management, and Discovery Park, and leverages its participation in federal manufacturing initiatives.

We invite applications from candidates with research and teaching interests aligning with this initiative. Specific research fields of interest in the cluster include, but are not limited to: i) large-scale optimization, ii) cyber-enabled experimentation, iii) multi-scale predictive modeling, iv) scaling principles for novel materials and processes, v) personalization of products and services, and vi) social manufacturing.

Successful candidates will join a strong manufacturing faculty group on campus, and will have a unique opportunity to help shape Purdue's vision and research/education agenda in manufacturing. Candidates must hold a Ph.D. or equivalent degree in a field of Engineering, Management, Science, Technology or areas related to manufacturing. They should have a distinguished academic record, exceptional potential for world-class research, and a commitment to teaching and collaborative interdisciplinary activities.

The successful candidates will conduct original research, will advise graduate students, will teach undergraduate and graduate level courses, and will perform service both at the School and University levels. Candidates with experience working

with diverse groups of students, faculty, and staff and the ability to contribute to an inclusive climate are particularly encouraged to apply. The primary faculty appointment will be in the Colleges of Engineering or Science or the Purdue Polytechnic Institute or the Krannert School of Management and will depend on the candidate's qualifications; cross-department/school/college appointments are anticipated.

Submit applications online at <https://engineering.purdue.edu/Engr/AboutUS/Employment/Applications>, including curriculum vitae, teaching and research plans, and names of four references. For information / questions regarding applications contact the Office of Academic Affairs, College of Engineering, at coeacademicaffairs@purdue.edu. Review of applications will begin on November 1, 2016, and will continue until positions are filled. A background check will be required for employment in this position.

Purdue's main campus is located in West Lafayette Indiana, a welcoming and diverse community with a wide variety of cultural activities and events, industries, and excellent schools. Purdue and the College of Engineering have a Concierge Program to assist new faculty and their partners regarding dual career needs and facilitate their relocation.

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.

Rensselaer Polytechnic Institute

Programmer, Culturally Situated Design Tools (1 Year Fixed Term)

The Programmer develops, installs, maintains, and integrates new hardware and software to support Culturally

Professional Opportunities

Situated Design Tools (CDST), researchers, and projects in a community computing environment.

To apply: <http://rpjjobs.rpi.edu/postings/4574>

Rutgers University

Postdoctoral Associate

DIMACS, the Center for Discrete Mathematics and Theoretical Computer Science, invites applications for several postdoctoral associate positions for 2017-18. Applicants should be recent Ph.D.'s with interest in DIMACS areas, such as theoretical computer science, discrete mathematics, statistics, operations research, and their applications. Application review begins December 1, 2016.

For information see <http://dimacs.rutgers.edu/Applications/postdoc.html>.

DIMACS is an EO/AA employer.

Rutgers University

Teaching Professor or Professor of Practice

The Department of Computer Science at Rutgers University invites applications for one or more positions as Teaching Professor or Professor of Practice in the area of Data Science, at the level of Assistant Professor, although exceptional candidates may be appointed at the rank of associate or full professor. These appointments may begin in either spring or fall semester 2017.

Main Responsibilities will include Teaching, Coordination of our Capstone project series, Design of short term tutorials dedicated to Data Science topics of current interest and Coordination of Data Science Workshops.

Questions can be directed to: James Abello (abello@dimacs.rutgers.edu)

To apply, please go to <http://apply.interfolio.com/37381>.

Rutgers University

Tenure-Track Assistant Professor

The Computer Science Department at Rutgers University invites applications for several tenure-track Assistant Professor positions focusing on (a) Data Science and AI, and (b) Distributed Networks and Systems. Responsibilities include teaching undergraduate and graduate level courses in various fields of Computer Science and supervision of PhD students based on funded projects. The appointments will start September 2017.

Qualifications: Applicants should show evidence of exceptional research promise with potential for external funding, and commitment to quality advising and teaching. Hired candidates must complete their Ph.D. in Computer Science or a closely related field by August 31, 2017. Applications received by January 13, 2017 will be given priority.

To apply for the Data Science and AI positions, go to: apply.interfolio.com/39330. To apply for the Distributed Networks and Systems position, go to: apply.interfolio.com/39389.

If you have further questions, please email the hiring committee: kagarwal@cs.rutgers.edu.

Southwestern College

Assistant/Associate Professor Positions

The Division of Communication, Computer Science and English at Southwestern College invites applications for a tenure-track position in computer science starting in the 2017-18 academic year. The computer science program at Southwestern College is in transition, which provides a significant opportunity for the successful candidate.

Applicants who have a vision for the future of undergraduate computer science education are encouraged to apply. The main responsibility of the successful candidate is to develop and cultivate a vision for

a successful computer science program that fits within a liberal arts perspective and serves the larger academic vision and mission of the college. We are looking to hire candidates with teaching and/or research experience in one or more of the following areas:

- algorithms
- software engineering
- computer architecture
- computational theory
- databases
- operating systems and programming languages
- digital arts and design
- computer game theory and game development
- computer animation

Additional responsibilities

- teach courses at the undergraduate level
- advise computer science academic clubs and organizations
- coordinate eSports team
- work collaboratively within the division and across the campus to create innovative academic opportunities.

Qualifications

- Ph.D. in Computer Science (or ABD with confirmed date of completion)
- demonstrated potential for excellence in teaching
- active pursuit of scholarly research and professional development opportunities
- ability to incorporate relevant experiences into instruction possess strong verbal and written communication skills

For complete application instructions, visit <http://www.sckans.edu/about/employment/#faculty>

Stevens Institute of Technology

Multiple Tenure-track Positions in Computer Science

The Department of Computer Science at Stevens Institute of Technology invites

Professional Opportunities

applications for four tenure-track positions at the rank of Assistant Professor to begin in Fall 2017. However, outstanding applicants at all ranks will be considered.

Applicants are expected to have a Ph.D. in Computer Science or a closely related field by the time of appointment, a record of excellence in research and a strong commitment to teaching. Applications should include a curriculum vitae, research and teaching statements, and at least three references. Successful candidates will be expected to establish a vigorous, externally-funded research program and teach at both the undergraduate and graduate levels. Junior faculty are supported with highly competitive startup packages.

Please apply at <https://academicjobsonline.org/ajo/jobs/8608>. Full consideration will be given to applications received by January 15, 2017.

The Department of Computer Science values diversity and seeks candidates who can contribute to a welcoming climate for students of all races and genders. Stevens Institute of Technology is an Equal Opportunity Employer and an NSF ADVANCE institution committed to equitable practices and policies. We strongly encourage qualified women and minority candidates to apply.

We are particularly interested in applicants whose research focuses on system aspects in areas of Computer Science that include but are not limited to:

- Machine learning and AI,
- Formal software verification,
- Security for systems including operating systems, networking and data management,
- Pervasive computing and HCI.

We are also interested in applicants whose research complements existing strengths in the department, to support collaborations in topics such as data science, mobile health, computer vision, programming languages

and cybersecurity. However, exceptional candidates in all areas of Computer Science will be considered.

The department is in a phase of significant and sustained growth with plans for hiring multiple tenure-track faculty members. Successful candidates will join a vibrant research environment, with 20 full-time faculty members, 7 of whom joined the department in 2016. Faculty research is supported by NSF, NIH, NSA, ONR, DARPA, and other federal and private funding sources. The Department of Computer Science will be the prime occupant of the institute's new \$45 million dollar state-of-the-art Gateway building, which will add 90,000 sq ft of academic and classroom space when completed in the fall of 2019. The campus is on the Hudson River across from Manhattan, offering excellent opportunities for collaborations with nearby universities and industrial research laboratories.

Texas Tech University

Associate/Full Professor

The Department of Computer Science at Texas Tech University invites applications for tenured or tenure-track senior position (Associate or Full Professor) starting in Fall 2017. The duties include teaching graduate and undergraduate courses, performing high quality research as evidenced by scholarly publications, and developing competitive research grant proposals. Service duties include participation in program enhancement and building community activities. Services to the department, college, and university are expected.

Candidates should demonstrate excellence in research achievement, successful record of obtaining external funding, effective leadership in building and guiding team efforts at the university or national level, and capability of designing multidisciplinary projects. All research areas in Computer Science and Software Engineering are of interest.

Review of applications will begin in February 1, 2017 and continue until the position is filled. A letter of application, Curriculum Vitae, research and teaching statements and three letters of reference should be submitted electronically at <http://www.texastech.edu/careers/>. Please use the requisition number 9053BR for the position.

As an Equal Employment Opportunity/Affirmative Action employer, Texas Tech University is dedicated to the goal of building a culturally diverse faculty committed to teaching and working in a multicultural environment. We actively encourage applications from all those who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community at Texas Tech University. The university welcomes applications from minorities, women, veterans, persons with disabilities, and dual-career couples. Should you have questions, please contact: Dr. Akbar Namin, at cs.search@ttu.edu

Trinity College, Hartford, Connecticut

Visiting Assistant Professor of Computer Science

Applications are invited for a two-year position of Visiting Assistant Professor of Computer Science to start in Fall 2017.

Applications should be submitted to: <https://trincoll.peopleadmin.com/>.

Consideration of applications will begin on February 15, 2017.

University of Arizona

Assistant Professor of Computer Science

The Department of Computer Science at the University of Arizona invites applications for a tenure-track faculty position. The research areas of algorithms, distributed systems, and storage and database systems are

Professional Opportunities

especially desirable. Outstanding candidates in related areas will also be considered.

The Department has a long history of research accomplishment, influential software distribution, and substantial external funding. Current research areas include algorithms, architecture, bioinformatics, compilers, computational geometry, databases, high performance computing, networks, operating systems, security, vision, and visualization. More information about the University of Arizona and its environs is available at www.whyUA.com.

To apply, complete an online application at the UA Human Resources web site, <https://uacareers.com/postings/14854>. Be sure to upload (a) your curriculum vitae, (b) a statement of your research and teaching interests, (c) the names of at least three references, and (d) your letter of interest.

The University of Arizona is an EO/AA employer-M/W/D/V.

Review of applications will begin January 3, 2017 and will continue until the position is filled. Please email search@cs.arizona.edu if you have any questions or need assistance.

UC San Diego

Assistant Professor

UC San Diego Tenure-track Assistant Professor positions in Computer and Engineering

The UCSD Department of Computer Science and Engineering (CSE) invites applications for multiple tenure-track faculty positions at Assistant Professor rank. Our focus this year is on candidates who advance research in vision, computer architecture, cyber-physical systems, and software engineering/software quality. However, outstanding candidates in all areas will be seriously considered. Candidates with experience or willingness to engage in activities that contribute to diversity and inclusion are especially encouraged to apply.

Successful applicants are expected to lead a vigorous research program and will be required to teach university students. A Ph.D. or advancement to candidacy in Computer Science & Engineering or related disciplines is required at the time of application. We encourage candidates to send applications as soon as possible. Applications received by January 16, 2017 will be given full consideration. However, positions remain open until filled.

To apply, submit the materials described below at the website: <https://apol-recruit.ucsd.edu/apply/JPF01307>

The UC San Diego is committed to building an excellent, diverse and inclusive faculty, staff, and student body (<http://www.jacobsschool.ucsd.edu/diversity>).

UC San Diego

Lecturer with Potential Security of Employment in Data Science

The UC San Diego Data Science Undergraduate Program (jointly with CSE,

Mathematics, and Cognitive Science) invites applications for a 'tenure-track' Assistant Teaching Professor (whose official title is "Lecturer with Potential Security of Employment"). The teaching faculty series carries a stronger emphasis on teaching and scholarly activity related to education.

Successful candidates will be outstanding educators and should provide evidence of effective and innovative undergraduate teaching in data science. A Ph.D. or advancement to candidacy in Computer Science & Engineering, Mathematics, Statistics or related disciplines is required at the time of application.

Applications received by February 1, 2017 will be given full consideration. However, positions remain open until filled.

To apply, submit the materials described below at the website: <https://apol-recruit.ucsd.edu/apply/JPF01311>



University of Colorado
Denver

ASSISTANT PROFESSOR Computer Science and Engineering

The Department of Computer Science and Engineering in the College of Engineering and Applied Science at the University of Colorado Denver invites applications for the position of Assistant Professor.

The candidate will be expected to develop and teach lecture and laboratory courses at all levels, establish an active, externally funded research program; conduct high quality research involving students at all levels, leading to sponsored research and refereed publications; advise students; and contribute to Department, College, and University governance and to the profession. The candidate must have a Ph.D. in Computer Science or closely related field and demonstrated expertise in computer science as evidenced by the candidate's record. Areas of cybersecurity, software engineering, artificial intelligence, programming languages and compilers, bioinformatics, computer systems, HCI, or a related field are preferred.

Applications are accepted electronically at <http://www.cu.edu/cu-careers> (refer to job posting **02763**).

The University of Colorado is committed to diversity and equality in education and employment.

Professional Opportunities

University of Colorado Boulder

Instructor

The Department of Computer Science in the College of Engineering and Applied Science at the University of Colorado Boulder invites applications for a full-time Instructor position. This position will support the Department of Computer Science and fulfillment of the department's educational mission through teaching Computer Science courses on the CU-Boulder campus.

This is a non-tenure track appointment; the successful candidate will likely be appointed as an Instructor on the Computer Science faculty although appointment as a Senior Instructor is possible depending on experience and qualifications. The position will report to the Chair of the Department of Computer Science.

Applicants are accepted electronically at <https://cu.taleo.net/careersection/2/jobdetail.ftl?job=07600&lang=en>

The University of Colorado is an Equal Opportunity/Affirmative Action employer.

University of Colorado Boulder

Senior Instructor

The Department of Computer Science in the College of Engineering and Applied Science at the University of Colorado Boulder invites applications for a full-time position as Senior Instructor. This position will support the Department of Computer Science and fulfillment of the department's educational mission through teaching Computer Science courses and curriculum coordination on the CU-Boulder campus, insuring the program effectively delivers the curriculum developed by the faculty and helps mentor and develop instructional faculty.

This is a non-tenure track appointment and it is expected that the successful candidate will be appointed as a Senior Instructor. The position will report to the Chair of the Department of Computer Science.

Applications are accepted electronically at <https://cu.taleo.net/careersection/2/jobdetail.ftl?job=05924&lang=en>

The University of Colorado is an Equal Opportunity/Affirmative Action employer.

University of Connecticut

Professor and Synchrony Chair for Cybersecurity

The Computer Science & Engineering (CSE) Department at the University of Connecticut invites applications for a tenure-track faculty position at full professor level.

The position has an expected start date of August 23, 2017. This position is in cybersecurity, with responsibilities to advance education and research in computer security and possibly drawing from closely related or emerging fields. In addition, the successful candidate is eligible for the Synchrony Financial Chair for Cybersecurity, an endowed chair in cybersecurity to advance education and research in cryptography, security engineering, security architecture, secure coding, network and cloud security, malware detection and other emerging security fields. For more information and to apply, please click on the link and follow the instructions <https://academicjobsonline.org/ajo/jobs/8559>

As an Affirmative Action/Equal Employment Opportunity employer, UConn encourages applications from women, veterans, people with disabilities and members of traditionally underrepresented populations.

University of Delaware

Teaching Faculty

The Department of Computer & Information Sciences at the University of Delaware invites applications for a teaching faculty position to begin September 1, 2017. This is a full-time, non-tenure track position with initial two-year contract, renewable

in a program that leads to substantial job security including sabbatical benefits.

The candidate's primary responsibility will be teaching, typically three to four courses per semester at both introductory (freshmen/sophomore) and advanced (junior/senior) levels. The candidate will also participate in curriculum development, student advisement, and service on department committees. Applicants should have a record of teaching excellence and a strong commitment to teaching and service. A Ph.D. in computer science or a closely related discipline by the start date is expected, though exceptional candidates with masters degrees will be considered.

One of the oldest institutions of higher education in this country, the University of Delaware is a premier co-educational institution of 15,000+ undergraduate students and 3000+ graduate students.

With a distinguished faculty and strengths in study abroad, undergraduate research and discovery learning, the University offers a broad range of undergraduate and graduate degrees across seven colleges. The beautiful 100-acre central campus is located in Newark, DE, about halfway between New York City and Washington, DC. More information about the Department and the University is available at <http://www.cis.udel.edu> and <http://www.udel.edu/aboutus/>, respectively.

For a complete list of requirements and job duties and to apply online, please visit the UDJOBS website at <https://apply.interfolio.com/39414>

Equal Employment Opportunity

The University of Delaware is an Equal Opportunity Employer which encourages applications from minority group members, women, individuals with a disability and veterans. The University's Notice of Non-Discrimination can be found at <http://www.udel.edu/aboutus/legalnotices.html>.

Professional Opportunities

Employment offers will be conditioned upon successful completion of a criminal background check. A conviction will not necessarily exclude you from employment.

University of Houston

Department of Computer Science Faculty Positions

The Department of Computer Science at the University of Houston (www.cs.uh.edu) invites applications for multiple tenure-track faculty positions at all ranks to begin in the 2017-18 academic year. The department is in a phase of significant growth in sponsored research, faculty size, and student enrollments. Outstanding candidates working on all areas of Computer Science are encouraged to apply. Special consideration will be given to the following areas: Security and Privacy, Software Engineering, High Performance Computing, and Big Data. Applicants should hold a doctoral degree in Computer Science, Computer Engineering, or a closely related field.

The department places a strong emphasis on research and its academic programs. The department has 23 tenured and tenure-track faculty members with world-class research groups in Algorithms and Theory, Biomedical Computing, Cybersecurity, Data Analytics, Parallel and Distributed Computing, Systems, and Visual Computing. Several faculty members are recipient of the prestigious NSF CAREER award. The University of Houston is a NSA-designated Center of Academic Excellence for Cyber Defense Research and leads the Borders, Trade and Immigration Institute (<http://www.uh.edu/bti/>), a Department of Homeland Security Center of Excellence.

The University of Houston is a Carnegie-designated Tier One research institution and is the flagship campus of a state-assisted system. UH is also listed as one of the nation's best institutions for undergraduate

education by the Princeton Review. The University of Houston is located in one of the most vibrant metropolitan areas. Houston, the 4th largest U.S. city, is the epicenter of the energy industry, features the largest medical center in the world, and hosts the Johnson Space Center. Houston is a fast growing, multi-cultural, diverse and affordable city known for museums, art events, and sports teams.

Candidate screening will begin on December 1, 2016 and to ensure full consideration applications must be received by January 9, 2017. Applicants should submit their cover letter, Curriculum Vitae, research and teaching statements, and up to two representative publications. Junior candidates should arrange for at least three professional references while senior candidates should provide at least five. To apply visit: <http://jobs.uh.edu/postings/32850>

The University of Houston is an ADVANCE institution, one of a select group of universities to receive NSF funds in support of our commitment to increase diversity and the participation and advancement of women in STEM. The department is seeking outstanding candidates with the potential for exceptional research, excellence in teaching, and a clear commitment to enhancing the diversity of the faculty, graduate, and undergraduate student population. The University of Houston is responsive to the needs of dual career couples. The University of Houston is an equal opportunity/affirmative action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

University of Houston

Department of Computer Science Instructional Faculty Position

The Department of Computer Science at the University of Houston (www.cs.uh.edu) invites applications for a full-time Instructional Assistant Professor to begin in the 2017-18 academic year. Responsibilities will involve coordinating and teaching undergraduate lecture and laboratory courses in Computer Science along with engagement in curricular and instructional innovation, scholarship of teaching, student recruitment, advising and service.

The Department of Computer Science at the University of Houston is a vibrant unit with a growing stature offering undergraduate (B.S.) and graduate degrees (M.S. and Ph.D.) in Computer Science. The department has 23 tenured and tenure-track faculty members, 4 instructional faculty members and over 1100 students across its degree programs. Our department is committed to offering a stimulating program with strong emphasis on high quality, state of the art education and research in the highly diverse and cosmopolitan environment that the University of Houston and the city of Houston provide. We seek outstanding candidates who hold a doctoral degree in Computer Science, Computer Engineering, or a closely related field, and preference will be given to candidates who have innovative ideas for lecture and laboratory instruction. A proven teaching record at the university level is highly desirable.

The University of Houston is a Carnegie-designated Tier One research institution and is the flagship campus of a state-assisted system. As the fourth largest city in the U.S. and the most ethnically diverse city in the country, Houston is a vibrant city to live and work. It has multi-national industries, commercial centers, the largest medical center in the world, a robust arts community, professional sports, an entrepreneurial

Professional Opportunities

approach to new technologies and, is considered the world capital for petroleum exploration and energy. The Chronicle of Higher Education has named the University of Houston as one of the best places to work, and U.S. News & World Report listed UH as the No. 2 most racially/ethnically diverse university in the nation.

Candidate screening will begin on December 1, 2016 and to ensure full consideration applications must be received by January 9, 2017. Applications should be submitted electronically. Instructions can be found at: <http://jobs.uh.edu/postings/32847>

The University of Houston is an ADVANCE institution, one of a select group of universities to receive NSF funds in support of our commitment to increase diversity and the participation and advancement of women in STEM. The department is seeking outstanding candidates with the potential for exceptional research, excellence in teaching, and a clear commitment to enhancing the diversity of the faculty, graduate, and undergraduate student population. The University of Houston is an Equal Opportunity/Affirmative Action institution. Minorities, women, veterans and persons with disabilities are encouraged to apply.

University of Idaho

Computer Science Faculty

The Computer Science Department at University of Idaho seeks 3 faculty at Assistant/Associate Professor with emphasis in 1) large-scale database management (big data), data analytics and data mining, machine learning, visualization, or high performance computing or 2) Expertise in cybersecurity for industrial control systems including embedded systems security, computer and network security, or digital forensics, reverse engineering hardware/software, malware analysis, specialized experience

with power and energy systems, operations technology (OT). Startup funding and research support will be extended to help establish a successful career and develop an externally funded research program. The successful candidates will have an earned PhD in CS or a closely related field. Existing research centers of excellence include the Institute for Bioinformatics and Evolutionary Studies, National Institute for Advanced Transportation Technology, Center for Secure and Dependable Systems, Center for Modeling Complex Interactions and the Northwest Knowledge Network. We are a certified National Center of Academic Excellence (CAE) in Information Assurance and Cybersecurity Education.

Visit: Computer Science Faculty, Idaho Falls <http://apptrkr.com/921683> Computer Science IGEM Regular Faculty, Idaho Falls <http://apptrkr.com/921684> IGEM Regular Faculty, Moscow <http://apptrkr.com/921685>.

We highly encourage candidates from underrepresented US minority groups and/or females to apply for this position.

UI is an affirmative action/equal opportunity employer.

University of Maryland College Park

Assistant/Associate Professor

The Electrical and Computer Engineering Department at the University of Maryland, College Park invites applications for faculty positions at both the Assistant and Associate Professor levels. Applicants should have a demonstrated record of research and publication in one of the following areas: a) communications: with an emphasis on communication theory, information and coding theory, and communication networking; b) microelectronics: with emphasis on bioelectronics, power electronic devices

and circuits, especially in the wide bandgap area, and RF circuits and antennas; and c) computer engineering: with emphasis on cybersecurity, embedded systems, IoT, quantum computing, real-time systems, secure and low power design and implementation of smart devices. Successful applicants will be expected to maintain active research programs and teach undergraduate and graduate courses in Electrical and/or Computer Engineering.

A Ph.D. in Electrical Engineering or a related discipline is required. Candidates should be creative and adaptable and should have a high potential for both teaching and research.

For best consideration, applications should be submitted by January 15, 2017 online by going to <https://ejobs.umd.edu> (position number 122479) and should include a cover letter, curriculum vitae, a list of references, examples of research including three publications, a research statement, and a statement of teaching philosophy.

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Professional Opportunities



UNIVERSITY OF MARYLAND

MARYLAND CYBERSECURITY CENTER

SENIOR FACULTY SEARCH

The University of Maryland is seeking candidates for a senior faculty position in the Maryland Cybersecurity Center (<http://www.cyber.umd.edu>). Founded in 2010, the Center has vibrant interdisciplinary research and educational components that, while based strongly in computer science and computer engineering, also include psychology, human-computer interaction, criminology and criminal justice, supply chain management, cyber economics, and more.

The Center is currently home to more than 25 faculty members from several academic departments across campus, including five hired in the Department of Computer Science and the Department of Electrical and Computer Engineering during the past three years. The University of Maryland is also home to ACES, the nation's first undergraduate honors program dedicated to cybersecurity.

Candidates for the senior position are expected to be prominent researchers in the field of cybersecurity, defined broadly, with a strong publication and funding record. The new hire will have a joint appointment in the Department of Computer Science and the Department of Electrical and Computer Engineering, as well as in the University of Maryland Institute for Advanced Computer Studies. The opening is for an appointment at the level of (tenured) Full Professor or (tenured) Associate Professor, depending on the level of experience. The appointment can be effective as early as July 1, 2017.

The Maryland Cybersecurity Center is committed to increasing the diversity of the campus community. Candidates who have experience working with a diverse range of faculty, staff, and students, and who can contribute to the climate of inclusivity, are encouraged to identify their experiences in these areas

Please apply online at <https://jobs.umd.edu> (position number 121592). Applicants are strongly encouraged to submit their applications by January 31, 2017.

The University of Maryland is an affirmative action, equal opportunity employer.

Applications completed by January 31, 2017 will receive full consideration. The position will remain open until filled.

Professional Opportunities

University of Miami

Faculty Positions in Electrical and Computer Engineering

The College of Engineering of the University of Miami (UM in Coral Gables, FL) invites applications and nominations for tenured/tenure-track faculty positions at the assistant/associate/full professor level in the Department of Electrical and Computer Engineering (ECE). The faculty hires will have expertise consistent with at least one of the following college-wide problem-based research clusters with a strong preference for applicants in the first cluster:

- Big Data, Cybersecurity, and/or Informatics
- Cognitive and Brain Engineering
- Sustainable, Resilient and Smart Systems
- Health and Healthcare Systems
- Novel Materials

Applicants must have a strong record of research accomplishments, evidence of leadership and vision, ability to excel in an interdisciplinary environment, and a strong interest in undergraduate and graduate teaching. Applicants must have an earned doctorate in electrical and computer engineering or a related field.

Responsibilities of this position include developing a strong externally-funded research program, fostering undergraduate and graduate student development; teaching and developing new courses, as well as novel teaching methods; assessing student learning; developing new degree offerings that meet the needs of the community and industry; actively engaging with and participating in professional societies; and strengthening the role of the department and the College in the innovation ecosystem in South Florida.

The University of Miami is a top 50 U.S. research institution committed to attracting a talented workforce to support the common purpose of transforming lives through teaching, research, innovation and service. Faculty hired will have

unique opportunities to contribute to the growth of strategic research areas through collaboration within the cluster and leveraging existing strengths at the University of Miami, which include:

- Unique geographical location providing a gateway to the Americas;
- World-class research faculty at the University of Miami, Miller School of Medicine and the Rosenstiel School of Marine & Atmospheric Science;
- Newly formed state-of-the-art makerspace research and teaching facility supported by a major medical devices company;
- A \$100 million gift to the College of Engineering together with the School of Arts and Sciences.

Initial screening of applications will begin immediately, with hires expected to start August 2017. Applications will be accepted until the positions are filled. Applications including curriculum vitae, statement of educational philosophy, and the names of three persons who may be asked for letters of reference; these items should be uploaded through the web portal at <http://coe.miami.edu/facultyopenings>.

The University of Miami is an equal opportunity employer; females, minorities, protected veterans and individuals with disabilities are encouraged to apply. Applicants and employees are protected from discrimination based on certain categories under federal law.

University of New Orleans

Department of Computer Science Two Assistant Professor Positions

The Department of Computer Science at the University of New Orleans (UNO) invites applications for two tenure-track Assistant Professor positions starting in Fall 2017. Application from all areas of computer science will be considered, but strong preference will be given to the general areas of cybersecurity and game

development/AI. We are also interested in applicants who would complement existing research efforts in big data, bioinformatics, and scientific computing.

A Ph.D. in computer science, or a closely related field is required for appointment; successful applicants must possess a record of research excellence, and demonstrate strong teaching commitments to graduate and undergraduate courses. Application packages should be emailed to search@cs.uno.edu. Applications will be evaluated on a rolling basis, starting Feb 1, 2017 until the positions are filled.

UNO is a Carnegie Higher Research institution located in the vibrant and fast-growing city of New Orleans. Over the last decade, the metro area has experienced a strong IT growth, and computer science enrollment has doubled over five years. The Department hosts two Board-certified research centers and has a strong record of federal, state, and private research funding.

UNO is an Equal Opportunity Employer with a strong commitment to diversity; we specifically encourage all qualified women and applicants from other underrepresented groups to consider this opportunity.

University of North Carolina at Charlotte

Assistant/Associate Professor

The Department of Software and Information Systems (SIS) in the College of Computing and Informatics (CCI) has strengths in cybersecurity, human centered design, intelligent systems and analytics, and health informatics. The Department offers BA/BS degrees in Computer Science with concentrations in software engineering, cybersecurity, web and mobile applications, human computer interaction and Information Technology. SIS offers an MS in Information Technology, an MS in Cybersecurity and a PhD in Computing and Information Systems.

Professional Opportunities

SIS is in a phase of significant growth in the number of students and faculty. Applications are solicited for tenured/tenure-track faculty positions in cybersecurity and human computer interaction (HCI), and health informatics. Priority will be given to applicants who can collaborate with and contribute to the university-wide initiative in Data Science and Analytics. Descriptions of the focus for the open positions are as follows.

Cybersecurity (#6281): SIS has a strong program in information assurance and protection, designated as a CAE/IAE and CAE/R institution by DHS and NSA, and has an NSF funded IU/CRC in Configuration Analytics and Automation. Applications are solicited for a tenure-track position with priority given to applicants with research related to the Science of Security to complement existing department strengths. Areas of priority include: Security Analytics, Cyberphysical Systems Security (e.g. IoT), Software Security, and interdisciplinary cybersecurity research.

HCI Design (#4651): SIS has 4 faculty members in HCI that research and design engaging, usable, and novel interaction techniques and systems to improve user experience and augment creativity. We focus on human centered design and plan to include ubiquitous and mobile interaction design to address challenges related to data science and analytics. SIS has a concentration in HCI at the Bachelors, Masters, and PhD levels. We seek applicants that complement our current strengths, with priority given to ubiquitous computing, mobile technologies, social computing, and interactive data analytics. See <https://jobs.uncc.edu/postings/13429> for more information.

Health Informatics (#3718): This is a tenure-track position in health informatics and analytics that contributes to the Professional Science Masters in Health

Informatics, the core areas of Software and Information Systems, the College of Health and Human Services, and the Data Science Initiative at UNCC. Specific research areas of interest include informatics and analytical methods applied to participatory patient care and shared decision making; health knowledge modeling and decision support system development; health care privacy and secure medical devices; human centric design of new health informatics technology, and health information technology development and evaluation. See <https://jobs.uncc.edu/postings/13446> for more information.

University of North Carolina at Charlotte

Teaching Professor

The Department of Software and Information Systems at the University of North Carolina at Charlotte (<http://sis.uncc.edu/>) is seeking candidates for one or more tenure-track positions at the rank of assistant or associate professor. The Department is seeking applicants with specialization in Cyber Security (priority given to applicants with research related to the Science of Security, Security Analytics, Cyberphysical Systems Security, Software Security, and interdisciplinary Cyber Security research), Human Computer Interactions (priority given to applicants with experience in ubiquitous computing, mobile technologies, social computing, and interactive data analytics), Health Informatics (priority given to applicants with experience including informatics and analytical methods applied to participatory patient care and shared decision making; health knowledge modeling and decision support system development; health care privacy and secure medical devices; human centric design of new health informatics technology, and health information technology development and evaluation.) Candidates must hold PhD

degree in Computer Science, Informatics, or a closely related discipline, have demonstrated excellence in research and be committed to excellence in teaching. Successful candidates will be expected to conduct research in their fields of expertise, publish and acquire research funding, teach courses in related areas at both the undergraduate and graduate levels, mentor students, support diversity initiatives and participate in other department and university activities.

Those interested can apply here <https://jobs.uncc.edu/postings/13902>.

University of Oregon

Department Of Computer and Information Science Faculty Position

The Department of Computer and Information Science (CIS) seeks applications for two tenure track faculty positions at the rank of Assistant Professor, beginning September 2017. The University of Oregon is an AAU research university located in Eugene, two hours south of Portland, and within one hour's drive of both the Pacific Ocean and the snow-capped Cascade Mountains.

The open faculty positions are targeted towards the following three research areas: 1) high performance computing, 2) networking and **distributed** systems and 3) data sciences. We are particularly interested in applicants whose research addresses security and privacy issues in these sub-disciplines; additionally, we are interested in applicants whose research complements existing strengths in the department, so as to support interdisciplinary research efforts. Applicants must have a Ph.D. in computer science or closely related field, a demonstrated record of excellence in research, and a strong commitment to teaching. A successful candidate will be expected to conduct a vigorous research program and to teach at both the undergraduate and graduate levels.

Professional Opportunities

We offer a stimulating, friendly environment for collaborative research both within the department, which expects to grow substantially in the next few years, and with other departments on campus. The department hosts two research centers, the **Center for Cyber Security and Privacy** and the **Neuroinformatics Center**. Successful candidates will have access to a new high-performance computing facility that opens in October 2016. The CIS Department is part of the College of Arts and Sciences and is housed within the Lorry Lokey Science Complex. The department offers B.S., M.S. and Ph.D. degrees. More information about the department, its programs and faculty can be found at <http://www.cs.uoregon.edu>.

Applications will be accepted electronically through the department's web site. Application information can be found at <http://www.cs.uoregon.edu/Employment/>. Applications received by December 15, 2016 will receive full consideration. Review of applications will continue until the positions are filled. Please address any questions to faculty.search@cs.uoregon.edu.

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

University of Rochester

All-Level Tenure-Track Faculty Position in Interdisciplinary Research in Data Science

The University of Rochester has made data science a centerpiece of its 5-year strategic plan, committing new faculty lines, a new building, and the establishment of the Goergen Institute for Data Science. We are seeking applicants for a tenure

track position in interdisciplinary research in data science.

The interdisciplinary search focuses on candidates who will engage in collaborative research that connects advances in computational models and methods with the humanities, sciences, or medicine. Successful candidates will receive a primary appointment in a department within S Arts, Sciences and Engineering.

Focus areas for this year's interdisciplinary search are:

- **Computational Linguistics:** Research in the theory or applications of natural language processing, with a particular interest in applications to linguistics, the social sciences, or the humanities.
- **Neurally-inspired Computing:** Research in artificial neural networks, including the fundamental theory of deep learning, practical applications to tasks such as perception, or as a tool for modeling and understanding biological neural networks.
- **Computer Vision and Image Analysis:** Research in the theory and applications of computational methods of image or video understanding, with a particular interest in applications to biomedicine or the humanities.

Apply online at: <https://www.rochester.edu/faculty-recruiting>.

You may apply to this interdisciplinary search in addition to applying to individual departmental searches. Direct questions to diane.evans@rochester.edu. For more information about the Institute, visit <http://www.rochester.edu/data-science>.

Applicants should hold a PhD and will be required to supply a CV, cover letter, set of refereed scholarly publications, names of references, and research and teaching statements. The application will ask applicants to select a set of disciplines most relevant to their research area. Review of applications at any rank will begin immediately and continue until the position

is filled. For full consideration, applications should be completed by January 15, 2017.

The University of Rochester is a private, Tier I research institution located in western New York State. It consistently ranks among the top 30 institutions, both public and private, in federal funding for research and development. The university has made substantial investments in computing infrastructure through the Center for Integrated Research Computing (CIRC) and the Health Sciences Center for Computational Innovation (HSCCI). The university includes the Eastman School of Music and the University of Rochester Medical Center, a major medical school, research center, and hospital system. The greater Rochester area is home to over a million people, including 80,000 students who attend the 8 colleges and universities in the region.

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

EOE / Minorities / Females / Protected Veterans / Disabled

University of South Carolina

Multiple Open Rank, Tenured or Tenure-Track Faculty Positions

Department of Computer Science and Engineering

College of Engineering and Computing

As part of a major college-wide hiring initiative, the Department of **Computer Science and Engineering** at the University of South Carolina seeks dynamic new faculty, at all ranks, to begin Fall 2017. See <http://www.cec.sc.edu/employment> for information on broad areas of emphasis, application instructions, and information about the University of South Carolina.

Professional Opportunities

Examples of interest areas include:

1. **Cybersecurity and embedded systems**

(2 positions) including hardware security, trustworthy embedded systems, secure high performance computing, and safety, security, and reliability of cyber-physical systems and the Internet of Things. Please send materials to Cyber2017@cec.sc.edu.

2. **Computational and data science**

(2 positions) including the development of scalable machine learning algorithms, causal inference using large-scale simulations and large datasets, data visualization, and uncertainty quantification as applied to various science and engineering fields. Please send materials to Computation2017@cec.sc.edu.

3. **Robotics and controls** (2 positions)

including autonomous vehicles, environmental monitoring, service robotics, and process controls. Please send materials to Controls2017@cec.sc.edu.

Eligible candidates should possess a Ph.D. degree and a demonstrated record of research accomplishments. Successful candidates will be expected to develop internationally recognized, externally funded research programs that complement existing strengths in the department and college. Applicants will also be expected to participate in interdisciplinary projects.

Applicants should submit one complete PDF file that includes: (1) cover letter, (2) CV, (3) teaching statement, (4) research statement, and (5) names and contact information for at least three references to the email addresses provided above for each position.

The Department of Computer Science and Engineering in the College of Engineering and Computing offers B.S. degrees in Computer Science, Computer Information Systems, and Computer Engineering, M.S. and Ph.D. degrees in Computer Science and Computer Engineering, and a Graduate Certificate in Cyber Security Studies. The

Department has 21 full-time faculty members (10 of whom are NSF CAREER award recipients), an undergraduate enrollment of 872 students, a graduate enrollment of 175 students, and over \$1.5 million in annual research expenditures.

The University of South Carolina is an Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation or veteran status.

University of South Carolina Upstate

Assistant Professor of Computer Science Requisition #011147

The University of South Carolina Upstate Mathematics & Computer Science Division is seeking applicants for a tenure-track faculty position to teach computer science courses with a strong focus on computer security especially in areas including, but not limited to, network security, digital forensics, and other applied security areas.

Minimum qualifications:

Ph.D. in Computer Science or closely related field required by August 16, 2017. Applicants must have a strong interest in teaching undergraduate computer security and networking courses as well as a variety of other computer science courses. Candidates should also have the demonstrated ability to develop a successful research agenda.

Preferred qualifications:

Prior teaching and industry experience in computer security is preferred. Additional interest in Artificial Intelligence, Cloud Computing, Digital Forensics, and/or Networking is desired.

For a complete job description and application instructions: www.uscupstate.edu/jobs.

The University of South Carolina Upstate is an Affirmative/Equal Opportunity Institution. Minorities and women are encouraged to apply.

University of Tennessee at Martin

Assistant Professor of Computer Science

College of Engineering and Natural Sciences, Department of Computer Science is seeking applications for a tenure-track appointment in Computer Science.

To apply: Applications may be made at http://www.utm.edu/departments/personnel/fac_emp.php. A letter of application with a statement of teaching and research goals, a detailed resume, and at least three letters of recommendation with contact information must be attached. Review of applications will begin in Spring 2016 and will continue until the position is filled.

The University of Tennessee is an EEO/AA/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment without regard to race, color, national origin, sex, pregnancy, marital status, sexual orientation, gender, identity, age, physical or mental disability, or covered veteran status.

University of Texas at Arlington

Three Tenure-Track Faculty Positions

The Computer Science and Engineering Department at The University of Texas at Arlington invites applications for three tenure-track assistant professor positions with foci on: (1) Biomedical Data Science, (2) Big Data, (3) Cyber Security, with a tentative starting date of employment in Fall 2017. The

Professional Opportunities

related research areas of bioinformatics, system biology, medical image computing, computational neuroscience, precision medicine, smart healthcare and health informatics, data mining, machine learning, large-scale optimization, large-scale smart and autonomous systems, hardware and software security, data privacy, behavioral and human aspects of security are especially desirable. Outstanding candidates in other related areas, including but not limited to cyber-physical systems, IoT, adaptive robotics, will also be considered.

The University, College and Department

The University of Texas at Arlington (<http://www.uta.edu/uta/>) is a Carnegie Research-1 "highest research activity" institution and the second-largest institution in The University of Texas System. With more than 7,000 students, the College of Engineering (<http://www.uta.edu/engineering/>) is the third-largest in Texas and offers the most comprehensive engineering degree programs in the region. The Computer Science and Engineering Department (<https://cse.uta.edu/>) has the most graduate students in the College of Engineering and is one of the College's largest departments. CSE faculty are active in the areas of data mining; machine learning; databases; assistive technologies; biocomputing and health informatics; computer networks and cloud computing; computer vision and multimedia; artificial intelligence and robotics; software engineering and cybersecurity; and high-performance and sustainable computing, with more than \$5 million in research expenditures. Many of the programs in these areas are ranked among the top-50 in the nation.

Application Instructions

To apply, applicants should go to:

<https://uta.peopleadmin.com/postings/1670>
for Big Data;

<https://uta.peopleadmin.com/postings/1673>
for Security;

<https://uta.peopleadmin.com/postings/1674>
for Biomedical Data Science;

and submit their application, including a cover letter, curriculum vitae, statements of research and teaching objectives, and contact information for at least five references. Questions about the position should be addressed to hong.jiang@uta.edu and heng@uta.edu.

Review of applications will begin on January 13, 2017, and will continue until the positions are filled.

EEO/AA Policy

UTA is an Equal Opportunity/Affirmative Action institution. Minorities, women, veterans and persons with disabilities are encouraged to apply. Additionally, the University prohibits discrimination in employment on the basis of sexual orientation. A criminal background check will be conducted on finalists. UTA is a tobacco free campus.

The University of Texas at Arlington

Three Tenure-Track Faculty Positions

The Computer Science and Engineering Department at The University of Texas at Arlington invites applications for three tenure-track assistant professor positions with foci on: (1) Biomedical Data Science, (2) Big Data, (3) Cyber Security, with a tentative starting date of employment in Fall 2017. The related research areas of bioinformatics, system biology, medical image computing, computational neuroscience, precision medicine, smart healthcare and health informatics, data mining, machine learning, large-scale optimization, large-scale smart and autonomous systems, hardware and software security, data privacy, behavioral and human aspects of security are especially desirable. Outstanding candidates in other related areas,

including but not limited to cyber-physical systems, IoT, adaptive robotics, will also be considered.

The positions are part of the College of Engineering's search for 12 tenure-oriented faculty members in thematic areas which are research thrusts of UTA's Strategic Plan 2020: Bold Solutions | Global Impact: Health and the Human Condition, Sustainable Urban Communities, Global Environmental Impact, and Data-Driven Discovery. The key objective is to hire faculty members with outstanding qualifications who share the University's core values of high standards of excellence in teaching, innovative and collaborative research, and service, combined with fostering an open and inclusive environment. Major emphasis will be on potential collaboration for research with faculty members from other departments across UTA and outside the University.

Duties and Responsibilities

Teach and develop undergraduate and graduate courses and conduct leading-edge research in the corresponding areas. Develop externally funded research programs that result in publications in leading scholarly journals and top-tier conferences; supervise graduate and undergraduate students; and serve on departmental, college, and university committees.

Minimum Qualifications

An earned Ph.D. degree (All-But-Dissertation, ABD, cases will be considered) in computer science, computer engineering, or a closely related field. The candidate should have a strong background in related research areas. Candidates must also show a strong commitment to teaching excellence at the undergraduate and graduate levels.

The University, College and Department

The University of Texas at Arlington is a Carnegie Research-1 "highest research activity" institution. With a global enrollment of about 51,000, UTA is the second-largest

Professional Opportunities

institution in The University of Texas System. With more than 7,000 students, the College of Engineering is the third-largest in Texas and offers the most comprehensive engineering degree programs in the region. It offers 10 baccalaureate, 14 master's, and 9 doctoral degree programs and has ties to numerous Fortune 500 companies in the region. The College is enjoying extraordinary growth in graduate and undergraduate student enrollment and in student graduation. This growth has been concomitant with growth in research expenditures, collaboration, innovation and entrepreneurship by faculty and students. The college currently has eight active NSF CAREER grants, four of which were awarded in 2015-16. The Computer Science and Engineering Department has the most graduate students (865) in the College of Engineering and is one of the College's largest departments. CSE faculty are active in the areas of big data analytics; data mining; machine learning; databases; assistive technologies; biocomputing and health informatics; computer networks and cloud computing; computer vision and multimedia; information systems and mobile computing; artificial intelligence and robotics; software engineering and cybersecurity; and high-performance and sustainable computing, with more than \$5 million in research expenditures. Many of the programs in these areas are ranked among the top-50 in the nation by Microsoft Academic Research.

Application Instructions

To apply, applicants should go to:

<https://uta.peopleadmin.com/postings/1670>
for Big Data;

<https://uta.peopleadmin.com/postings/1673>
for Security;

<https://uta.peopleadmin.com/postings/1674>
for Biomedical Data Science;

and submit their application, including a cover letter, curriculum vitae, statements of research and teaching objectives, and contact information for at least five

references. Questions about the position should be addressed to hong.jiang@uta.edu and heng@uta.edu.

Review of applications will begin on January 13, 2017, and will continue until the positions are filled.

EEO/AA Policy

UTA is an Equal Opportunity/Affirmative Action institution. Minorities, women, veterans and persons with disabilities are encouraged to apply. Additionally, the University prohibits discrimination in employment on the basis of sexual orientation. A criminal background check will be conducted on finalists. UTA is a tobacco free campus.

University of Utah

School of Computing - Lecturing Position

The School of Computing at the University of Utah seeks applicants for the position of Lecturing Professor (at all ranks) beginning in the fall semester of 2016. This lecturing position is intended to be a long term or permanent position, with possibilities for extended contracts and promotion within the University's Career-Line Faculty structure. The candidate will have the opportunity to provide leadership to our upcoming Master of Software Development (MSD) Program and to teach as part of this cohort-based hands-on program.

The qualifications of an ideal candidate include (i) a strong academic background in computer science or a related field (Ph.D. preferred), (ii) practical experience in the computer industry, (iii) a demonstrated proficiency in teaching, and (iv) an interest in curriculum development.

The School of Computing currently employs 41 tenure-track and 6 lecturing professors who collaborate to offer a variety of undergraduate and graduate degree and certificate programs.

The University of Utah is a Carnegie Research I Institution, and the School of Computing is an exciting, growing school with a 50-year history of excellence in computer science education, innovation, and research. The University of Utah is located in Salt Lake City, the hub of a large metropolitan area with excellent cultural and recreational opportunities. Additional information about the school and our current faculty can be found at <http://www.cs.utah.edu>. Candidates may apply through the following URL: <http://utah.peopleadmin.com/postings/59856>

The University of Utah is an Equal Opportunity/Affirmative Action employer and educator. Minorities, women, veterans, and persons with disabilities are strongly encouraged to apply. Veterans' preference is extended to qualified veterans.

Reasonable disability accommodations will be provided with reasonable notice. For additional information about the University's commitment to equal opportunity and access see: <http://www.utah.edu/nondiscrimination/>.

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

University of Warwick

Professor/Reader in Data Science

Salary: Professor - Competitive, Reader - £48,327 - £59,400 per annum

Up to two enthusiastic individuals are now sought to be part of the Warwick involvement in the newly created Alan Turing Institute (The Turing Institute), of which Warwick is a founding partner (with Cambridge, Edinburgh, Oxford and UCL). The Turing Institute is the UK's new national data science institute, headquartered at the British Library in London. The Institute's

Professional Opportunities



Director, Institute for Quantum Computing

University of Waterloo
Waterloo, Ontario, Canada

The Institute for Quantum Computing (IQC) seeks to appoint a new director. This is a unique opportunity to shape the global future of quantum information science and engineering. IQC is well connected internationally and the directorship provides an effective platform for sharing visions of a quantum future. Quantum information is an established strategic priority of both the University of Waterloo and the government of Canada. The Director of IQC plays a critical role in the leadership of the institute by setting its overall strategic direction, cultivating key external relationships, and ensuring that it delivers against its mandate. The Director of IQC reports to the Vice President, University Research at the University of Waterloo.

IQC is a multidisciplinary research center at the University of Waterloo, dedicated to the development and advancement of quantum information science and technology. Established 15 years ago, it spans the Faculties of Mathematics, Science, and Engineering, and today has an annual budget of approximately \$25 million and includes 27 faculty members and 37 postdoctoral fellows. IQC is exceptionally well outfitted for advancing quantum science and as a welcoming meeting place for researchers. It has 58,000 square feet of laboratory space in three facilities, including purpose-built laboratories for nano-fabrication, metrology, and ultralow vibration experiments. IQC's primary location, the Lazaridis Quantum-Nano Centre, was designed to facilitate interactions and includes ample space for discussions and collaborative research. In addition to its internationally recognized research, IQC offers a unique interdisciplinary graduate program in Quantum Information to approximately 105 students. It also runs a variety of outreach programs, including the USEQIP summer school for undergraduates and the Quantum Innovators workshop for aspiring faculty candidates. IQC is supported by a strong administrative staff, including finance and communications personnel, <https://uwaterloo.ca/institute-for-quantum-computing/>.

IQC sits within the Quantum Valley ecosystem, with partners including the Perimeter Institute for Theoretical Physics and Quantum Valley Investments; more than 250 researchers work within 1km of IQC to advance the science, technology and commercial impact of quantum information. Investment in the Quantum Valley (governmental, industrial, philanthropic, and academic) now totals \$1.5 billion CAD. Looking ahead, IQC is poised for a significant expansion through a recent \$76 million CAD award by the Canada First Research Excellence Fund, with a targeted complement of 40 faculty members.

Attractive factors include stable funding, including an endowment of more than \$100 million CAD, the potential for significant faculty hiring (approximately 12 faculty members), and the established, internationally recognized excellence of IQC's comprehensive and

Professional Opportunities

mission is to undertake world-leading data science research at the intersection of computer science, mathematics, statistics and systems engineering, and to act as a magnet for leaders in academia and industry from around the world to engage with the UK in data science and its applications.

The creation of these posts reflects the strong commitment of the University of Warwick to invest in a coherent methodological approach to the fundamentals of data science and the challenges of complex data sets. The posts will be held either singly, or jointly, in the Department of Computer Science, Department of Statistics, and/or the Mathematics Institute, and are open at senior levels (Reader or full Professor).

You will have expertise regarding the current issues in data science and the drive to address them at a fundamental level, while forming part of a collaborative team of researchers across the mathematical sciences at Warwick and more widely within the Turing Institute. You will help shape research and teaching leadership in this fast-developing discipline. You will have an excellent publication record and proven ability to secure research funding.

This is an opportunity to join one, or more, of the world's most prominent and most research-active departments and to be part of the prestigious Turing Institute. It is expected that post-holders will spend at least 40% of their time conducting research at the Turing Institute and their teaching and administration duties at the University of Warwick will reflect this.

The university has also recently created the Warwick Data Science Institute (WDSI), which coordinates world-class research activities in data science, and is strongly connected to high-quality education in the broad area of data science, ranging from undergraduate to PhD level.

Informal enquiries can be addressed to any of the following:

Professor Graham Cormode (G.Cormode@warwick.ac.uk), Professor Stephen Jarvis (S.A.Jarvis@warwick.ac.uk), Computer Science, or any other senior member of the Departments involved.

For further details and to apply online please visit our website below. Minicom users: 024 7615 0554

<http://www2.warwick.ac.uk/services/humanresources/vacancies/statscsmaths/>

Closing date: Monday 13 February 2017.

It is expected that interviews will take place in March 2017.

The University Values Diversity

University of Western Ontario

Canada Research Chair Tier II in Data-Centric Systems

The Department of Computer Science, Faculty of Science, Western University is pleased to announce the search for a Tier II Canada Research Chair in Data-Centric Systems. Western Science is making significant investments in 'Big Data' as part of its broader Science of Information research theme, in line with its strategic priorities at http://www.uwo.ca/sci/pdf/STRATEGIC%20PRIORITIES_FA-web.pdf, as well as the broader priorities of Western University (Achieving Excellence on the World Stage: see http://president.uwo.ca/pdf/strategic-plan/WesternU_Full_StratPlan_2014.pdf).

In accordance with the regulations set for Tier 2 Canada Research Chairs (www.chairs-chaire.gc.ca), Tier 2 Chairs are intended for exceptional emerging scholars (i.e., candidates must have less than 10 years of experience as an active researcher in their field at the time of nomination). Applicants who are more than 10 years from having earned their highest degree (and where

career breaks exist, such as maternity, parental or extended sick leave, clinical training, etc.) may have their eligibility for a Tier 2 Chair assessed through the program's Tier 2 justification process, please contact Research Development at Western for more information. Please consult the Canada Research Chair website for full program information, including further details on eligibility criteria: http://www.chairs-chaire.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx#s3

The successful candidate will have an established record in database systems research with preference given to applicants whose research focuses on both scalable and distributed database systems. Publications in highly ranked journals and refereed conference proceedings as well as invited presentations at prestigious international conferences are both attributes of our desired candidate. A demonstrated interest in applied interdisciplinary research is highly desirable. Demonstrated success in attracting research funds from a variety of sources and initiation and fostering industry-academic collaborations are also essential. The start date will be July 1, 2018 or as negotiated.

The Department of Computer Science (<http://www.csd.uwo.ca>) currently has substantial and diverse strengths, especially in the area of large-scale analytics. This research field focuses on developing the foundations of methodologies in machine learning, algorithmic and computational mathematics for image processing and genome analysis, human-data interaction, visual analytics and natural language processing. Cross-disciplinary teams are tackling big data challenges in health informatics, life sciences, and other areas. Western Computer Science has recently hired a Canada Research Chair in Statistical

Professional Opportunities

Health Sciences and a Western Research Chair in Computational Neuroscience. The Department also has expertise in software and systems, with a second recent Western Research Chair hire in Cyber-Physical systems. This Canada Research Chair position will complement existing software and systems strengths in Computer Science and Electrical and Computer Engineering at Western, and is expected to participate in cross-disciplinary teams. The research will be supported by the high performance computing facilities of SHARCNET and the Southern Ontario Smart Computing Innovation Platform (SOSCIP). The successful candidate must supervise graduate students at the MSc and PhD levels, and is expected to be able to teach courses in databases and data-centric systems at the undergraduate and graduate level in core computing disciplines and interdisciplinary programs. These courses include Western Integrated Science courses at the undergraduate level and graduate courses in our Professional Master's in Data Analytics (with Statistics).

Candidates are expected to hold a Ph.D. in Computer Science or related discipline. Candidates will be appointed to a Probationary (tenure-track) appointment at the rank of Assistant or Associate Professor or to a Tenured appointment at the rank of Associate Professor. The rank and tenure status will be commensurate with the successful applicant's qualifications and experience.

With a full-time enrolment of about 35,000 students, Western University is a large, research-intensive university with a full range of academic and professional programs. General information about the University can be found at <http://www.uwo.ca/>. The university campus is in London Ontario, a city of 410,000, located midway between Toronto and Detroit. With parks, river valleys, tree-lined streets, and bicycle paths, London is known as the "Forest City".

London boasts an international airport, galleries, theatre, music and sporting events (see <http://www.goodmovelondon.com/>).

Candidates should submit a curriculum vitae, a one-page teaching statement and a concise research proposal (5 pages, NSERC Discovery Grant format preferred, if available) and contact details of at least three professional referees who can provide letters of support to:

Dianne McFadzean
Department of Computer Science,
Western University,
London, Ontario N6A 5B7
dmcfadze@uwo.ca

Consideration of applications will begin on March 1st, 2017 and will continue until the position is filled.

Please ensure that the Application for Full-Time Faculty Position Form available at: <https://www.uwo.ca/facultyrelations/pdf/careers/Faculty/Application-FullTime-Faculty-Position-Form.pdf> is completed and included in your application submission.

Positions are subject to budget approval and a successful Canada Research Chair nomination. Applicants should have fluent written and oral communication skills in English. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.

Accommodations are available for applicants with disabilities throughout the recruitment process. If you require

accommodations for interviews or other meetings, please contact Dianne McFadzean, Department of Computer Science, Western University, London, Ontario N6A 5B7, dmcfadze@uwo.ca

Virginia Tech

Postdoctoral Research Associate in causal learning and automated scientific discovery

A 1-year postdoc position (with the possibility of renewal for an additional year) is available at Virginia Tech in the area of causal learning and automated scientific discovery. The position start date is June 1, 2017. The successful applicant will explore the formal connections between causal learning in the graphical causal modeling tradition and the algorithmic determination of natural kinds (classes of causal structures that support law-like generalizations useful for prediction and control).

To view the official position announcement or to apply, see <https://listings.jobs.vt.edu/postings/72301>.

Wayne State University

Research Assistant Professor

The Department of Computer Science at Wayne State University invites applications for a Research Assistant Professor, as part of an NSF-funded computational physics project relevant to experiments at the Relativistic Heavy-Ion Collider and the Large Hadron Collider. The collaboration involves multi-disciplinary teams from Duke, MIT, McGill, Ohio State, Lawrence Livermore National Lab., Texas A&M, UC Berkeley, and Wayne State. A key research component is the seamless integration of diverse simulation codes into a scalable open-source software tool.

The position requires a Ph. D. in computer science, engineering, or physics, with expertise in developing and managing large-scale software projects. HPC experience

Professional Opportunities

desirable but not required. The position is renewable annually for up to three years, with a preferred start of January 2017.

Applicants should submit a cover letter, CV, and contact information for three references, online at <http://jobs.wayne.edu> (position number **042076**). Questions should be directed to Loren Schwiebert at loren@wayne.edu.

Xiamen University, People's Republic of China

School of Informatics

Ph.D. Program, Postdoc and Research Scientist Positions in Data Science

The School of Informatics at Xiamen University invites applicants for Ph.D. program, PostDoc and Research positions in the areas of Data Science and related areas, including but not limited to High Performance Computing, Distributed and Parallel Programming Models and Languages, High Dimensional Space Search, Design and Analysis of Algorithms, Big Data, Point Cloud Computing, Web Mining, Machine Learning, Internet of Things, Robotics, and Artificial Intelligence.

The School of Informatics holds the Center for Cloud Computing and Big Data Analytics at Xiamen University, which was founded three years ago but rapidly growing. A 10 Peta FLOPS data processing center is under its design stage and expected to complete in 2017. The Center is expanding its faculty and facility. It offers its Ph.D. program in joint with the School of Informatics (<http://information.xmu.edu.cn/en/>). Its objective

is to become a leading technology base in the areas of High Performance Computing, Internet of Things, Big Data, and Machine Intelligence. The Center is closely tied with the School of Informatics, consisting of Departments of Computer Science, Communication Engineering, Cognitive Science, and Cyberspace Security. The School of Informatics offers Master and Ph.D. programs in the above fields.

The Center is under the leadership of Professor Z. George Mou, Ph.D. in Computer Science, Yale University, who has conducted and led numerous research and development projects at Brandeis University, IBM RS 6000 Division, Applied Physics Lab of the Johns Hopkins University, the Boeing Company, and Yale University in the fields of Parallel Programming Models and Programming Languages, Scientific Computing, Information Retrieval, Simulation, Disease Control, High Dimensional and Geographic Space Search, Machine Learning, and Internet of Things. His landmark work in the programming model and language Divacon has been implemented in a number of high performance platforms, delivered superb performance for a wide range of applications.

Applicants for the Ph.D. program should have completed his/her Bachelor degree by the time of entering the program. Candidate for PostDoc and Research Scientist positions should have completed or will complete within a year a Ph.D. program in Computer Science, Mathematics, Electrical Engineering, Physics or other related areas. Interested applicants should submit (1) a Cover Letter (2) a Personal Statement (3) three Letters of

Recommendation (4) a detailed Curriculum of Vita to zhifanbai@xmu.edu.cn. The review process will start from March 1, and will continue until all vacancies are filled.

Xiamen University is a reputable Chinese University founded in 1921 with a long excellent academic tradition. Its campus is generally regarded as the most beautiful in China. We offer stimulating environments for research and development, waiver of tuition and generous stipend for Ph.D. studies, competitive compensation for PostDoc and Scientist Positions. In-campus accommodation and visa assistance will be provided for successful candidates. Teaching and graduate student advising opportunities are available for those who are interested. Chinese language is not required for English speakers. The appointment is for an initial three-year term and is renewable. Tenure track teaching and research positions at the rank of assistant or associate professors will be open to those candidates who successfully completed the initial term of the appointment.

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