CRA

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

Computing Research and the Emerging Field of Data Science

By CRA's Committee on Data Science: Lise Getoor (Chair), David Culler, Eric de Sturler, David Ebert, Mike Franklin, and H. V. Jagadish on behalf of the CRA Board

Our ability to collect, manipulate, analyze, and act on vast amounts of data is having a profound impact on all aspects of society. This transformation has led to the emergence of data science as a new discipline[1]. The explosive growth of interest in this area has been driven by research in social, natural, and physical sciences with access to data at an unprecedented scale and variety, by industry assembling huge amounts of operational and behavioral information to create new services and sources of revenue, and by government, social services and non-profits leveraging data for social good. This emerging discipline relies on a novel mix of mathematical and statistical modeling, computational thinking and methods, data representation and management, and domain expertise. While computing fields already provide many principles, tools and techniques to support data science applications and use cases, the computer science community also has the opportunity to contribute to the new research needed to further drive the development of the field. In addition, the community has the obligation to engage in developing guidelines for the responsible use of data science.

Data science starts with a strong set of foundations adapted from several fields including statistics, mathematics, social science, natural sciences, and computer science. Already, virtually all aspects of traditional computer science research have played a role in the development of data science. And looking forward, **data science will drive fundamentally new computing research.**

1. From a data management perspective, **data science requires a much deeper understanding and representation of** how **data** is acquired, stored and accessed. Data lineage, data quality, quality assurance, data integration, storage, privacy, and security all need to be rethought. The traditional approach of acquisition, followed by storage, and processing often does not work for high rate or sensitive data.
2. From a computational point of view, **very large data volumes, very high data rates, and very large numbers of users, demand new systems and new algorithms.** New system architectures that can accommodate the heterogeneity and irregular structure in data access and communication are needed. From an algorithmic perspective, there is a need for sublinear algorithms, online algorithms that support real-time data streams, and probabilistic and stochastic approaches to accommodate both scale and noise in the data.
3. **Furthermore, many classic statistical assumptions and machine learning techniques do not fit current data science needs.** Often derived from natural sources, data is increasingly likely to be biased, incomplete and highly heterogeneous. Systematic errors arising in automated data collection and semantic inconsistencies that result from stitching data together from multiple sources across longer time horizons present profound modeling challenges and opportunities for the development of new statistical methods and machine learning algorithms. Even in the small data setting, new techniques that can cope with heterogeneity and biased sampling are needed. While predictive modeling is important, many data science problems involve decision making, and the ability to reason about alternate courses of action is needed. In addition, understanding the curse of dimensionality, overfitting, and causality in these complex settings is critical.
4. The challenges in scale and heterogeneity also fundamentally change **how users interact with data and models,** how the data is visualized, what algorithms are needed to support understanding and interpretation of the

[1] We use the term data science in its broadest sense, including data collection, data engineering, data analytics and data architecture.

results of data science models, how decisions are made, and how user feedback is acquired and incorporated. Human computer interaction and visual analytics will need to be more tightly integrated with data science models and algorithms. New use cases for natural language processing, speech, computer vision and other human-machine communication modes will emerge.

5. Because data science systems are often embedded in operational systems with changing demands and distributions, **supporting the entire data science lifecycle is important.** Ensuring the robustness of all aspects of the pipeline is important. New software engineering and computer programming best practices will need to be developed. Additionally, data artifacts will often persist beyond their initially planned usage, so longer-term curation and management must also be addressed.

The above research topics, and many others, will require foundational research into systems, computation and machine intelligence.

Furthermore, like colleagues in many other fields, **computing researchers are increasingly becoming users of data science,** as many subareas of computer science, including computer architecture, networking, software engineering, vision, robotics, education and user modeling, are becoming increasingly data-driven. Good empirical methodology is needed to ensure value and reproducibility, including proper data curation, rigorous system modeling, measurement and analysis, and sound methods for the presentation and interpretation of results. It is becoming increasingly important to train all computing researchers in basic data science skills.

Looking more broadly, data science provides new opportunities for creative collaborations between industry, academia and government for pure and applied research. In addition to sponsorship of research, industry partners can provide valuable insights to realistic problems, access to data, capacity to test theories at scale and in the wild, and complementary ways of seeking solutions. Academia, in turn, can provide innovative solutions and software, novel algorithms, and principled analyses of alternative approaches. Academia will also educate a cadre of well-trained data scientists to meet industry needs and help industrial partners explore cutting edge research. These partnerships will also help inform the data science policy issues related to bias, data privacy, intellectual property, appropriate use, and regulatory issues. Open data initiatives and the open source software movement are particularly well suited for data science and can help smooth the path to commercialization and impact. In short, industry, academic and government data science collaborations will help drive new models for working together.

Finally, while data science offers many new opportunities for improving scientific inquiry and decision-making through increased utilization of data, these uses also offer new challenges. Both the context in which data is generated, and the application(s) for which it will be used are immensely important for accurate, fair and ethical data science. These data science efforts will require collaboration among subfields of computer science and between computer science and other disciplines. Both intradisciplinary as well as interdisciplinary skills need to be taught in order to help support this. As data generation and collection become ubiquitous, concepts of data ownership are evolving as well, and many legal and policy issues will need to be rethought in that context. **In order to understand how to use and share data ethically and responsibly, computer scientists will need to engage with domain scientists, policy makers, and ethicists** to understand the risks and assumptions being made. For example, understanding the social science behind the data science is important when answering questions about individuals and society (e.g., in education, economic policy, and policing). Important concerns include privacy, fairness, and transparency. In order to engage and contribute as productively as possible in emerging policy discussions around data science, computing researchers will need to develop new methods that are able to incorporate ethics, fairness and responsibility.

In summary, the computing research community has a unique opportunity to help define and shape the emerging field of data science. Together with statisticians, mathematicians, social scientists, data analysts, domain scientists and subject matter experts, computer scientists can develop the new theoretical foundations, algorithmic principles and systems upon which the foundations of data science will be built. The Computing Research Association is committed to supporting computing professionals and others in developing ethical and responsible data science research.

Nominations Open for CRA Distinguished Service and A. Nico Habermann Awards

The Computing Research Association invites nominations for the 2017 CRA Distinguished Service Award and A. Nico Habermann Award.

Distinguished Service Award

CRA presents an award, usually annually, to a person who has made an outstanding service contribution to the computing research community. This award recognizes service in the areas of government affairs, professional societies, publications or conferences, and leadership that has a major impact on computing research.

Guidelines for Nominators

The quality and extent of computing research conducted by the candidate is not taken into consideration in making this award, and material about the candidate's research accomplishments should not be included in the nomination material. Service considerations are limited to those that relate to the computing research community. Thus, for example, government service on behalf of the computing research community or educating graduate students for research careers would count. However, the selection committee will not give consideration to service in undergraduate education unless it relates directly to computing research.

Viable candidates are likely to be senior members who have been members of editorial boards and planning or programming committees. While it is not objectionable to mention this kind of service in the nomination, it is not likely to be a key factor in the selection process unless the applicant's service is well above and beyond that of other senior members.

Longevity, effectiveness, breadth, and community-wide scope of service are all important in the award selection. The nomination letter must make an argument why the candidate deserves the award, focusing on a few key contributions and providing evidence for these claims. The nomination should not simply consist of a list of accomplishments.

Nominators must obtain three to four letters of support from distinguished members of the computing research community who are familiar with the candidate's service accomplishments and must include a copy of the candidate's current curriculum vitae. Submit nominations here.

A. Nico Habermann Award

CRA presents an award, usually annually, to a person who has made outstanding contributions aimed at increasing the numbers and/or successes of underrepresented groups in the computing research community. This award recognizes work in areas of government affairs, educational programs, professional societies, public awareness, and leadership that has a major impact on advancing these groups in the computing research community. Recognized contributions can be focused directly at the research level or at its immediate precursors, namely students at the undergraduate or graduate levels.

Guidelines for Nominators

Longevity, effectiveness, breadth, and community-wide scope of service, rather than great contributions within one institution, are important in the award selection. The nomination letter must make an argument for why the candidate deserves the award, focusing on a few key contributions and providing evidence for these claims. The nomination should not simply consist of a list of accomplishments. Nominators must obtain three to four letters in support of the nominee from distinguished members of the computing research community who are familiar with the candidate's service, with particular emphasis on its community-wide scope. The nomination must include a copy of the candidate's current curriculum vitae. Submit nominations here.

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Questions or comments may be addressed to awards@cra.org.

The deadline for receipt of nominations is December 9, 2016.

Current members of the CRA board of directors are not eligible for these two awards.

Nominees Sought for CRA Board of Directors

The Computing Research Association seeks your help in suggesting nominations for its board of directors. We want individuals who have the time, energy, initiative, and resources to work on CRA issues on behalf of the entire CRA community. We have a working board, and all members are expected to work on community issues.

The board provides the membership for various standing committees, including the Government Affairs, Snowbird Conference, Taulbee Survey, Finance, and Elections committees. In addition, issues affecting computing research arise unexpectedly, and board members must take the initiative and lead CRA's responses. Many CRA committees and initiatives involve year-round attention, regular conference calls, communications with lab directors and department chairs, proposal writing, and sometimes travel at the expense of the individual board member.

The board, as a whole, meets twice a year, with travel and hotel costs paid by the individual members. Board members serve staggered three-year terms. At the discretion of the Elections Committee and based upon a member's proactive service record during the expiring term, members wishing to stand for re-election may be included on the draft ballot. There is a three term limit. Candidates do not need to be affiliated with CRA member organizations. New this year, we are allowing self-nominations from candidates.

Recent board activities include:

- Working with the computing research community to envision the future of computing research
- Increasing the participation of women and minorities in computing research
- Thinking strategically about computing education and its impact on the research enterprise
- Testifying before Congress and meeting with policymakers to explain the role of computing and computing research
- Developing workshops on critical policy issues
- Planning the biennial CRA conference at Snowbird
- Conducting the annual CRA Taulbee Survey
- Monitoring CRA's budget and expenses

Important dates and events:

- The deadline for receipt of nominations is December 2, 2016. The Elections Committee will carefully consider all nominations, with the aim of a final ballot containing about twice as many candidates as there are open slots. Important criteria considered by the committee will include distribution of candidates and current board members among member institutions, distribution among types and sizes of institutions, leadership qualities, and evidence of interest in and capacity for service beyond that expected of all faculty members and researchers
- On January 13, 2017, the Elections Committee will announce the draft ballot. Additional names may be added by the CRA community (as described below)
- On February 3, 2017, nominations by petition are due. Each such nomination must be signed by the heads of at least 10 constituent member organizations that are current in dues payment. Current CRA members are listed at http://cra.org/about/membership/member-list/
- On February 10, 2017, final ballots will be distributed to all CRA department chairs and lab directors. Each will have one vote for each open slot on the board
- On February 24, 2017, completed ballots must be returned to CRA

Click here to fill out a nomination form. Additional information on CRA and its activities is available at http://cra.org/about/. Questions can be sent to elections@cra.org.

Nominations Open for 2017 CRA-E Undergraduate Research Faculty Mentoring Award

CRA's newest award program honors faculty members in computing who have made a significant impact on students they have mentored. The CRA-E Undergraduate Research Faculty Mentoring Award recognizes faculty members who have provided exceptional mentorship and undergraduate research experiences and, in parallel, guidance on admission and matriculation of these students to research-focused graduate programs in computing.

Eligible nominees are full-time faculty members at North American academic institutions. Faculty members include tenured and tenure-track faculty, instructors, and professors of the practice. Current members of CRA-E are not eligible to be a nominee or to serve as a nominator. A nominee must be nominated by a faculty member or researcher in the computing field. Nominations are due **Monday, November 30, 2016 by 5 PM (ET).** Winners will be notified by early February 2017. Click here to view the 2016 award winners and here to view the FAQs.

The award is given annually, and multiple recipients may be awarded. The selection committee will give appropriate consideration to different types of schools and mentors at different stages of their careers. The awardees will receive travel support to attend the meeting at which they accept the award.

Evaluation criteria

The selection committee will evaluate the evidence of: undergraduate student mentoring during the most recent 10 years (being sensitive to the size of the program) including the number of students enrolling in research-oriented M.S. or Ph.D. programs; professional development of the students mentored; and impact and success of their students' research.

The 2017 selection committee includes:

- Eric Aaron (Vassar College)
- Nancy Amato (Texas A&M University)
- Jeff Forbes (Duke University)
- Pat Morreale (Kean University)
- Manuel Pérez Quiñones (UNC Charlotte)
- Barbara Ryder (Virginia Tech) *Chair*

CRA-E Graduate Fellows Program

The Computing Research Association Education Committee (CRA-E) is now accepting applications for the CRA-E Graduate Fellows Program. The program provides opportunities for Ph.D. candidates in computing fields to contribute to CRA-E projects, network with computer science education advocates on the committee, engage in advocacy for mentoring undergraduate students and promote undergraduate research and education at the national level.

CRA-E plans to appoint up to two graduate fellows per year, who will serve as members of the committee, providing a voice for graduate students. The fellows will attend the annual CRA-E meeting (travel expenses funded by CRA-E), serve on a CRA-E subcommittee related to their interests and expertise, and contribute to the CRA-E Conquer site that provides resources for undergraduate research and applying to graduate school.

In 2016, CRA-E selected two Ph.D. students, Keith Feldman (Notre Dame University) and Max Grossman (Rice University), to serve as Fellows. Both Fellows have a history of mentoring undergraduates and advising them on pursuing graduate school and research. Click here to view a profile on the Fellows.

Faculty members are invited to nominate a graduate student **by January 30, 2017.** More information for students and nominators is available at http://cra.org/crae/activities/fellows/.

Please nominate a graduate student and encourage your colleagues to do so, too!

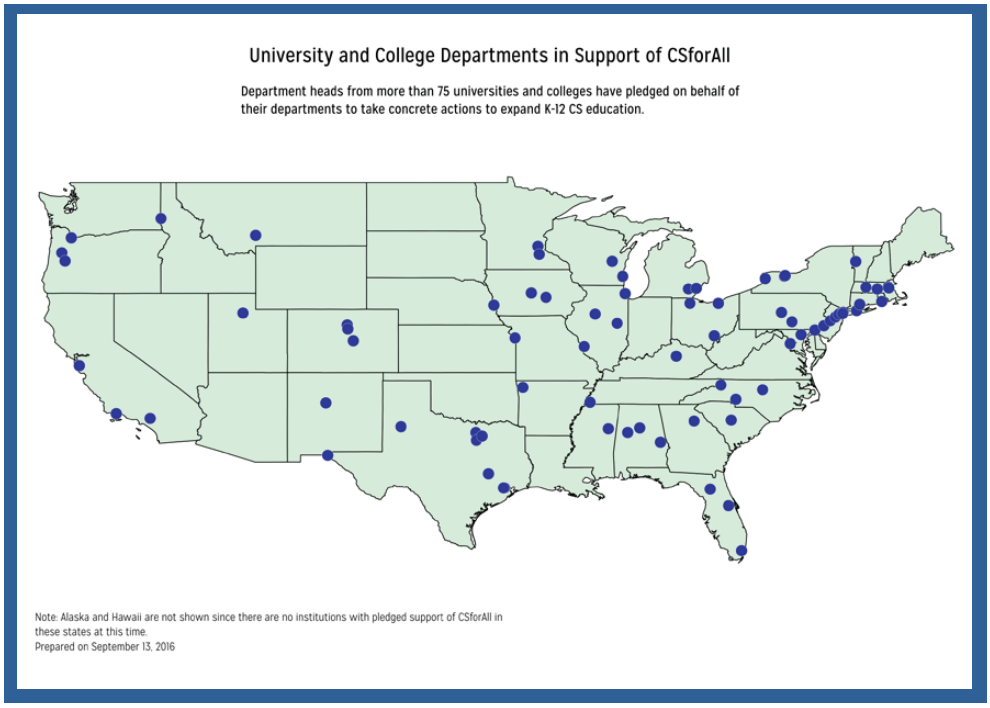
CRA Executive Director Speaks at White House Summit on Computer Science for All

By Shar Steed, CRA Communications Specialist, and Jane Stout, CERP Director

On September 14, CRA executive director Andrew Bernat was a speaker at the White House Summit on Computer Science for All. The audience heard from students and leaders of CS education efforts as part of the CS for All initiative. The initiative aims to ensure CS education is available to all K-12 students across the U.S.

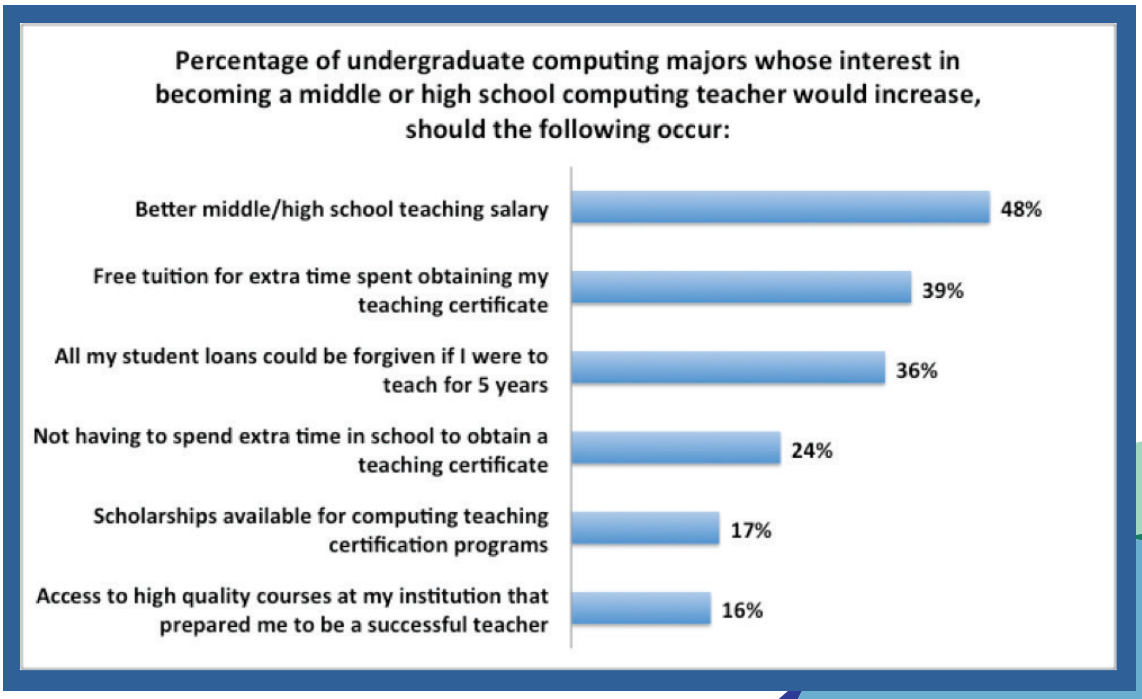
Bernat expressed his excitement about the incredible success of the initiative and explained CRA's commitment to strengthening the computing research community by supporting the development of strong, diverse talent. He announced that more than 75 university and college computing departments have agreed, on behalf of their departments, to support the goals of the CS for All initiative through a variety of concrete actions. And Bernat said he is confident many more will sign up. CRA member institutions' support will include faculty expertise and effort, the development of innovative computing education products, and teacher development.

During his talk, Bernat also expressed his deep appreciation for K-12 teachers, sharing that he once considered becoming one. He and other speakers acknowledged that more K-12 teachers are needed in order to inspire and educate the next generation of computing researchers. A recent infographic from the CRA's Center for Evaluating the Research Pipeline (CERP) indicates



greater financial incentive would increase undergraduate computing majors' interest in becoming middle and high school computing teachers (see figure below).

The White House summit showcased widespread efforts and enthusiasm to enhance computer science education at the K-12 level. The results of CERP's research point to actionable items universities and colleges can take to contribute K-12 teachers with expertise in computing in order to address students' growing interest in learning computer science.



Computing Researchers Travel to D.C. to Make the Case for Computing

By Brian Mosley, CRA Policy Analyst

On September 14, 21 computing researchers from across the country visited Washington, D.C. to make the case before Congress for federally funded computing research. The volunteers, traveling from as near as Maryland and Pennsylvania, and as far away as Utah and California, participated in nearly 50 House and Senate meetings. Their message to Congress was very simple: Federally supported computing research is vital to the nation's future. Using their own research and individual stories as support, and reinforced with additional information from CRA, they made the "Federal case" for computing to members of Congress and their staff. Just as important as the message they presented, they also made valuable connections with the officials who represent them in D.C. Those members now know more about the expertise and interesting (and important) computing work that occurs in their districts and states, and our participants have a better sense of just who represents them in Congress. And they've hopefully started a lasting dialogue on both sides.

How You Can Help

As a reminder, if you would like to participate in a Congressional Visit Day or are in Washington, D.C. and would like to visit your representative's office, please contact Brian Mosley (bmosley@cra.org) in the CRA Government Affairs Office. CRA can provide expert training, messaging, and materials, and we would also be happy to accompany you to your congressional meetings.

Undergraduate Computing Majors Talk about Institutional Support at Their College or University for Becoming a Middle or High School Teacher

By Jane Stout, CERP Director

CERP asked 3,616 undergraduate computing majors about their perceptions of institutional support for becoming a middle or high school computing teacher. As seen here, very few students in this sample have been exposed to this career path in their department, and more than one-third of students perceive the career path as viewed negatively in their department. Furthermore, few students knew where to seek advice for this career path at their institution. These data suggest colleges and universities in general, and computing departments specifically, could improve the amount of emphasis placed on teaching middle or high school computing. In turn, this might result in increased interest by computing majors in becoming middle or high school computing teachers. Given **recent efforts** to promote widespread K-12 computing education, enhancing support for students who might be interested in becoming middle or high school computing teachers is important.

7% *say middle or high school teaching is discussed as* ***a career option*** *in their computing department*

23% *know where to go at their college or university to* ***get good advice*** *about the career path for middle or high school teaching*

37% *believe there is* ***a negative perception*** *of choosing middle or high school teaching as a career in their computing department*

Notes. Data were collected from a sample of undergraduate students who were majoring in a computing field during the fall 2015 academic semester. Computing majors included computer science, computer information systems/informative, bioinformatics, computing and business, information technology, computer engineering, and other fields with a strong computing component. Students were asked to indicate how much they agreed or disagreed with the following statements: *Middle or high school teaching is discussed as a career option in my major department; There is a negative perception of choosing middle or high school teaching as a career in my major department; I know where to go at my college or university to get good advising about the career path for middle or high school teaching*, using the following scale: *(1) Strongly disagree, (2) Disagree, (3) Neither disagree nor agree, (4) Agree, (5) Strongly agree.* Percentages of students who responded with either Agree or Strongly agree are displayed in this visualization.

CERP
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Evaluation

This analysis 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/.

The Future of Computing Research: Industry-Academic Collaborations

By Helen Wright, CCC senior program associate

The Computing Community Consortium convened a round-table of industry and academic participants in July 2015 to better understand the landscape of industry-academic interaction, and to discuss possible actions that might enhance those interactions. This discussion was preceded by a survey sent to academics and industry representatives in the spring of 2015. The survey was designed to provide current information about the perceptions of the value of academic-industry interaction, as well as trends and barriers.

The resulting report, The Future of Computing Research: Industry-Academic Collaborations, touches on topics that were discussed during the round-table and mentioned in the survey.

From the report:

In reflecting on the results of the survey and the roundtable discussions, below are some concrete actions that could be taken to enhance the future vitality and impact of academic-industry interactions:

1) Establish a means of measuring and benchmarking industry-academic interactions. It is hard to assess or improve something that cannot be measured. Create a repository of best practices for industry-university interactions.

2) Recognize that there is a need for career paths that may combine elements of a traditional academic career in a university research and education setting with career paths that involve significant time within a new or established company, and create mechanisms that support such career paths.

3) Consider ways that advanced infrastructure can be made widely available to the research community. Finding ways to make advanced computing and devices, large data sets, and unique facilities more widely available will benefit industry (it will create "power users" for their infrastructure), academic research (avoiding wasted time and resources replicating capabilities already in existence), and education (students will learn on the latest and greatest).

4) Convene a long-term forum or body around industry-academic interaction. Collaborations between academia and industry will continue to play a central role in the transfer of long-term and fundamental research into the U.S. economy. Recognizing and supporting this transfer will provide mutual benefits to all stakeholders.

The report has led to a CCC-sponsored program on Industry-Academic Collaboration. The goal of this program is to catalyze and foster partnerships between industry and academic research by creating mechanisms for both early career researchers in academia and industry representatives to interact and explore ways to work together. The CCC has implemented these programs through the four National Science Foundation-sponsored Big Data Regional Innovation Hubs (BD Hubs). The BD Hubs are coordinated by top data scientists at Columbia University (Northeast Hub), Georgia Tech and the University of North Carolina (South Hub), the University of Illinois at Urbana-Champaign (Midwest Hub) and the University of Washington, UC Berkeley, and the San Diego Supercomputer Center, UC San Diego (West Hub).

One Hundred Year Study on Artificial Intelligence

By Greg Hager, Computing Community Consortium (past chair), and Johns Hopkins University

What do you think your field will look like in 100 years? Speculating about the world a century from now may be too challenging, so what if instead a community took it upon itself to periodically assess its progress and potential nearer-term futures over time? How might such reflections influence the rate of progress, the types of problems that the field focuses on, the public perception of the work, or the ability to anticipate and address thorny ethical or policy questions?

The first step on a project to answer these questions was taken with the release of the first report of the One Hundred Year Study on Artificial Intelligence (AI100). Quoting from the press release:

Titled "Artificial Intelligence and Life in 2030," this year-long investigation is the first product of the 100 Year Study on Artificial Intelligence (AI100), an ongoing project hosted by Stanford to inform societal deliberation and provide guidance on the ethical development of smart software, sensors and machines.

This study was launched through the inspiration of Eric Horvitz, a past president of the Association for the Advancement of Artificial Intelligence (AAAI).

The inaugural study panel, of which I was a member, spanned an impressive breadth of areas, from machine learning to language, from robotics to healthcare, and from technology to economics and law. Each of us was challenged to provide our perspective on a 30-year span of technological progress, from 2000 to the present and then forward to 2030, in an area with which we were familiar. From this, we tried to elicit ideas, lessons, and predictions for what we might see in the future.

When you do this, it is surprising to note how few new and disruptive ideas or changes emerge in that time span. At the same time, it is hard to anticipate which existing ideas will grow or converge to have an impact. For example, autonomous driving research has been steadily progressing for 30 years, and, in fact, today's automated vehicles aren't all that different than those from fifteen years ago. But, the convergence of several factors led to an explosion of interest and progress that surprised even experts in the field. A similar story can be told of the convergence of cloud computing, deep learning, and enormous data archives accumulated via the Web, which has transformed fields such as computer vision and language understanding.

What fields stand on the brink of similar convergence and related disruptive progress? Could it be healthcare, now that electronic health records, machine learning, genomics, and precision medicine are aligning to create more powerful evidence-driven medicine? Maybe it will be technologies for an aging society driven by powerful economic and societal trends? Or perhaps it will be enhancements in urban transportation networks that reduce traffic congestion and increase access for all citizens.

And, perhaps as the study progresses, it will be forced to wrestle with some of the more difficult societal, ethical, and philosophical implications of future, more powerful AI technologies. However, to quote Isaac Asimov from the preface to his first book, "Minds of Steel" with regard to the (at that time) concern about robotics:

Even as a youngster, though, I could not bring myself to believe that if knowledge presented danger, the solution was ignorance. To me, it always seemed that the solution had to be wisdom. You did not refuse to look at danger, rather you learned how to handle it safely.

Echoing this sentiment, Peter Stone, the chair of the inaugural panel, is quoted in the press release:

"Until now most of what is known about AI comes from science fiction books and movies," Stone said. "This study provides a realistic foundation to discuss how AI technologies are likely to affect society."

Of course, this is an uncontrolled experiment – we can never really know how these reports affect the future choices of AI researchers. Yet, in the coming decades, as we look back to this first report and those of subsequent panels, I am convinced that this unique activity will serve to bring wisdom to the field, and thus provide benefits to the field and to society as a whole.

Expanding the Pipeline: PROMISE Brings a New Phase of #ThinkBigDiversity to Maryland Grad Students

By Renetta Garrison Tull, University of Maryland, Baltimore County

Graduate students in STEM fields can find their M.S. and doctoral experiences to be both isolating and academically challenging. Loneliness can be particularly poignant when the graduate student is a member of an underrepresented group; has had an undergraduate experience that was connected by school spirit, such as collectively rooting for the college's sports teams; or has participated in group-based academic student success initiatives, such as the Society for Hispanic Professional Engineers, which primarily connect to undergraduate students.

To combat isolation, PROMISE: Maryland's Alliance for Graduate Education and the Professoriate (AGEP), a program sponsored by the National Science Foundation, hosts the annual Summer Success Institute (SSI), a pre-semester weekend conference in August for graduate students. The SSI features professional development activities that directly cater to the needs of graduate students in STEM, and peripherally to "postdoctoral fellows, professors, and career professionals (PP&P)." The SSI was developed to connect graduate students before the start of fall semester classes by offering seminars and a welcoming environment to address the loneliness factor, mentally prepare them for a new academic year, share tips for professional development, and develop a sense of community. In an effort to provide underrepresented graduate students in STEM with diverse role models and mentors, the SSI speakers are called "Mentors-in-Residence," and they engage with participants throughout the duration of the conference, not just during their designated keynote speeches and workshop sessions. Furthermore, students provide feedback through evaluations and participate in SSI "Hacking Diversity in STEM" challenges and messaging with the hashtag #ThinkBigDiversity for the past two years.

The SSI Provides Encouragement, Mentoring, and Empowerment

The SSI was founded in 2003 as "Success 2003," and it included two weeks of programming that occurred at three research universities in Maryland. In 2004, Success 2003 was changed to the Summer Success Institute, and the programming was streamlined into a two-day activity. Mentors' advice and the relationships they develop with the participants is the core of the SSI. The SSI typically invites 20 visiting mentors to participate each year. These mentors are often from schools outside of Maryland, and include faculty, university administrators, scientists in the non-profit sector, and STEM professionals in government. University presidents with STEM backgrounds have been among the keynote luncheon speakers, including mathematician Freeman Hrabowki, Ph.D., president of the University of Maryland Baltimore County (UMBC), and civil engineer Makola Abdullah, Ph.D., president of Virginia State University.

Table 1: Samples From the SSI Seminar and Workshop Agendas: 2003-2016

Seminar	Year
Mentors and Leaders Who Are Paving Your Way: Panel of National Award Winners and Presidents	2016
Changing the "Face" of Robotics	2015
Financial Essentials: Savings and Debt	2014
When Bricks and Sticks are Replaced by Clicks: MOOCs - The Next Wave	2013
Your Electronic Self: Pros and Cons of Living a Digital Life in Academia	2012
The Imposter Syndrome and How to Overcome It	2011
Knockout Presentations for Conferences, Defenses, and Professional Meetings	2010
News, Press, and Social Media - Broadening Your Reach	2009
Assessing Your Dependable Strengths	2008
Three Magic Letters: Ph.D.	2007
Pathways, Passion, and Purpose: Images of Possibility	2006
Networking and Managing Relationships, An Important Step at Every Level	2005
Strive for Excellence-Make it the Rule Rather than the Exception	2004
The REAL DEAL: What it really takes to get a Ph.D. … Insights and Life Lessons	2003

Computer scientists are among the PROMISE mentors-in-residence who have been involved with the SSI over the years. SSI CS mentors include Patricia "Patty" Lopez, Ph.D., Intel (2016); Patricia "Patti" Ordóñez, Ph.D., University of Puerto Rico-Rio Piedras (UPR) (2016); Kevin Huggins, Ph.D., computer science professor at Harrisburg University (2016); Andrew Williams, Ph.D., founder of SpelBots and current professor of computer science at Marquette University (2015); Tyrone Grandison, Ph.D., formerly of IBM and the Department of Commerce (2015); Nwokedi Idika, Ph.D., now at Google (2013); Andrew Ng, Ph.D., Coursera and Stanford University (2013); and Juan Gilbert, Ph.D., chair of the Computer and Information Science and Engineering Department at the University of Florida (2006). These mentors have provided career-boosting information about finding faculty positions, connecting your personal service mission with your STEM research, technology innovations, and career-life balance.

Hacking Diversity in STEM via #ThinkBigDiversity

In 2015, PROMISE decided to actively engage SSI participants in a brainstorming exercise that would allow students, as a group, to create solutions to graduate school challenges. Ordóñez, a computer scientist at UPR and a PROMISE alumna, introduced the concept of "Hacking Diversity in STEM," and brought Grandison, a former IBM program manager, to the table. Both Ordóñez and Grandison had experience with hackathons and getting diverse groups involved. With their advice, and tips and financial support from Monica Orta of the MIT Media Lab, PROMISE created a hacking-styled program for the SSI, and themed the conference #ThinkBigDiversity as a

combination of the "Think Big" hackathons and the focus on issues that underrepresented STEM scholars experience in higher education.

In 2016, PROMISE staff members gave a presentation on the outcomes of the #ThinkBigDiversity Twitter responses at the Understanding Interventions conference in Philadelphia. Using Jeff Howe's 2006 Wired article titled "The Rise of Crowdsourcing," the PROMISE team explained the #ThinkBigDiversity session was a voluntary and participative online activity that was mutually beneficial to the crowd and sponsors. The goal of the SSI #ThinkBigDiversity "hacking/design thinking/brain-storming" intervention was to invite graduate students to provide solutions for retention in graduate school. Three groups of participants, divided by experience, were represented: first-year graduate students, continuing graduate students, and the PP&P group. Table 2 showcases the challenges that presented to the new graduate students.

Table 2: Challenges Presented to First-Year/New, Incoming Graduate Students

Challenge	Description
1) Time Management	Graduate students have to balance research, courses, experiments, clients, subjects, and teaching. They also need self-care, attention to sleep and exercise, and those things that offer emotional or spiritual renewal.
2) Understanding your professors' expectations	Faculty expect students to follow their instructions, and want student to follow through with expectations that are explicitly stated. There are also expectations that aren't explicit, but students need to be aware of unwritten rules, silent cues, body language, and implications. Students should seek to understand issues that are related to the field, even if they aren't discussed in class. Professors expect that there will be an independent desire to learn more about the topic, above and beyond what may be taught. Students are expected to understand the research and historical context of the field, and be in the process of mastering the practice or techniques that define the lab or research group.
3) Differences between undergraduate coursework and graduate work	Students often joke that during their undergraduate years they could wait to study until the day before the exam, or write a 10 page paper overnight. Graduate school coursework requires a much more rigorous approach that necessitates depth of understanding of the theory, review of the literature, pilot experiments, and analysis of discussions. This process can take several days, which prohibits starting at the last minute.
4) Isolation	Graduate students often work alone due to shyness, discomfort with a group, or lack of invitation to join a group. Some students choose to work alone in an attempt to prove worthiness, without realizing that those around them regularly collaborate and share knowledge.
5) Expectations from family and obligations to the community	Graduate students, particularly those who don't have family members who went to college, often struggle with a guilt that comes from concern about being perceived as being part of the "bourgeoisie," or aspiring to be affluent while leaving others behind. Students can also struggle with the demands of family members who rely on them for financial stability or care-giving of others in the family (e.g., siblings, grandparent). Others face their own emotional needs to be at home more often, or their desires to make deeper and more frequent connections to the community and social justice needs of people in their neighborhoods.

The #ThinkBigDiversity was used to generate answers to the challenges, and each group had mentors-in-residence who served as guiding coaches. The tweets were analyzed using qualitative content analysis to make inferences from their text. A coding schema was developed, categories were independently defined and grouped, and inter-rater reliability was ensured. The 66 tweets fell into three categories: time management, isolation and family expectations, and obligations to the community. Themed solutions included mindful engagement in face-to-face activities, developing accountability systems, and joining organizations with diverse members and similar interests.

This #ThinkBigDiversity event fostered openness and created a space that facilitated candor and offered professional and peer responses that were responsive to the students' needs. An analysis of 913 tweets between July 1, 2015, and November 1, 2015 with the hashtag #ThinkBigDiversity revealed that the key themes were time management, isolation, and family expectations. Suggested solutions included the use calendars to schedule, balance, and prioritize tasks; join groups and network without hiding behind technology to tackle isolation; and keep in touch with family members to manage their expectations.

The impact of this "Hacking Diversity in STEM" exercise included peer-to-peer mentoring, engaging of mentors-in-residence, and reducing isolation. Further, the process fostered connections between students, offered advice to overcome fears, provided an invitation for active engagement, and encouraged a community environment to combat isolation. Table 3 shows the recommendations that resulted from the 2015 #ThinkBigDiversity analysis for the group of first year/new incoming students.

Table 3: The Recommendations From 2015 #ThinkBigDiversity Challence for First-Year Students

Give students a chance to consider the challenges and some solutions.(Invoking Psychological Sense of Community: Membership, Influence)
Invite internal & external mentors to assist, outside of the classroom. (Using alternative/third Spaces)
Allow a free flow of ideas that includes personal sharing and aspirations (Valuing cultural capital.)
Reinforce importance of engagement, development and long-term goals (STEM Identity)

Photo credit: Cheriss May, NDEMay Photography

#ThinkBigDiversity: A Continuation of the SSI's Theme in 2016

The #ThinkBigDiversity exercise of 2015 ushered in a new phase of #ThinkBigDiversity tweets for the SSI in 2016. That August, the SSI brought in social media all-stars to live tweet the conference using the #ThinkBigDiversity hashtag, which was the top trending hashtag during the afternoon.

The social media stars included Stephani Page, Ph.D. (creator of the #BLACKandSTEM hashtag); Jedidah Isler, Ph.D. (Vanguard STEM); Chrystelle Vilfranc (Vanguard STEM); Yaihara Fortis-Santiago, Ph.D., (New York Academy of Sciences); and Lopez (Intel and Latinas in Computing). They used the #ThinkBigDiversity hashtag to chronicle the sessions of the 2016 SSI. Table 4 showcases a subset of the 2016 SSI, highlighting the sessions that were tweeted widely.

Photo credit: Cheriss May, NDEMay Photography

Table 4: SSI Plenary and Workshop Sessions That Were Tweeted With Hashtag #ThinkBigDiversity on August 20, 2016. (Speakers are noted below within parentheses.)

PROMISE and the World View: Harnessing Talent for Global Action (Renetta Tull)
Eyes on the Prize – "The Pact" (Daniel Jean)
Learning from the Prize Winners – "Mentors and Leaders Who Are Paving Your Way." Panel of National Award Winners and Presidents (Gloria Ladson Billings, Louis Martin-Vega, Silvia Lorena Mazzula, Christine Grant)
The Circle of Doctorates – ROLL CALL (Kaye Wise Whitehead)
"Expert Advice for Getting Started: Time Management, Understanding Professors' Expectations, and Preparing to Ace Classes" (Miryam C. Gerdine, Levon Esters, Marquita Qualls, Sweeney Windchief)
"Being a Professional in the Digital Age" (Clifton Griffin)
PP&P: Postdocs, Professors, & Professionals – "Preparing for the Prize – Media Preparation: Tips for Engaging with the Public." (Tiffany Lohwater)
University System of Maryland Welcome (JoAnn Boughman)
Celebration of PhD Candidates (Janet Rutledge)
Keynote Speaker: Dr. Makola M. Abdullah, President, Virginia State University

The Circle of Doctorates ROLL CALL, led by Kaye Wise Whitehead, was particularly moving. All the individuals with doctorates in the room surrounded the doctoral candidates, and each candidate repeated their name, institution, degree program, and graduation date in an effort to inspire a commitment from each candidate and to address retention.

Since July 9, 2015, more than 2,000 tweets have been posted with the hashtag #ThinkBigDiversity. The historical data for this hashtag shows that the tweet stream for 2016,

Photo credit: Patty Lopez, Intel

influenced by the SSI, continues to provide encouragement online. Plans for the 2017 SSI will begin in a few weeks, and the successful practice of involving participants in social media interaction has become a tool for engagement and retention for the PROMISE AGEP.

In honor of "The Jessica Effect," a PROMISE policy that promotes a family-friendly atmosphere at all PROMISE events in honor of Jessica Soto Perez, speakers and participants brought their families with them. The youngest PROMISE attendees were under the age of two.

About the Author

Renetta Garrison Tull, Ph.D., is associate vice provost for graduate student professional development and postdoctoral affairs at the University of Maryland, Baltimore County. She is also on detail with the University System of Maryland (USM), where she is special assistant to the senior vice chancellor for academic affairs, and director of Pipeline Professional Programs for the system's 12 academic institutions. She is the co-PI and founding director for the National Science Foundation's PROMISE: Maryland's Alliance for Graduate Education, and co-PI for the Louis Stokes Alliance for Minority Participation and Bridge to the Doctorate programs for the USM. Tull serves on a number of boards for women and diversity in STEM initiatives in the U.S. and Latin America. She was a "cover girl" for O'Reilly Media's "Women in Data" issue in 2015, a finalist for the 2015 Global Engineering Deans Council/ Airbus Diversity Award, Sci Chic/Medium.com 35 "Women STEM on Social Media Stars" (July 1, 2016), and 2016 winner of the Claire Felbinger Award for Diversity from ABET. She is a Tau Beta Pi "Eminent Engineer" and can be found online at @ Renetta_Tull and https://renettatull.wordpress.com/.

Announcements

Applications Open for Grad Cohort 2017

The upcoming CRA-Women Graduate Student Cohort (Grad Cohort) will be held April 7-8, 2017 in Washington, D.C. Grad Cohort is a two-day workshop for female students in their first, second, or third year of graduate school in computing fields. The application is available here and closes November 30.

Grad Cohort is generously funded by sponsors from industry, academia, the National Science Foundation, and the computing community. The workshop aims to increase the ranks of senior women in computing-related studies and research by building and mentoring nationwide communities of women through their graduate studies.

CRA-Women Virtual Undergrad Town Hall: Enabling Science Breakthroughs Using Computer Science

Please share this opportunity with your students.

CRA-W
Computing Research Association
Women

During CRA-W's Virtual Undergraduate Town Hall webinar, students from around the world will learn about cutting edge research in the field of computing, and ask questions to distinguished computer scientists. Click here to register. The next event will be held October 13 at 7PM EST.

Speaker: Deb Agarwal, Senior Scientist, Data Science and Technology, Department Head, Computational Research Division, Lawrence Berkeley National Laboratory

Host: Gail Murphy, Professor in the Department of Computer Science and Associate Dean (Research & Graduate Studies) in the Faculty of Science at the University of British Columbia

Announcements, continued

Are you working on the Taulbee Survey?

The CRA Taulbee Survey is in progress. The deadline for the salary section is November 18 and the deadline for the rest of the survey is January 18, 2017.

If you are the academic unit head of a U.S. or Canadian department granting doctoral degrees in Computer Science, Computer Engineering, and/or Information, you should have received emails about the survey. If you did not, please check with the CRA Director of Statistics, Dr. Betsy Bizot, at bizot@cra.org.

Announcing the VMware Systems Research Award for Early Career Faculty

By Sonal Jain Wong, VMware

We are pleased to announce a new award in support of the computer science research community. The objective of this award is to call attention to a valuable and promising body of emerging computer science systems research and provide support for continued advances by an emerging research leader. This will be an annual award in the amount of USD 100,000, granted to the recipient's university in support of her/his research.

Eligible nominees are faculty worldwide within 5 years of their first tenure-track appointment. Nominations must be submitted by a university department chair and each submission should include a one-page letter of nomination, a proposed citation and three references with contact information. Each department chair is limited to a single nomination which must be submitted via email at sysaward@vmware.com. The deadline for the nominations submission is November 15, 2016.

Each year, an Award Committee comprising senior faculty and VMware research leaders will be responsible for reviewing nominations and making a selection. Evaluation criteria will include the nominees' originality, impact, and future potential of their early-career research results in computer science systems research.

2016 VMWARE SYSTEMS RESEARCH AWARD COMMITTEE

Committee Chair

- Michael Stonebraker (Massachusetts Institute of Technology)

Committee Members

- Greg Ganger (Carnegie Mellon University)
- James Larus (École Polytechnique Fédérale de Lausanne)
- Jennifer Rexford (Princeton University)
- Chris Ramming (VMware)
- Pratap Subrahmanyam (VMware)
- David Tennenhouse (VMware)
- Raj Yavatkar (VMware)

Announcements, continued

Ruzena K. Bajcsy Receives NAE Founders Award

Ruzena K. Bajcsy, the 2003 recipient of the CRA Distinguished Service Award, recently received the 2016 Simon Ramo Founders Award from the National Academy of Engineering.

The award webpage states: "Her current research is in the use of robotic technology, namely measuring and extracting noninvasively kinematic and dynamic parameters of individual in order to assess their physical movement capabilities or limitations. If there are limitations, her students have designed assistive devices that can compensate for the lack of kinematic agility and /or physical strength."

The award citation: "For seminal contributions to the fields of computer vision, robotics, and medical imaging, and technology and policy leadership in computer science education and research."

The Founders Award was established in 1965 by the Academy to honor an outstanding NAE member or foreign member who has upheld the ideals and principles of the NAE through professional, educational, and personal achievement and accomplishment.

Professional Opportunities

Arizona State University

Director of the School of Computing, Informatics and Decision Systems Engineering

Arizona State University seeks a visionary leader to serve as director of the School of Computing, Informatics, and Decision Systems Engineering. The School of Computing, Informatics, and Decision Systems Engineering has more than 65 tenured or tenure-track faculty, 3000 undergraduate students and 1200 graduate students across two campuses. The faculty includes over a dozen young investigator or CAREER winners as well as 10 fellows of societies and institutes.

The director of the school reports to the Dean of the Fulton Schools of Engineering, Dr. Kyle Squires, and is the academic and administrative leader of the school. The director is responsible for the advancement of the school including academic program innovation and student success, faculty hiring and development, research program growth and impact, connections with community organizations and industry, and resource generation and strategic planning. More information about this important leadership opportunity can be found at: http://cidse.engineering.asu.edu/director-search/

We welcome applications, nominations, and expressions of interest. Applications should include a CV and cover letter describing professional background, qualifications, and vision for the school and should be sent via email (CIDSE-Director-Search@wittkieffer.com) to the Witt/Kieffer executive search team that is assisting the school's recruitment committee, chaired by Dr. K. Selcuk Candan.

Preference will be given to applications received by September 30, 2016. Review of applications will be conducted weekly thereafter until the search is closed, but candidate materials should be received as soon as possible given the importance of this role. The search will be conducted in confidence until finalists are invited for campus visits at which time professional references will be contacted.

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. See ASU's full non-discrimination statement (ACD 401) at https://www.asu.edu/aad/manuals/acd/acd401.html and the Title IX statement at https://www.asu.edu/titleIX/.

Arizona State University

Assistant or Associate Professor in Statistics

Arizona State University has an opening for an Assistant or Associate Professor in Statistics.

For more information, please visit https://www.mathjobs.org/jobs/jobs/9164.

Bard College

Full-time Tenure-track Assistant Professor in Computer Science

Bard College invites applications for a full-time tenure-track position in computer science at the rank of assistant professor to begin fall 2017. Applications are sought in all areas of computer science, although special consideration will be given to those with research interests in human-computer interaction, information security, and data science.

The successful candidate will have a commitment to quality, innovative undergraduate teaching at a liberal arts college; maintaining an active research program; contributing to the general education curriculum; and engaging with the life of the college. Candidates should have a Ph.D. in Computer Science or a related area (e.g. Applied Mathematics, Computational Science, Psychology, or Design) or be nearing its completion by September of 2017.

To apply, please send a cover letter, curriculum vitae, teaching and research statements, three letters of recommendation (at least one addressing teaching) through Interfolio.com at: http://apply.interfolio.com/36653.

Review of applications will begin October 10, 2016. For more information on the Computer Science Program at Bard, visit http://cs.bard.edu, or contact Keith O'Hara at kohara@bard.edu.

Bard College is an equal opportunity employer and is especially interested in candidates who intend to contribute to the diversity goals of the institution.

Ben-Gurion University

Tenure track position at the Department of Software and Information Systems engineering

The Software and Information Systems Engineering Department at Ben-Gurion University of the Negev, Israel (http://www.ise.bgu.ac.il) has a number of open tenure-track faculty positions starting October 2017 and October 2018.

The Software and Information Systems Engineering Department is the largest of its kind in Israel. Currently the department includes 19 full time faculty members in various research fields related to Software and Information Systems Engineering, Computer Science, with special emphasis and orientation towards Data Science Engineering.

We offer B.Sc. degrees in Information Systems Engineering and in Software Engineering, as well as graduate studies (M.Sc. and Ph.D. degrees) including special M.Sc degree with concentrations in Cyber-Security, Data Science and Artificial Intelligence. We have about 400 undergraduates 120 graduate students,

Professional Opportunities

and 40 Ph.D students. The teaching language is Hebrew.

Candidates must hold a doctoral degree in Software Engineering, Information Systems Engineering Computer Science, or closely related fields; have a strong academic track records, and must demonstrate the potential to achieve excellence in research and teaching at both graduate and undergraduate levels.

For details and application instructions, please see this link

Boise State University

Lab Director, Cyber Laboratory for Industrial Control Systems (CLICS)

Boise State University is seeking a visionary leader to develop and grow a premier cyber research facility. This laboratory is being built in collaboration with Idaho National Laboratory (INL) who is deeply committed to supporting the nation in the cyber security of our critical infrastructure and is the recognized leader in industrial process control cyber security. Boise State University is heavily investing in new faculty and curriculum that will support this need. This laboratory will be integral to student training and at the same time provide an environment where INL staff, faculty, and students can explore and understand the performance of control systems and more importantly how to protect and design in ways that mitigate attacks.

The leader of this laboratory should have a background in process control cyber security, a demonstrated ability to pursue funding, and a strong desire to conduct research in the area as well as train the next generation of researchers.

Qualified applicants should review the position and apply at coen.boisestate.edu/cs/jobs/clics-director/.

Boston College

Tenure-Track Assistant Professorship in Computer Science

The Department of Computer Science at Boston College invites applications for a tenure-track Assistant Professorship beginning September, 2017. Applicants should have a Ph.D. in Computer Science or related discipline, a research trajectory likely to attract sustained external funding, and a commitment to quality in undergraduate teaching. All research areas will be considered, with a preference for AI / machine learning and systems / networks. An interest in interdisciplinary collaboration on problems of broader scientific or social importance would be desirable. We will begin reviewing

Butte College
Start Here...Go Anywhere!

Software Engineering Manager-CCC Technology Center

Manager for Software Engineering will direct the day-to-day design and software development activities for projects supporting the California Community College Technology Center (CCCTC) as part of its initiatives as defined by the California State Chancellor's Office.

EDUCATION AND EXPERIENCE:

- Bachelor's Degree in Computer Science, or related technical discipline;
- **AND** Seven (7) years of experience in enterprise class solutions where the deployment scale is millions of transactions,
- with at least three (3) of the seven years performing as a manager or supervisor.

DESIRED QUALIFICATIONS:

- Experience managing or participating in SaaS projects for the educational technology market.
- Demonstrated experience in designing applications to scale via cloud (elastic) technologies.
- Demonstrated experience managing competing priorities with complex documentation in a fast-paced environment.
- Demonstrated proficiency in Java programming and with the Spring Framework and Spring Boot.

Description:

Full-time/Exempt; 12 months per year
MSC-Range 24; $113,189.48 per year
Contingent upon continued grant funding

For full details and to apply, visit: **http://apptrkr.com/877808**

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applications on October 15, 2016, and will continue considering applications until the position is filled.

Additional information about the department and the position is available at www.cs.bc.edu.

Submit applications at apply.interfolio.com/37623.

Please arrange for three confidential letters of recommendation to be uploaded separately.

Cal Poly State University

Assistant or Associate Professor – Software Engineering

The Computer Science and Software Engineering Department within the College of Engineering at Cal Poly State University, San Luis Obispo, CA invites applications for two full-time, academic year, tenure-track Software Engineering faculty positions, at a rank and salary commensurate with the applicant's background and experience. The anticipated start date is September 7, 2017. Candidates with industry experience are encouraged to apply. Duties include teaching undergraduate and master's level courses, supporting and expanding curricular development in Software Engineering, pursuing research in this area, and providing service to the department, the university, and the community. Strategic priorities of the department include the areas of: Mobile, Web and Cloud Computing, Applied Formal Methods, and Software Testing.

For full details, qualifications and application instructions (online faculty application required), visit:

https://www.calpolyjobs.org/applicants/Central?quickFind=165513

Review will begin January 2, 2017 and will continue until the positions are filled. EEO.

Caltech

Tenure-track faculty position

The Computing and Mathematical Sciences (CMS) department at the California Institute of Technology (Caltech) invites applications for tenure-track or tenured faculty positions. CMS is a unique environment where innovative, interdisciplinary, and foundational research is conducted in a collegial atmosphere. Candidates in all areas of computing and mathematical sciences are invited to apply, including (but not limited to) learning and computational statistics, security and privacy, networked and distributed systems, optimization and computational mathematics, control and dynamical systems, theory of computation and algorithmic economics, scientific computing, etc. Additionally, we are seeking candidates who have demonstrated strong connections to other fields, including the mathematical, physical, biological, and social sciences.

A commitment to world class research, high-quality teaching, and mentoring is expected. The initial appointment at the Assistant-Professor level is for four years and is contingent upon the completion of a Ph.D. degree in Computer Science, Applied Mathematics or related field.

Applicants are encouraged to have all their application materials on file by October 21st, 2016, but applications will be accepted until the end of December. For a list of documents required and full instructions on how to apply on-line, please visit http://www.cms.caltech.edu/search.

Questions about the application process may be directed to: search@cms.caltech.edu.

Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

The Tepper School of Business at Carnegie Mellon University

Tenure Track Position in Business Technology /Business Analytics

The Tepper School of Business at Carnegie Mellon University invites applicants for a tenure-track position as an Assistant Professor in Business Analytics to begin in September 2017. The ideal candidate will play an important role in advancing the school's analytical approach to business, which is a long-standing differentiator of the Tepper School's approach to business education and research. We are looking for candidates who can explore and solve business problems using quantitative methods utilizing big data or unstructured information. We are especially interested in those candidates who apply machine learning (e.g., natural language processing, computer vision, deep learning, and artificial intelligence) and causal inference (e.g., econometrics, structural modeling, observational studies, and experiments) to business applications. The ideal candidate will conduct innovative research in topics including, but not limited to: ecommerce, mobile marketing, social media, digital advertising, the Sharing Economy, crowdsourcing or solving business problems through new technologies.

Applicants are expected to have a doctoral degree at the time of appointment in Information Systems, Computer Science, Marketing, Statistics, or related fields. The appointee will be part of the Business Technology group. The Tepper School of Business and Carnegie Mellon University have a strong culture of collaboration across disciplines. This open environment provides unique opportunities for highly innovative work and interdisciplinary work is encouraged.

Carnegie Mellon University seeks to meet the needs of dual-career couples and is a member of the Higher Education

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Recruitment Consortium (HERC) that assists with dual-career searches. Applicants should submit an application letter, vita, three publications or unpublished research papers, research and teaching statements, and three recommendation letters. If you have any questions about the application please contact Mr. Philip Conley at isgroup@andrew.cmu.edu or 412-268-6212. To receive full consideration, applications must be submitted by November 1, 2016.

APPLICATION PROCEDURE: Faculty applications and all supporting documents must be submitted to: https://apply.interfolio.com/37175

Carnegie Mellon University is an equal opportunity employer and is committed to increasing the diversity of its community on a range of intellectual and cultural dimensions. Carnegie Mellon welcomes faculty applicants who will contribute to this diversity through their research, teaching and service, including women, members of minority groups, protected veterans, individuals with disabilities, and others who would contribute in different ways.

Case Western Reserve University

Faculty Positions in Computer Science

Department of Electrical Engineering and Computer Science Case Western Reserve University, Cleveland, Ohio

The Department of Electrical Engineering and Computer Science at Case Western Reserve University invites applications for tenure-track positions in Computer Science. Preference will be given to candidates at the assistant professor level, applications at other ranks will be considered commensurate with experience and qualifications. While exceptional candidates in all areas of Computer Science will be considered, our priority areas include Networks, Cyber- Security, Internet Applications, Distributed Computing, Software Engineering, and Data Science and Analytics. Current departmental strengths in Computer Science include Bioinformatics, Data Management, Software Engineering, Networks and Distributed Systems, and Artificial Intelligence and Machine Learning, and we expect a successful candidate to be synergistic with these strengths.

Appointments will be considered for starting dates as early as January 1, 2017. Applicants should have potential for excellence in innovative research. All successful candidates are expected to develop a vibrant, high-quality externally sponsored research program, supervise graduate students, and interact and collaborate with faculty across the department and campus. Applicants should have a strong commitment to high quality teaching at the undergraduate and graduate levels. Candidates must have a Ph.D. in Computer Science or a closely related field.

Applicants must submit (i) a cover letter, (ii) current curriculum vita, (iii) statement of research interests, and (iv) statement of teaching interests and (v) arrange to have at least three references.

Application materials may be sent to:
Faculty Search Committee
Computer Science
Department of Electrical Engineering and Computer Science
Case Western Reserve University
10900 Euclid Avenue
Cleveland, OH 44106-7071

Application materials may also be e-mailed to YoLonda Stiggers (yxs307@case.edu).

Applications will be reviewed beginning August 1, 2016 and will continue until the position is filled.

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

Case Western Reserve University provides reasonable accommodations to applicants with disabilities. Applicants requiring a reasonable accommodation for any part of the application and hiring process should contact the Office of Inclusion, Diversity and Equal Opportunity at 216- 368-8877 to request a reasonable accommodation. Determinations as to granting reasonable accommodations for any applicant will be made on a case-by-case basis.

The Citadel

Tenure-Track Position in Computer Science

The Department of Mathematics and Computer Science invites applications for a tenure- track faculty position in computer science at the Assistant Professor level beginning August 2017. Minimum qualifications include an earned Ph.D. in computer science and a commitment to excellence in teaching, research, and service. In addition, candidates should display the core values of The Citadel: honor, duty, and respect. Candidates from all areas of computer science are encouraged to apply, especially those with strong backgrounds in cybersecurity.

Located in beautiful Charleston, S.C., The Citadel is a fully accredited, public, comprehensive, co-educational college with a student body of 2300 undergraduate and 1000 evening and graduate students. The department has 16 full-time faculty members covering the areas of mathematics, statistics, and computer science. The department offers B.S. and M.S. degrees in computer science, a graduate certificate in cybersecurity, and minors in computer programming, management information systems, and cybersecurity. Teaching responsibilities include undergraduate courses in computer science for majors and minors and graduate-level courses in our joint Master of Science program with the College of Charleston. A normal teaching

Professional Opportunities

load is nine-twelve hours per week with small class sizes.

The Citadel supports faculty scholarship and professional development. Internal funding is available for research, development, and travel. Salary and fringe benefits are competitive, and other benefits include convenient parking and access to the Citadel Beach House located on the Isle of Palms.

Applicants should submit a letter of application, curriculum vita, copies of transcripts, a statement of teaching philosophy, a statement of research plan, and at least three letters of recommendation with at least one that addresses applicant's teaching. All application materials should be submitted online at The Citadel Careers web site, http://careers.pageuppeople.com/743/cw/en/listing. If you have any questions or concerns while applying at the Citadel Careers web site, please call The Citadel's Human Resources Office at 843-953-6922.

Questions about the position may be directed to Dr. Shankar M. Banik, *Chair, Computer Science Search Committee, Department of Mathematics and Computer Science, The Citadel, 171 Moultrie Street, Charleston, SC 29409,* phone: 843-953-5039, or email: shankar.banik@citadel.edu. Review of applications will begin on November 4, 2016, and will continue until the position is filled.

Applications from women and minorities are especially encouraged. The Citadel is an affirmative action/equal opportunity employer actively committed to ensuring diversity in all campus employment.

Colby College

Open Rank Tenure-Track Position in Computer Science

Colby College invites applications for an open rank tenure-track position in Computer Science to support our growing program in Computational Biology, to start 1 September 2017. Applicants must hold, or be close to completing, a Ph.D. in computer science or related area and have a research focus in computational biology or bioinformatics. Review of applications will begin on 15 October 2016.

For more information and required materials, see cs.colby.edu. Review of applications will begin on 15 October 2016 and will continue until the position is filled.

Colby is a private, coeducational liberal arts college that admits students and makes employment decisions on the basis of the individual's qualifications to contribute to Colby's educational objectives and institutional needs. Colby College does not discriminate on the basis of race, color, gender, sexual orientation, gender identity or expression, disability, religion, ancestry or national origin, age, marital status, genetic information, or veteran's status in employment or in our educational programs. Colby is an Equal Opportunity employer, committed to excellence through diversity, and encourages applications from qualified persons of color, women, persons with disabilities, military veterans and members of other under-represented groups. Colby complies with Title IX, which prohibits discrimination on the basis of sex in an institutions education programs and activities. Questions regarding Title IX may be referred to Colby's Title IX coordinator or to the federal Office of Civil Rights. For more information about the College, please visit our website: www.colby.edu

Columbia University

The Department of Computer Science at Columbia University in the New York City invites applications for Lecturer in Discipline in the area of Data Science.

Lecturers in Discipline are officers who meet a programmatic need for instruction in specialized fields. The selected candidate/s will be expected to teach courses on Algorithms, Machine Learning, as well as the Capstone & Ethics course. Courses will be geared towards data science, at the graduate level, and the candidate/s will be responsible for advising students in Data Science Institute's academic programs: Certification of Professional Achievement and/or Master of Science in Data Science. In addition to teaching and mentoring responsibilities, the selected candidate will assist the growth and development of future online and on-campus graduate degree programs within the Institute, as well as with executive education; ensure adequate linkage with industry and practical applications as part of the Capstone & Ethics course; and coordinating with the faculty in the Data Science Institute. Typical teaching load consists of two courses per semester.

Candidates for appointment must demonstrate practice expertise, professional competence and scholarship in Computer Science. Candidates must hold a doctorate degree or its professional equivalent. The ideal candidate also possesses the ability to bring real world approaches, methods and technologies from industry to the School's classrooms. In collaboration with the Institute's Director of Strategic Programs, the incumbent will provide students with exposure to practitioners of outstanding professional achievement and leadership. The Department is especially interested in qualified candidates who can contribute, through their teaching and/or service, to the diversity and excellence of the academic community.

For questions and/or to apply for this position, please use the following link: http://bit.ly/2cylzTn

Professional Opportunities

Cornell Tech

Faculty Positions - Computer Science

Multiple faculty positions in computer science are available at Cornell's new the Cornell NYC Tech campus in New York City. Applications are welcome in all areas of computer science and related fields and at all levels, including tenured and tenure-track. Faculty hired in these positions will be within the Department of Computer Science, which will span the Ithaca and New York City campuses, but their teaching and research will be based in New York City. Candidates whose work fits into one of the three initial hubs at Cornell Tech, Connective Media, Healthier Life, and Built Environment, are particularly encouraged.

Candidates must hold a Ph.D., have demonstrated an ability to conduct outstanding research at the level of tenure-track or tenured faculty in the Department of Computer Science, and also have a strong interest in the technology commercialization and entrepreneurship mission of the campus. In addition, interest in international programs and/or pre-college (K-12) education is advantageous.

This search may include Cornell faculty positions that are part of the Jacobs Technion-Cornell Institute (Jacobs Institute). To ensure full consideration, applications should be received by December 1, 2016, but will be accepted until all positions are filled. (Interested candidates can apply for a Cornell Tech in NYC position, a Cornell Ithaca CS position, or both, but the two campuses have different application sites; please see the Cornell Ithaca ad for the Ithaca application URL.)

Applicants should submit a curriculum vita, brief statements of research and teaching interests, identify one or two top publications to which they have made significant contributions, and the names and contact information of at least three references on-line at https://academicjobsonline.org/ajo/jobs/7713.

Inquiries about your application may be directed to frecruit@cs.cornell.edu.

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

Cornell University

Tenured, Tenure-track, or Lecturer

Multiple faculty positions in computer science are available at Cornell's Ithaca campus. Applications are welcome in all areas of computer science and related fields and at all levels, including tenured, tenure-track, and lecturer. Faculty hired in these positions will be members of the Department of Computer Science, which spans the Ithaca and New York City campuses, but their teaching and research will be based in Ithaca. (Interested candidates can apply for a Cornell Ithaca CS position, a Cornell Tech (in NYC) CS position, or both, but the two campuses have different application sites; please see the Cornell Tech ad for the NYC application URL.)

Tenured and tenure-track faculty must hold the equivalent of a Ph.D. Applicants must have demonstrated an ability to conduct outstanding research. Successful candidates are expected to pursue an active research program, to teach graduate and undergraduate courses, and to supervise graduate students. Lecturers must hold the equivalent of a Masters degree, with a Ph.D. preferred.

The department is ranked among the top computer science departments in the country. Ithaca, NY is a city of about 30,000 people in the heart of the Finger Lakes region. Both Cornell and Ithaca offer a wide range of cultural activities, sports, and outdoor activities with the pleasures of both city and country close at hand. Ithaca is Gorges!

To ensure full consideration, applications should be received by December 1, 2016, but will be accepted until all positions are filled. Applicants should submit a curriculum vita and brief statements of research and teaching interests, identify one or two top publications to which they have made significant contributions, and arrange to have at least three reference letters submitted at: https://academicjobsonline.org/ajo/jobs/7712. Inquiries about your application may be directed to frecruit@cs.cornell.edu.

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Dartmouth College

Associate or Full Professor of Computer Science

The Dartmouth College Department of Computer Science invites applications for a tenured faculty position at the level of associate or full professor. We seek candidates who will be excellent researchers and teachers in the broad range of areas related to cyber-security. **This position is the first of three hires that the College anticipates making in the area of cyber-security.** We particularly seek candidates who will help lead, initiate, and participate in collaborative research projects within Computer Science and beyond, including Dartmouth researchers from other Arts & Sciences departments, Geisel School of Medicine, Thayer School of Engineering, and Tuck School of Business.

The Computer Science department is home to 21 tenured and tenure-track faculty members and two research faculty members. Research areas of the department encompass the areas of

Professional Opportunities

security, computational biology, machine learning, robotics, systems, algorithms, theory, digital arts, vision, and graphics. The Computer Science department has strong Ph.D. and M.S. programs and outstanding undergraduate majors. The department's security faculty are affiliated with Dartmouth's Institute for Security, Technology, and Society (ISTS), which also involves faculty from Engineering, Sociology, and Business.

Dartmouth College, a member of the Ivy League, is located in Hanover, New Hampshire (on the Vermont border). Dartmouth has a beautiful, historic campus, located in a scenic area on the Connecticut River. Recreational opportunities abound in all four seasons.

We seek candidates who have a demonstrated ability to contribute to Dartmouth's undergraduate diversity initiatives in STEM research, such as the Women in Science Program, E. E. Just STEM Scholars Program, and Academic Summer Undergraduate Research Experience (ASURE). We are especially interested in applicants with a demonstrated track record of successful teaching and mentoring of students from all backgrounds (including first- generation college students, low-income students, racial and ethnic minorities, women, LGBTQ, etc.).

Applicants are invited to submit a cover letter and CV via Interfolio at http://apply.interfolio.com/36691.

Email David.F.Kotz@Dartmouth.edu with any questions.

Dartmouth College is an equal opportunity/affirmative action employer with a strong commitment to diversity and inclusion. We prohibit discrimination on the basis of race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, veteran status, marital status, or any other legally protected status. Applications by members of all underrepresented groups are encouraged.

Application review will begin November 1, 2016, and continue until the position is filled.

Dartmouth College

Assistant Professor of Computer Science in the area of Machine Learning

The Dartmouth College Department of Computer Science invites applications for a tenure-track faculty position at the level of assistant professor. We seek candidates who will be excellent researchers and teachers in the area of machine learning. We particularly seek candidates who will help lead, initiate, and participate in collaborative research projects within Computer Science and beyond, including Dartmouth researchers from other Arts & Sciences departments, Geisel School of Medicine, Thayer School of Engineering, and Tuck School of Business.

The Computer Science department is home to 21 tenured and tenure-track faculty members and two research faculty members. Research areas of the department encompass the areas of security, computational biology, machine learning, robotics, systems, algorithms, theory, digital arts, vision, and graphics. The Computer Science department is in the School of Arts & Sciences, and it has strong Ph.D. and M.S. programs and outstanding undergraduate majors. The department is affiliated with Dartmouth's M.D.-Ph.D. program and has strong collaborations with Dartmouth's other schools.

Dartmouth College, a member of the Ivy League, is located in Hanover, New Hampshire (on the Vermont border). Dartmouth has a beautiful, historic campus, located in a scenic area on the Connecticut River. Recreational opportunities abound in all four seasons.

We seek candidates who have a demonstrated ability to contribute to Dartmouth's undergraduate diversity initiatives in STEM research, such as the Women in Science Program, E. E. Just STEM Scholars Program, and Academic Summer Undergraduate Research Experience (ASURE). We are especially interested in applicants with a demonstrated track record of successful teaching and mentoring of students from all backgrounds (including first-generation college students, low-income students, racial and ethnic minorities, women, LGBTQ, etc.).

Applicants are invited to submit application materials via Interfolio at https://apply.interfolio.com/37189. Upload a CV, research statement, and teaching statement, and request at least four references to upload letters of recommendation, at least one of which should comment on teaching. Email Lorenzo.Torresani@Dartmouth.edu with any questions.

Dartmouth College is an equal opportunity/affirmative action employer with a strong commitment to diversity and inclusion. We prohibit discrimination on the basis of race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, veteran status, marital status, or any other legally protected status. Applications by members of all underrepresented groups are encouraged.

Application review will begin January 1, 2017, and continue until the position is filled.

Dartmouth College

Neukom Fellows: Call for Applications

The Neukom Institute for Computational Science at Dartmouth College is pleased to announce the Neukom Postdoctoral Fellows competition for positions starting September 1, 2017.

Neukom Fellows are interdisciplinary positions for recent Ph.D.s, DMAs, or MFAs

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whose research interests or practice cuts across traditional disciplinary boundaries, and has a strong computational theme. The successful candidate should have a history of collaborative work across disciplines, but still show good evidence of independence and initiative. Current and previous Fellows have research interests that span the sciences, social sciences, arts and humanities. The Fellowships are two- to three-year appointments with third year extensions considered upon request after a review early in year two. Fellows are mentored by faculty in two departments at Dartmouth College, take up residence in one department, and will teach one course each year on a subject of their interest. Beyond that there are no additional duties. Stipends are $60,000 for 2017-2018. Additional funds are available for equipment, travel, and research materials.

For a list of current Neukom Fellows: http://neukom.dartmouth.edu/programs/neukom_fellows.html

For a full job description and to apply, go here: https://academicjobsonline.org/ajo/jobs/7569

For more information on The Neukom Institute: http://neukom.dartmouth.edu/

The Neukom Fellows Program and the Neukom Institute are made possible by a generous gift from Mr. William H. Neukom, Dartmouth College Class of 1964.

Franklin & Marshall College

Tenure-Track Position in Computer Science

The Franklin & Marshall College Computer Science Program invites applications for a tenure-track position in software beginning Fall 2017. Applicants should possess a Ph.D. in Computer Science or a related field, or be close to completing the degree. We anticipate filling the position at the rank of Assistant Professor or Instructor depending on qualifications, but we will consider qualified applicants at the Associate Professor level.

We seek candidates who are able to teach and develop courses in software design (broadly defined). We prefer candidates interested in working with students and colleagues with diverse perspectives, experiences, and backgrounds.

Applicants should submit materials at http://apply.interfolio.com/36926. See http://www.fandm.edu/computer-science/employment for more details. We will review applications until the position is filled; we assure full consideration to applications completed by December 12.

Franklin & Marshall College is a research-intensive liberal arts college committed to having an inclusive campus community where all members are treated with dignity and respect. The College does not discriminate in its hiring or employment practices on the basis of gender, sex, race, ethnicity, color, national origin, religion, age, disability, family or marital status, sexual orientation, or any protected characteristic.

Georgia Institute of Technology

Tenure-Track Faculty At All Levels

Computational Science and Engineering solves real-world problems in science, engineering, health, and social domains, by using high-performance computing, modeling and simulation, and large-scale "big data" analytics. The School of Computational Science and Engineering of the College of Computing at the Georgia Institute of Technology seeks tenure-track faculty at all levels. Our school seeks candidates who may specialize in a broad range of application areas including biomedical and health; urban systems and smart cities; social good and sustainable development; materials and manufacturing; and national security. Applicants must have an outstanding record of research, a sincere commitment to teaching, and interest in engaging in substantive interdisciplinary research with collaborators in other disciplines.

Georgia Tech is located in the heart of metro Atlanta, a home to more than 5.3 million people and nearly 150,000 businesses, a world-class airport, lush parks and green spaces, competitive schools and numerous amenities for entertainment, sports and restaurants that all offer a top-tier quality of life. From its diverse economy, global access, abundant talent and low costs of business and lifestyle, metro Atlanta is a great place to call "home." Residents have easy access to arts, culture, sports and nightlife, and can experience all four seasons, with mild winters that rarely require a snow shovel.

For best consideration, applications are due by December 16, 2016. The application material should include a full academic CV, a personal narrative on teaching and research, a list of at least three references and up to three sample publications. Georgia Tech is an Affirmative Action/Equal Opportunity Employer. Applications from women and under-represented minorities are strongly encouraged.

For more information about Georgia Tech's School of Computational Science and Engineering please visit: http://www.cse.gatech.edu/

Georgia Institute of Technology

Tenure Track Faculty Positions

Applications will be considered until open positions are filled. However, to receive full consideration, applications should be submitted by December 15, 2016. Application materials should include a full academic CV, teaching and research statements, and a list of at least three references. Applicants are encouraged to clearly identify in their cover letter the area(s) that best describe

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their research interests. All applications must be submitted online.

More information about the School of Computer and application instructions are available at http://www.scs.gatech.edu/content/cs-faculty-hiring.

Georgia Tech is an Affirmative Action/Equal Opportunity Employer. Applications from women and underrepresented minorities are strongly encouraged.

Grinnell College

Tenure-Track Position (Start Fall 2017)

The Department of Computer Science invites applications for a tenure-track appointment beginning Fall 2017. Assistant Professor (Ph.D.) preferred; Instructor (ABD) or Associate Professor possible. Research and teaching interests might include, but are not limited to, theory, algorithms, systems, AI, HCI, software engineering, programming languages, CS education, data science, security, databases, graphics, parallel and distributed computing, accessibility technology, or social and ethical issues in computing.

Grinnell College is a highly selective undergraduate liberal arts college with a strong tradition of social responsibility. In letters of application, candidates should discuss their potential to contribute to a college community that maintains a diversity of people and perspectives as one of its core values. Review of applications will begin on October 21, 2016. Please visit our department website at http://www.cs.grinnell.edu and our application website at https://jobs.grinnell.edu to find more details about the job and submit applications online.

Candidates will need to upload a letter of application, curriculum vitae, transcripts (copies are acceptable), a teaching statement, a description of scholarly activities, and a statement about ways in which they can support diversity in the department, the College, and the discipline. Candidates must also provide email addresses for three references. Questions about this search should be directed to the search chair, Professor Samuel A. Rebelsky, at [CSSearch@grinnell.edu] or 641-269-3169.

Grinnell College is committed to providing a safe and inclusive educational and work environment for all College community members, and does not discriminate on the basis of race, color, ethnicity, national origin, age, sex, gender, sexual orientation, gender identity or expression, marital status, veteran status, religion, disability, creed, or any other protected class.

Gustavus Adolphus College

Mathematics, Computer Science, and Statistics: Computer Science OR Discrete Mathematics

Gustavus Adolphus College invites applications for a tenure-track position of Assistant Professor in the Department of Mathematics, Computer Science, and Statistics to begin September 1, 2017. The department is considering applicants with specializations in either computer science or discrete mathematics; the letter of application should indicate which position is being applied for. We seek candidates who have an earned doctorate in either Computer Science or Mathematics, but will consider candidates who have achieved ABD status.

Visit http://gustavus.edu/jobs for application instructions. Review of applications will begin on November 8, 2016, and continue until the position is filled.

EOE Employer/Disabled/Vet

Harvey Mudd College

Two Tenure-Track Assistant Professorships

The Computer Science Department at Harvey Mudd College (HMC) has two tenure-track openings for assistant professors commencing July 1, 2017. Candidates in all areas of computer science will be considered.

HMC is a highly selective undergraduate liberal arts college (850 students) emphasizing science, mathematics, and engineering. HMC is part of the Claremont Colleges, a consortium that includes five colleges and two graduate schools.

The Computer Science Department currently has fourteen tenure-track faculty members and serves three major programs (the computer science major, the joint major in computer science and mathematics, and the joint major in mathematical and computational biology) totaling more than eighty students in each graduating class. The department and the college place a high value on engaging students from traditionally underrepresented groups, and candidates from these groups are especially encouraged to apply.

Among the department's strengths are its success in recruiting women (who comprise nearly 40% of our faculty and more than 40% of our majors) to computer science, an innovative and rigorous curriculum that prepares students for both employment and graduate school, and an active research program that involves a substantial number of undergraduates. Most classes are relatively small. The teaching load is two courses per semester, plus supervision of one or two industry-supported senior capstone Computer Science Clinic projects per year. Please visit www.cs.hmc.edu for more information about the department and the Clinic program.

Applicants should use the AcademicJobsOnline system (https://academicjobsonline.org/ajo/jobs/7743) to submit (1) a cover letter describing their interests in teaching undergraduates at Harvey Mudd College and in promoting inclusion and diversity in computer science, (2) a curriculum vita, (3) a statement

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regarding teaching philosophy and experience, including evidence of commitment to promoting inclusion and diversity as well as teaching evaluations or other evidence of teaching effectiveness, and (4) a statement of research interests and how undergraduates could participate in this work. Concurrently, please request three references to submit letters (the letter writers indicated in the application will automatically receive a request to upload their letters). It is desirable that at least one letter address the candidate's potential as a teacher. All application materials, including letters of reference, should be received by December 1, 2016 to receive maximum consideration.

Questions about the position can be addressed to Prof. Ran Libeskind-Hadas at cssearch@cs.hmc.edu.

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

The Hong Kong University of Science and Technology

Faculty Positions

The Department of Computer Science and Engineering of HKUST (http://www.cse.ust.hk/) will have substantiation-track faculty openings at all levels of Professor, Associate Professor and Assistant Professor for the 2017-2018 academic year. We are looking for outstanding candidates with demonstrated research expertise and experience in one or more of the following areas:

- Cybersecurity
- Game Theory and Economic Computing
- Deep learning and Robotics
- Computer Systems Research, including but are not limited to: Compilers, Big Data Systems and Quantum Computing

Strong candidates in other core computer science and engineering research areas will also be considered.

Applicants should have an earned PhD degree and demonstrated potential in teaching and research.

The department has about 40 faculty members, recruited from major universities and research institutions around the world, and about 800 students (including about 200 postgraduate students). The medium of instruction is English. We were ranked 14th among all computer science and engineering departments worldwide according to the QS World University Ranking in 2016. The University is committed to increasing the diversity of its faculty, and has a range of family-friendly policies in place.

The department has the following concentrated research areas: Artificial Intelligence, Big Data, Cybersecurity, Data and Knowledge Management, Human-Computer Interaction, Networks and Data Center, Vision and Graphics, Software Systems, and Theoretical Computer Science.

Salary is highly competitive and will be commensurate with qualifications and experience. Fringe benefits include medical/dental benefits and annual leave. Housing will also be provided where applicable. For appointment at Assistant Professor level, initial appointment will normally be on a three-year contract. A gratuity will be payable upon completion of contract.

Application Procedure

Applications including a cover letter, a curriculum vitae (including the names and contact information of at least three referees), a research statement and a teaching statement (all in PDF format) should be sent through e-mail to csrecruit@cse.ust.hk. Priority will be given to applications received by **Thursday, 15 December 2016.** Applicants will be promptly acknowledged through e-mail upon receiving the electronic application material.

(Information provided by applicants will be used for recruitment and other employment-related purposes.)

IST Austria

Call for Assistant Professors and Professors

IST Austria invites applications for TENURE-TRACK ASSISTANT PROFESSOR and TENURED PROFESSOR positions to lead independent research groups in all areas of Computer Science and Data Science. Applicants in software systems, algorithms, and cross-disciplinary areas are particularly encouraged to apply.

IST Austria is a recently founded public institution dedicated to basic research and graduate education near Vienna. Currently active fields of research include biology, neuroscience, physics, mathematics, and computer science. IST Austria is committed to become a world-class centre for basic science and will grow to about 90 research groups by 2026. The institute has an interdisciplinary campus, an international faculty and student body, as well as state-of-the-art facilities. The working language is English.

Successful candidates will be offered competitive research budgets and salaries. Faculty members are expected to apply for external research funds and participate in graduate teaching. Candidates for tenured positions must be internationally accomplished scientists in their respective fields.

Deadlines:

Open call for Professor applications.

For full consideration, Assistant Professor applications should arrive on or before November 3, 2016.

Application material must be submitted online: www.ist.ac.at/professor-applications

IST Austria values diversity and is committed to equal opportunity. Female researchers are especially encouraged to apply.

Professional Opportunities

Johns Hopkins University

Multiple Endowed Faculty Positions in Engineering in Healthcare

The Whiting School of Engineering at Johns Hopkins University is seeking outstanding faculty candidates whose research will contribute to the development and advancement of engineering methods applied to health care. Successful candidates will be eligible for one of several endowed professorships, and they will be affiliated with the newly established Malone Center for Engineering in Healthcare: http://malonecenter.jhu.edu. The Malone Center is one element of a substantial, multi-year investment by the Whiting School in engineering related to healthcare. More information about the Whiting School of Engineering can be found at https://engineering.jhu.edu.

This search is open to all faculty ranks and to candidates in all engineering disciplines including Computer Science and Applied Mathematics. Of particular interest are candidates with a focus on systems modeling and optimization, user-centered design, human-computer interaction, data science, machine learning, smart devices, and mobile health. Candidates with a demonstrated ability to translate their work to healthcare-related settings are especially desirable.

All applicants must hold a Ph.D. in an engineering or related field and will be expected to establish a strong, independent, multidisciplinary, and internationally recognized research program. Commitment to teaching excellence at the undergraduate and graduate levels is required.

Applicants at the level of Assistant Professor should apply using the Academic Jobs Online link: https://academicjobsonline.org/ajo/jobs/6325 by supplying a current CV, Research Statement, Teaching Statement, the names of at least three references. Applicants at the level of Associate or Full Professor, please contact Sr. Administrative Manager Nina Jackson-Goode via email to cjacks64@jhu.edu regarding instructions on how to apply. Applications will be reviewed on a continuous basis. Candidates who complete their applications by December 1, 2016 will receive full consideration for appointments starting July 1, 2017.

The Whiting School of Engineering is committed to building a diverse educational environment, and women and minorities are strongly encouraged to apply. Johns Hopkins University is an EO/AA employer committed to recruiting, supporting, and fostering a diverse community.

Kansas State University

Multiple Tenure-Track Faculty positions in Computer Science

The department of Computer Science (CS) at Kansas State University invites applications for multiple tenure-track positions in computer science at all levels (Assistant, Associate, or Full Professor) starting in Fall 2017. Outstanding candidates will be considered for open endowed positions. While the department is accepting applications in all areas of computer science, applicants with expertise in or intersecting our strength areas (security, high-assurance software, cyber-physical systems and data science) are preferred. Women and members of under-represented groups are highly encouraged to apply. Successful applicants will demonstrate commitment to both teaching and research. A doctorate degree in computer science or related disciplines is required; salary will be commensurate with qualifications.

For details: http://careers.k-state.edu/cw/en-us/job/493077/assistantassociateprofessor-in-computer-science

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

Knox College

Assistant Professor of Computer Science

Knox College invites applications for a tenure-track Assistant Professor in Computer Science beginning Fall 2017. Ph.D. preferred; master's degree or equivalent experience required. The successful candidate should be able to teach a broad spectrum of courses across the ACM/IEEE CS curriculum; six courses per year teaching load.

Candidates in all areas of specialization are welcome, but we are especially interested in HCI, software development, CS education, security, or computational science. Interest in undergraduate student/faculty research is highly desirable, as is an interest in interdisciplinary collaborations.

Computer Science at Knox is a dynamic, growing program, with an orientation that combines rigorous foundations with experiential education, student research, and collaboration with other departments. Our students engage in a very high level of undergraduate research, internship projects, and application development with faculty. We are very active in the SIGCSE community and many of our courses use Peer Instruction, a research-based active learning pedagogy, including StartUp Term, an immersive experience that combines business, entrepreneurship, and computer science. For more information on the Computer Science Department, see http://cs.knox.edu.

Computer Science is an increasingly prominent department, with 100 students enrolling in the introduction computer science course each year. Located in Galesburg, IL, Knox is a highly-selective, top-100 national liberal arts college of 1,400 diverse students, including 30% underrepresented minorities from the U.S. and 12% international students. The Department is actively striving to reflect this diversity; currently, our majors are 26% underrepresented minorities and 29%

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women. We especially invite applications from women and from members of historically underrepresented groups.

Candidates should send materials as PDFs to cssearch@knox.edu, including:

- Cover letter that addresses interests, qualifications and experience.
- Curriculum vitae.
- Statement of teaching philosophy, including your approach to teaching and mentoring a diverse student body.
- Statement of research interests.

Three letters of recommendation should be sent separately as PDFs by the recommenders.

Review of applications begins December 1, 2016.

For additional information, contact David Bunde, Chair, at dbunde@knox.edu.

Knox College is an affirmative action, equal opportunity employer and does not discriminate on the basis of race, color, ethnicity, national origin, age, sex, gender, sexual orientation, gender identity or expression, marital status, veteran status, religion, disability, creed, or any other protected class.

Lafayette College

Assistant Professor Position in Computer Science

The Department of Computer Science at Lafayette College invites applications for a tenure-track position in computer science starting in the 2017-2018 academic year. Applicants are expected to have a PhD in computer science or a related area, a strong commitment to undergraduate teaching, and demonstrated accomplishments in research. We encourage applicants from all areas of computer science, with a preference for applicants who work with other fields in the sciences, social sciences, or humanities in an interdisciplinary way. The teaching load is five courses per year, with the exception of the first year when the teaching load is four courses. The college and the department provide generous support for faculty research with funds for conference/research travel and a student researcher program (the EXCEL Scholars program) where students work with faculty to support their research goals.

The Department offers an ABET accredited program Bachelor of Science degree and a Bachelor of Arts degree in computer science. The faculty in the department have a diverse set of interests ranging from theoretical computer science and computer systems to computer vision, natural computing and biological modeling. The department is very supportive of faculty interested in developing interdisciplinary relationships and reaching out to other fields in the college to support computation in its many forms. For details about our department, please see our homepage: http://compsci.lafayette.edu.

A detailed description of the application procedures is available at apply.interfolio.com/36983, and questions may be emailed to the search committee chair (compsci@lafayette.edu). Application review will begin 11/15/2016 and continue until the position is filled. To apply, please submit a cover letter, a current CV, three letters of reference, a teaching statement and a research statement. In your cover letter, please address how your scholarship, teaching, mentoring, and/or service may support Lafayette College's commitment to diversity and inclusion articulated in the College's diversity statement (http://www.lafayette.edu/about/diversity-statement/).

Lafayette College is a highly selective private liberal-arts college located in the Lehigh Valley of Pennsylvania. The college is 70 miles north of Philadelphia and 70 miles west of New York City.

Lafayette College is committed to creating a diverse community: one that is inclusive and responsive, and is supportive of each and all of its faculty, students, and staff. All members of the College community share a responsibility for creating, maintaining, and developing a learning environment in which difference is valued, equity is sought, and inclusiveness is practiced. Lafayette College is an equal opportunity employer and encourages applications from women and minorities.

Lehigh University

Tenure-Track Positions in Computer Science and Engineering

Applications are invited for tenure-track positions in the Computer Science and Engineering Department (http://www.cse.lehigh.edu) of Lehigh University to start in August 2017. Outstanding candidates in all areas of computer science will be considered, with priority areas including computer systems (including parallel and distributed systems, database systems, operating systems, and systems aspects of data mining), data analytics, cybersecurity, algorithms, and pervasive intelligence (robotics, the Internet of Things, and human-computer interaction). Rank will be commensurate with experience.

The successful applicants will hold a Ph.D. in Computer Science, Computer Engineering, or a closely related field. The candidates must demonstrate a strong commitment to quality undergraduate and graduate education, and the potential to develop and conduct a high-impact research program with external support. Applicants should have an interest in teaching core courses in computer science as well as courses in their research area. The successful applicants will also be expected to contribute to interdisciplinary research programs, including the recently announced Data X Initiative (http://lehigh.edu/datax), which includes not only data

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analytics, but also the underlying algorithms and systems that make large-scale data analytics possible.

Lehigh University is a private, highly selective institution that is consistently ranked among the top 40 national research universities by U.S. News & World Report. Located in Bethlehem, Pennsylvania, Lehigh is 80 miles west of New York City and 50 miles north of Philadelphia, providing an accessible and convenient location that offers an appealing mix of urban and rural lifestyles. Lehigh Valley International Airport, just six miles from campus, provides easy access to the world. Lehigh Valley cities and towns are regularly listed as among the best places to live in the country.

Applications are accepted online at http://academicjobsonline.org/ajo/jobs/7774 and should include a cover letter, curriculum vita, both teaching and research statements, and contact information for at least three references. Review of applications will begin December 1, 2016 and will continue until the position is filled.

Lehigh University is an affirmative action/equal opportunity employer and does not discriminate on the basis of age, color, disability, gender, gender identity, genetic information, marital status, national or ethnic origin, race, religion, sexual orientation, or veteran status. Lehigh University is a 2010 recipient of an NSF ADVANCE Institutional Transformation Grant for promoting the careers of women in academic science and engineering. Lehigh University provides comprehensive benefits including domestic partner benefits (see also http://www.lehigh.edu/worklifebalance/). Lehigh Valley Inter-regional Networking & Connecting (LINC) is a newly created regional network of diverse organizations designed to assist new hires with dual career, community and cultural transition needs. Please contact infdcap@lehigh.edu for more information. Questions concerning this search may be sent to faculty-search@cse.lehigh.edu.

Michigan Tech

Michigan Technological University
Department of Computer Science

Tenure-track Position

Applications are invited for two tenure-track faculty positions at the Assistant Professor level beginning in Spring 2017 or Fall 2017. Candidates are expected to have a Ph.D. in Computer Science or a closely related field and to demonstrate potential for excellence in teaching and research. We seek applicants with research interests in cybersecurity or big data; exceptional candidates in other areas may apply.

The Department has two undergraduate degree programs (Computer Science and Software Engineering) and graduate programs in Cybersecurity (M.S.) and Computer Science (an M.S. and Ph.D.). Faculty research interests include architecture, artificial intelligence, cloud computing, cybersecurity, data science, distributed systems, embedded and multimedia systems, graphics & visualization, human computer interaction, machine learning, software engineering, virtual environments, and wireless networks. In addition, the Department is a member of the university's Alliance for Computing, Information & Automation and participates in several interdisciplinary initiatives, including the M.S. in Data Science graduate degree program.

Michigan Technological University, a state research university in Houghton, MI, with approximately 7,100 students and 400 faculty, has educational and research programs in computing, engineering, physical and social sciences, forestry, humanities, and business. Michigan Tech is located in Michigan's scenic Upper Peninsula and is surrounded by Lake Superior and nearby forests. The community offers year-round recreational and cultural opportunities.

Application Instructions

Applications for the position should be submitted online at:
http://www.jobs.mtu.edu/postings/4662.
Application materials include a cover letter, curriculum vitae, teaching statement, research statement, and contact information for three references. The review of applications will begin October 10, 2016; applications will be accepted until the position is filled.

Michigan Technological University is an ADVANCE institution, one of a select group of universities in receipt of NSF funds in support of our commitment to increase diversity and the participation and advancement of women in STEM.

Michigan Technological University acknowledges the importance of supporting dual career partners in attracting and retaining a quality workforce. See www.dual.mtu.edu for additional information.

Michigan Technological University is an equal opportunity educational institution/equal opportunity employer, which includes providing equal opportunity for protected veterans and individuals with disability.

Missouri State University

Department Head - Computer Science

The Department of Computer Science at Missouri State University seeks a Department Head. As well as administrative duties, the department head will need to participate in teaching, research and service. Missouri State University (MSU) is located in Springfield, Missouri. More information about MSU can be found at: http://www.missouristate.edu/. Information about the department, its programs and research endeavors can be found at: http://computerscience.missouristate.edu/undergraduate/.

Review of applications will begin November 1, 2016 and continue until finalists are identified. To see the required qualifications, complete list of duties and online application go to: https://jobs.missouristate.edu/. Employment will require a criminal background check at University expense.

Professional Opportunities

Missouri State University is an equal opportunity/affirmative action/minority/female/veterans/disability/sexual orientation/gender identity employer and institution. We encourage applications from all interested minorities, females, veterans, individuals with disabilities, and sexual orientation/gender identity.

Massachusetts Institute Of Technology, Cambridge, MA

Faculty Positions

The Massachusetts Institute of Technology (MIT) Department of Electrical Engineering and Computer Science (EECS) seeks candidates for faculty positions starting in September 1, 2017, or on a mutually agreed date thereafter. Appointment will be at the assistant or untenured associate professor level. In special cases, a senior faculty appointment may be possible. Faculty duties include teaching at the undergraduate and graduate levels, research, and supervision of student research. Candidates should hold a Ph.D. in electrical engineering and computer science or a related field by the start of employment. We will consider candidates with research and teaching interests in any area of electrical engineering and computer science.

Candidates must register with the EECS search website at https://eecs-search.eecs.mit.edu, and must submit application materials electronically to this website. Candidate applications should include a description of professional interests and goals in both teaching and research. Each application should include a curriculum vitae and the names and addresses of three or more individuals who will provide letters of recommendation. Letter writers should submit their letters directly to MIT, preferably on the website or by mailing to the address below. Complete applications should be received by December 1, 2016. Applications will be considered complete only when both the applicant materials and **at least three letters of recommendation are received.**

It is the responsibility of the candidate to arrange reference letters to be uploaded at https://eecs-search.eecs.mit.edu **by December 1, 2016.**

Send all materials not submitted on the website to:
Professor Anantha Chandrakasan
Department Head, Electrical Engineering and Computer Science
Massachusetts Institute of Technology
Room 38-401
77 Massachusetts Avenue
Cambridge, MA 02139

M.I.T. is an equal opportunity/affirmative action employer.

Morgan State University

Assistant Professor

The Department of Computer Science at Morgan State University in Baltimore, Maryland has an immediate opening for a tenure-track Assistant Professor starting in January 2017. The targeted areas include data science, cyber security, information retrieval, and high performance computing but strong candidates in other areas will also be considered. The candidate should have a Ph.D. in Computer Science or a related area, show strong potential for excellent teaching and research, and eligibility to work in USA.

Founded in 1867, Morgan State University is a Carnegie Foundation Doctoral Research HBCU. It is known for its excellence in teaching, research, and community engagement, and is one of four public doctoral research institutions in Maryland. The Department offers a BS program in Computer Science and an MS in Bioinformatics. It is also involved in a PhD program in Industrial and Computational Mathematics. In 2015, the NSA has approved Morgan State University as a National Center of Excellence in Education in cyber security.

To Apply: please submit a letter of interest, curriculum vitae, teaching and research statements, official transcripts, and arrange to send three letters of recommendation to wendy.smith@morgan.edu. The search process will begin immediately.

Mount Holyoke College

Associate or Full Professor and Jean Sammet Endowed Chair in Computer Science

The Computer Science Department of Mount Holyoke College invites applications from associate and full professors to lead the Department and to hold the Jean Sammet Endowed Chair in Computer Science. This is an exciting opportunity to join a small and vibrant department that supports a growing community of dedicated undergraduate students. Faculty and staff work closely with the student-run CS Society, which organizes co-curricular programming (including regional hackathons, local outreach and interview prep workshops). Close interaction with other scholars in the Mount Holyoke and Five College Consortium communities provides opportunities for traditional and innovative collaborative research projects.

To be assured full consideration, submit all application materials through https://jobs.mtholyoke.edu/. For more information about what to include in your application materials, see the full job ad on the site above. For further information about the department see; https://www.mtholyoke.edu/acad/computerscience or you may contact the department chair, Margaret Robinson (robinson@mtholyoke.edu).

Mount Holyoke is an undergraduate liberal arts college for women with approximately 2,300 students and 220 faculty. Half of the faculty are women; one fifth are persons of color. The College is located about 80 miles west of Boston in the Connecticut River Valley and is a member

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of the Five College Consortium consisting of Amherst, Hampshire, Mount Holyoke, and Smith Colleges and the University of Massachusetts. The College is committed to fostering multicultural diversity and awareness in its faculty, staff and student body and is an Equal Opportunity Employer. Women and persons of color are especially encouraged to apply.

New York University/ Courant Institute of Mathematical Sciences

Faculty Position

The department expects to have several regular faculty positions and invites candidates at all levels to apply. We will consider outstanding candidates in any area of computer science, in particular in systems, machine learning and data science, scientific computing and verification.

Faculty members are expected to be outstanding scholars and to participate in teaching at all levels from undergraduate to doctoral. New appointees will be offered competitive salaries and startup packages, with affordable housing within a short walking distance of the department. New York University is located in Greenwich Village, one of the most attractive residential areas of Manhattan.

The department has 34 regular faculty members and several clinical, research, adjunct, and visiting faculty members. The department's current research interests include algorithms, cryptography and theory; computational biology; distributed computing and networking; graphics, vision and multimedia; machine learning and data science; natural language processing; scientific computing; and verification and programming languages.

Collaborative research with industry is facilitated by geographic proximity to computer science activities at AT&T, Facebook, Google, IBM, Bell Labs, NEC, and Siemens.

Please apply at https://cs.nyu.edu/webapps/facapp/register

To guarantee full consideration, applications should be submitted no later than December 1, 2016; however, this is not a hard deadline, as all candidates will be considered to the full extent feasible, until all positions are filled. Visiting positions may also be available.

New York University is an equal opportunity/affirmative action employer.

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.

Northeastern University

Assistant/Associate/Full Professor

Position Summary

The College of Computer and Information Science invites applications for several tenure-track and tenured faculty positions, beginning in Fall 2017. Applicants at all ranks will be considered. Candidates will be considered from all areas in Computer and Information Science.

Applications are especially encouraged in computer/network security and data science. Candidates are expected to have or to develop an independently funded research program of international caliber and to participate in undergraduate and graduate teaching.

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Qualifications

A PhD in Computer Science, Information Science or a related field is required by the start date.

Additional Information

The College has a diverse full-time faculty of 59, and offers a broad array of educational opportunities to students. Since 2012, the College has hired 30 outstanding faculty members, and plans to continue this strategic growth in the coming years. In addition to Bachelor's, Master's, and PhD programs in the computing discipline, the College offers several innovative undergraduate and graduate degreeprograms that combine computing with an important application domain. Fifteen faculty members have joint appointments with other academic departments, including Electrical and Computer Engineering, Art and Design, Health Sciences, Chemistry, Physics, Political Science, Psychology and Business. Northeastern University is home to 35,000 full- and part-time degree students and to the nation's premier cooperative education program. The past decade has witnessed a dramatic increase in Northeastern's international reputation for research and innovative educational programs. A heightened focus on interdisciplinary research and scholarship is driving a faculty hiring initiative at Northeastern, advancing its position amongst the nation's top research universities. The College has been a major participant in this initiative and will continue the efforts this year, with additional interdisciplinary searches ongoing in related areas. For more information about the College, please visit http://www.ccs.neu.edu.

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

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

Screening of applications begins immediately. For full consideration, application materials should be received by December 1, 2016. However, applications will be accepted until the search is completed.

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

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.

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

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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.

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

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

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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.

NUS National University of Singapore

Multiple Tenure-Track or Tenured Faculty Positions in Computer Science

The Department of Computer Science at the National University of Singapore (NUS) invites applications for several tenure-track or tenured faculty positions. We have positions dedicated to cyber security, Internet of Things, robotics and big data analytics as well as positions open to all areas of computer science. While our main focus is on the assistant professor level, we also welcome exceptional candidates at the associate and full professor levels. For applications at the assistant professor level, candidates should demonstrate excellent research potential and a strong commitment to teaching. Candidates at more senior levels should have an established record of outstanding and recognized research achievements. Truly outstanding assistant professor level applicants will also be considered for the prestigious Sung Kah Kay Assistant Professorship.

The Department of Computer Science at NUS is highly ranked internationally. It enjoys ample research funding, moderate teaching load, excellent facilities, and extensive international collaborations. The department covers all major research areas in computer science and boasts a thriving PhD program that attracts the brightest students from the region and beyond. More information is available at http://www.comp.nus.edu.sg/.

NUS offers highly competitive salaries and is situated in Singapore, an English-speaking cosmopolitan city and a melting pot of many cultures, both the east and the west. Singapore offers high-quality education and healthcare at all levels, high level of personal freedom and security, as well as very low tax rates.

Interested candidates are invited to send, via electronic submission, the following materials to our electronic application website:

https://faces.comp.nus.edu.sg

with the following combined into a single PDF document:

- A cover letter that clearly indicates the position applied for and the main research interests
- Curriculum Vitae
- A teaching statement
- A research statement

Please also arrange for **at least 3 references** to be sent directly to csrec@comp.nus.edu.sg or provide the contact information at the submission website. Applicants are assumed to have obtained their references' consent to be contacted for this matter.

Application review will commence on October 1, 2016 and continue until the positions are filled. To ensure maximal consideration, please submit your application by December 15, 2016. If there are further queries, please feel free to send the Search Committee Chair Weng-Fai Wong an email at the above email address.

NYU Shanghai

Faculty Position

NYU Shanghai is currently inviting applications for a tenure/tenure track position at the rank of assistant, associate, or full professor. We will consider applicants in all areas of computer science, and have a particular interest in applicants in the fields of data science and machine learning. Candidates should be exceptionally strong researchers and educators, with a Ph.D. in Computer Science or a closely related field, and publications in the top venues of the sub-field.

Candidates must have completed a Ph.D. or equivalent by the time of appointment. *The search will remain open until the position is filled, but review of applications will begin* ***January 1, 2017.*** The appointment could begin as soon as September 1, 2017, pending administrative and budgetary approval, or could be delayed until September 1, 2018. The terms of employment in NYU Shanghai are comparable to U.S. institutions in terms of research start-up funds and compensation, and include housing subsidies and educational subsidies for children. Faculty may also spend time at NYU New York and other sites of the global network, engaging in both research and teaching opportunities.

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Applicants must submit a curriculum vitae, a statement of research and teaching interests, electronic copies of up to five recent relevant publications, and the names and addresses of three or more individuals willing to provide letters of reference. Please visit our website at http://shanghai.nyu.edu/en/about/work-here/open-positions-faculty for instructions and other information on how to apply. If you have any questions, please e-mail shanghai.engineering.recruitment@nyu.edu.

About NYU Shanghai:

NYU Shanghai is the newest degree-granting campus within New York University's global network. It is the first higher education joint venture in China authorized to grant degrees that are accredited in the U.S. as well as in China. All teaching is conducted in English. A research university with liberal arts and science at its core, it resides in one of the world's great cities with a vibrant intellectual community. NYU Shanghai recruits scholars of the highest caliber who are committed to NYU's global vision of transformative teaching and innovative research and who embody the global society in which we live.

NYU's global network includes degree-granting campuses in New York, Shanghai, and Abu Dhabi, complemented by eleven additional academic centers across five continents. Faculty and students circulate within the network in pursuit of common research interests and cross-cultural, interdisciplinary endeavors, both local and global.

NYU Shanghai is an equal opportunity employer committed to equity, diversity and social inclusion. We strongly encourage applications from individuals who are under-represented in the profession, across color, creed, race, ethnic and national origin, physical ability, and gender and sexual identity. NYU Shanghai affirms the value of differing perspectives on the world as we strive to build the strongest possible university with the widest reach.

EOE/AA/Minorities/Females/Vet/Disabled/Sexual Orientation/Gender Identity Employer

Old Dominion University

Executive Director of the Virginia Modeling, Analysis, and Simulation Center/ Associate Vice President for Data Sciences

Old Dominion University invites applications for the position of Executive Director of the Virginia Modeling, Simulation, and Analysis Center (VMASC), who also will serve as Associate Vice President for Data Sciences in the Office of Research. ODU's goal is to build on its longstanding M&S strengths to create a broad Data Sciences concentration, both at VMASC and across the university.

The university seeks a visionary leader with skills to manage and guide an internationally recognized center in Modeling & Simulation, as well as to help ODU coordinate and enhance its capabilities and opportunities in Data Sciences more generally. ODU and VMASC have unique regional opportunities in Data Sciences, with federal and state partners including Department of Defense commands, Jefferson National Laboratory, NASA-Langley, and the Port of Virginia, and private sector partners such as Newport News Shipbuilding.

The Executive Director/AVP will be expected to develop and implement a compelling, collaborative vision for VMASC and also for Data Sciences throughout ODU, forge and follow through on strategic partnerships, and interact collegially with academic and industry communities, military and other federal sponsors, municipalities, and state government agencies. The successful applicant will have an established, successful track record in her/his own Data Science research program that exceeds university criteria for the rank of tenured full professor or an advanced associate professor (as appropriate), and an equally distinguished track record in leadership and business development, including demonstrated success as PI for sponsored projects. Familiarity with simulation-based data science is required. A successful candidate also will have a clear, demonstrated commitment to academic excellence, diversity, and inclusiveness. The Executive Director/AVP will be a tenured professor in the appropriate academic department. A Ph.D. in a data science field is required.

VMASC was established in 1997 to support research and development of new and improved modeling and simulation techniques, theory, and processes to help grow this expanding field. Originally focused on military modeling and simulation VMASC has leveraged that experience into addressing complex problems in multiple domain areas such as medical, transportation, education, business process engineering, human behavior representation and many others. Reporting to the Vice President for Research, VMASC currently employs 14 Ph.D. researchers, with a technical and administrative support staff of 16. Additional information can be found at https://www.odu.edu/vmasc.

ODU, located in the City of Norfolk in coastal Virginia, is a dynamic public research institution that serves its students and enriches the Commonwealth of Virginia, the nation, and the world through rigorous academic programs, strategic partnerships, and active civic engagement. ODU delivers top-quality education to populations in need and provides internationally-recognized research in areas of regional and national significance, such as coastal resilience and cybersecurity. With a number of key strengths in the region—including significant Department of Defense investment (the world's largest naval base), ports of national, strategic importance (the largest deep water harbor on the East Coast), national labs (DOE and NASA), and tourism—

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ODU is capitalizing on its unique role as a central connection point by training the workforce, providing advanced research and engaging in meaningful community service to further the regional economy.

Applications should include a letter of interest that outlines a vision for VMASC and Data Sciences at ODU, a curriculum vita, statement of research and teaching interests, and contact information for five professional references including email addresses and phone numbers. Review of applications will begin October 17, 2016 and the position will remain open until an appointment is made. Applications should be submitted electronically to https://jobs.odu.edu/.

Old Dominion University is an equal opportunity, affirmative action institution. Minorities, women, veterans and individuals with disabilities are strongly encouraged to apply.

Pomona College

Tenure-track Assistant Professor in Computer Science

Computer Science Department, Pomona College: Tenure-track Assistant Professor, beginning July 1, 2017. Teaching load: 2/2. Ph.D. required. The position is open to all areas of computer science.

Pomona College, the founding member of the Claremont Colleges, is a highly selective liberal arts college in southern California and attracts a diverse, national student body. The Computer Science Department supports equal access to higher education. The successful candidate will have experience working with students from diverse backgrounds and a demonstrated commitment to improving higher education for underrepresented students.

Please submit the following application materials online (https://academicjobsonline.org/ajo/jobs/7689): cv; graduate transcripts; 3 or more letters of recommendation, at least one evaluating teaching; and three statements—one addressing teaching philosophy, one addressing scholarship and one addressing demonstrated ability to mentor a diverse student body.

Review of applications will begin on December 12, 2016.

Further information at http://www.cs.pomona.edu/search2017.html or search@cs.pomona.edu.

Princeton University

Assistant Professor Positions in Computational Biology Available at Princeton University

The Lewis-Sigler Institute for Integrative Genomics at Princeton University invites applications for tenure-track faculty positions at the Assistant Professor Level. We are seeking outstanding scientists in the areas of bioinformatics, computational biology or biostatistics. The successful candidate would have an established track record of collaborative research with experimental biologists. We are particularly keen to recruit faculty who will extend and complement our existing strengths in bioinformatics and biostatistics.

The Lewis-Sigler Institute for Integrative Genomics, housed in the Carl Icahn Laboratory at Princeton University, was established to innovate in research and teaching at the interface of modern biology and the more quantitative sciences. The Institute provides significant support to its faculty through heavy investment in state-of-the-art infrastructure, an NIH-funded graduate training program, and a high level of administrative support.

Faculty positions are jointly appointed in one of the following academic departments at Princeton: Computer Science, Ecology and Evolutionary Biology, Physics, Chemistry, Chemical and Biological Engineering, or Molecular Biology. These joint faculty positions offer significant benefits in terms of infrastructure, research funds, and collaborative opportunities, as well as an opportunity to interact with unusually able and interdisciplinary students. The successful candidate will have research laboratories at the Institute, and teaching responsibilities (both graduate and undergraduate) will be shared between the Institute and the home department.

Essential Qualifications

All applicants must have a Ph.D., M.D., or equivalent degree. In addition, applicants must have a very strong record of research productivity, demonstrate the ability to develop a rigorous research program, and be committed to teaching at both the undergraduate and graduate levels.

How to Apply

Applications must be submitted online at http://jobs.princeton.edu, requisition #1600658 (jobs.princeton.edu/applicants/Central?quickFind=68888) and should include a cover letter, curriculum vitae, a two-page research description, as well as contact information for at least three references. Applications will start being reviewed beginning on December 1, 2016.

Princeton University is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law. This position is subject to the University's background check policy.

Rutgers University

Non Tenure Track Assistant or Associate Professor

The Department of Computer Science at Rutgers University invites applications for a 1-year non-tenure-track renewable position at the rank of Assistant or Associate Teaching Professor. The appointment will start either Spring 2017 or Fall 2017, and

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will continue through the end of the 2017-18 academic year. Main responsibilities include teaching, managing, developing, and updating undergraduate classes.

Please see http://apply.interfolio.com/36929 for more details.

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.

A PhD in Computer Science or closely related field is required. Candidates with an MS and substantial industry experience in software systems design and implementation are encouraged to apply.

To apply, please submit a curriculum vitae, teaching statement, and contact information for three references at: http://apply.interfolio.com/37381.

Ryerson University

Two Tenure-Track Assistant Professorships in Computer Science

The Department of Computer Science in the Faculty of Science at Ryerson University (www.scs.ryerson.ca) invites applications for two full-time tenure-track positions at the Assistant Professor level. One position is in Software Engineering and the other in Applied Machine Learning. The positions commence July 1, 2017, subject to final budgetary approval.

Candidates will hold a PhD in Computer Science or a related field. The successful candidates will be expected to establish and maintain an independent, externally funded research program, supervise graduate students, teach Computer Science courses at all levels, and engage in collegial service. Candidates must have a demonstrated commitment to upholding the values of Equity, Diversity, and Inclusion as it pertains to service, teaching, and scholarly, research or creative activities.

The Department of Computer Science, consisting of 20 tenure-stream faculty members, offers a B.Sc. , an M.Sc. , and a PhD. Located in the heart of Toronto, Ryerson University has 38,000 undergraduate and 2,500 graduate students registered and is on a transformative path to become Canada's leading comprehensive innovation university.

This position falls under the jurisdiction of the Ryerson Faculty Association (RFA). The RFA collective agreement can be viewed at: RFA Collective Agreement. The RFA's website can be found at: www.rfanet.ca and a summary of RFA benefits at: RFA Benefits.

Ryerson University is strongly committed to fostering diversity witihin our community. We welcome those who would contribute to the further diversification of our staff, our faculty and its scholarship including, but not limited to, women, visible minorities, Aboriginal people, persons with disabilities, and persons of any sexual orientation or gender identity. Please note that all qualified candidates are encouraged to apply but applications from Canadians and permanent residents will be given priority.

A complete description of the two positions as well as details on the application procedure can be found at the links below. Please indicate in your application if you are a Canadian citizen or a permanent resident of Canada.

Computer Science - Assistant Professor (Applied Machine Learning)

Computer Science - Assistant Professor (Software Engineering)

Seattle Pacific University

Department of Engineering and Computer Science: Computer Science

Assistant Professor

Tenure track position available September 2017. Ph.D. in Computer Science or a closely related field (i.e., Computer Engineering or Software Engineering), preferably with emphases in programming languages, algorithms and complexity, and/or operating systems. ABD candidates will be considered. To complement current faculty interests, candidates with significant background in web and mobile development or computer graphics will be given high priority. Successful candidates should demonstrate a commitment to undergraduate education and show promise of scholarly production. Founded in 1891, Seattle Pacific University has a long and distinguished history in Christian higher education. Its comprehensive academic programs serve more than 4,100 undergraduate and graduate students. Located just minutes from downtown Seattle, SPU seeks to be a premier Christian University fully committed to engaging the culture and changing the world by graduating people of competence and character, becoming people of wisdom, and modeling grace-filled community. Seattle Pacific University seeks applicants committed to its Christian mission. Due to our mission of cultural engagement, SPU is committed to building an excellent and diverse teaching faculty. Women and people of color are particularly encouraged to apply.

The online application includes an official SPU application form, a faith statement and teaching philosophy statement of

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approximately one page each, a curriculum vitae, and other supporting documents. Review of applications will begin in November, 2016. [Position subject to final funding approval.] Address inquiries to Prof. Elaine Weltz, Computer Science Chair, Seattle Pacific University, 3307 3rd Ave W, Seattle, WA 98119-1957, cscsearch@spu.edu

Smith College

Assistant Professor of Statistical and Data Sciences

Assistant Prof Statistical & Data Sciences: Tenure-track Assistant Professor to begin fall 2017. Ph.D. in statistics or a closely related field required. Details at http://apply.interfolio.com/36190.

Review begins November 15, 2016.

EO/AA/Vet/Disability Employer.

Stanford University

Jr. level tenure track faculty positions (Asst. or untenured Assoc.)

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

Assistant Professor Position

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

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

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

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

The proposed start date is September 1, 2017.

Application Instructions

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

Review of applications will begin upon receipt and complete application packets received by November 1, 2016 will receive full consideration. However, the search will remain open until the position is filled.

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

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

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sub-area of specialization within Computer Science.

We are seeking applicants from all areas of Computer Science, spanning theoretical foundations, systems, software, and applications. We are also interested in applicants doing research at the frontiers of Computer Science with other disciplines, including but certainly not limited to those in the engineering, mathematical, medical, physical, and social sciences. Applicants must have completed (or be completing) a Ph.D., must have demonstrated the ability to pursue a program of research, and must have a strong commitment to graduate and undergraduate teaching. A successful candidate will be expected to teach courses at the graduate and undergraduate levels, and to build and lead a team of graduate students in Ph.D. research. Further information about the Computer Science Department can be found at http://cs.stanford.edu. The School of Engineering website may be found at http://soe.stanford.edu.

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

The review of applications will begin on November 18, 2016, and applicants are strongly encouraged to submit complete applications by that date for full consideration; however, applications will continue to be accepted until January 15, 2017.

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

ENGINEERING
TEXAS A&M UNIVERSITY

TEXAS A&M ENGINEERING HIRING MULTIPLE FACULTY POSITIONS IN CYBERSECURITY AT ALL POSITIONS

Texas A&M College of Engineering has launched a major initiative to hire a significant number of faculty in cybersecurity at all ranks. Applications are being accepted for new faculty positions in all areas of cybersecurity in computing, networking, cyber physical systems, critical infrastructure in healthcare, transportation, manufacturing and energy sectors.

Applicants must have a Ph.D. in computer engineering, computer science or electrical engineering, or a closely related field. For specific questions about the positions, contact **cybersecurity-search@tamu.edu**.

Accepted applicants will receive faculty appointments in one of the departments within the college, primarily within the departments of computer science and engineering **www.cse.tamu.edu** and electrical and computer engineering **www.ece.tamu.edu**. Candidates will be expected to teach, perform research, supervise graduate students, participate in all aspects of the department's activities; and serve the profession. Senior hires may come with additional positions.

For more information, and to apply for this position, visit **www.tamengineeringjobs.com**

TEXAS A&M ENGINEERING engineering.tamu.edu

Professional Opportunities

Texas A&M University

Senior Full Professor

The College of Engineering at Texas A&M University invites applications for a senior full professor in the area of big data, broadly understood to encompass information and computational sciences, and their applications in engineering domains. Candidates who have demonstrated exceptional research achievement, success in leading team efforts at the university or national level, and who can create common ground across diverse engineering domains are especially encouraged to apply. The candidate is expected to grow and coalesce existing activity in the big data area. Candidates having synergistic interests with existing areas of research strength, and those who will broaden and expand our current programs will generate the most interest.

The successful candidate will be expected to teach undergraduate and graduate courses, develop an independent, externally funded research program, advise graduate students, serve the profession, and participate in the college's mission.

Applicants must have an earned doctorate in an engineering discipline or a field related to big data.

Applicants should submit a cover letter, curriculum vitae, teaching and research statements, and 5 references by applying for this specific position at www.tamengineeringjobs.com. It is anticipated the appointment will begin in fall 2017.

The members of Texas A&M Engineering are all Equal Opportunity/Affirmative Action/Veterans/Disability employers committed to diversity. It is the policy of these members to recruit, hire, train and promote without regard to race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity.

Faculty Positions Available

STATISTICS
TEXAS A&M UNIVERSITY

The Department of Statistics at Texas A&M University anticipates multiple Assistant Professor positions (tenure/tenure-track) to begin September 2017. Completion of all requirements for a PhD/DSc degree in Statistics (or a closely related field) prior to beginning employment is required. The department encourages persons from all areas of research to apply, but is particularly interested in areas at the interface of statistics and computer science (i.e., big data, computational statistics and data mining) and in spatial statistics. Successful candidates will have a strong commitment to research and teaching. Excellent computing facilities are available and highly competitive startup funding is anticipated.

The department has a tradition of outstanding theoretical and interdisciplinary research. Current faculty members actively collaborate with colleagues in the Colleges of Science, Agriculture and Life Sciences, Engineering, Geosciences, Medicine, Public Health, Veterinary Medicine, and with the Faculties of Genetics, Nutrition and Toxicology. For more information on the department and the research interests of its faculty, please visit www.stat.tamu.edu. **To apply, please visit** AcademicJobsOnline.org. Applications will continue to be accepted until the positions are filled.

Texas A&M University is an equal opportunity/affirmative action employer. The university is dedicated to the goal of building a culturally diverse and pluralistic faculty and staff committed to teaching and working in a multicultural environment and strongly encourages applications from women, minorities, individuals with disabilities and veterans. Texas A&M University has a partner placement program and is responsive to the particular needs of dual career couples. The Department of Statistics is interested in candidates who can contribute to the diversity of the academic community through their research, teaching and/or service.

University of Alabama

Assistant or Associate Professor

The Department of Computer Science at the University of Alabama invites applications for multiple tenure-track faculty positions at the Assistant or Associate level to begin August 2017. Outstanding candidates in all areas of computer science will be considered. Successful applicants must show the potential to establish a quality research program, collaborate effectively with other faculty, and excel in teaching at both the undergraduate and graduate levels. In addition, successful applicants must demonstrate the potential to contribute to the University of Alabama's initiatives with respect to water, the Alabama Water Institute (http://awi.ua.edu/), and/or transportation, the Alabama Transportation Institute (http://ati.ua.edu/). Expertise needed by the AWI and ATI may include, but is not limited to, areas such as big data, spatial data, data analytics, data visualization, machine learning, vehicular networks, software modeling, software engineering, security, robotics, and autonomous vehicles.

Located in Tuscaloosa, Alabama, the University of Alabama enrolls over 37,000 students. The Computer Science Department has 22 faculty members (14 tenured/tenure-track faculty), over 600 undergraduates and approximately 50 graduate students. The Department generated over $13 million in research expenditures in FY 2015 and our doctoral program has produced 33 graduates in the past five years.

Applicants should apply online at http://facultyjobs.ua.edu/postings/39546. Applicants must have an earned doctorate (Ph.D.) in computer science or a closely

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related field. The application package should include a cover letter addressing how the applicant is able to contribute to the ATI and AWI initiatives, curriculum vitae, and the names of three references. Review of applications will begin immediately. For additional details, please contact Dr. David Cordes (faculty.search@cs.ua.edu) or visit http://cs.ua.edu.

The University of Alabama is an equal opportunity/affirmative action employer. Women and minority applicants are particularly encouraged to apply.

University of Alabama at Birmingham

Asst/Assoc/Full Professor of Computer Science

The Department of Computer and Information Sciences (CIS) at the University of Alabama at Birmingham (UAB) is seeking candidates for a tenure-track/tenure-earning/tenured faculty position at the Assistant/Associate/Full-Professor rank beginning Fall 2017. For additional information about the Department, please visit: http://www.cis.uab.edu.

Candidates with expertise in all core CIS areas are sought, with preference given to: (1) Advanced Computing Systems (broadly defined, including large-scale systems, distributed systems, and software systems), and (2) Data Science (broadly defined, including machine learning, data mining and big data). UAB has made a significant commitment to both research and teaching in Computer Science. Candidates must consequently have strong research and teaching credentials. Experience and success in funded research is desirable for junior-level candidates, and required for senior-level candidates. UAB is a Carnegie "Very High Research Activity" University.

The CIS Department at UAB offers PhD, MS and BS programs. The Department has a strong research focus, and a strong commitment to teaching, service and outreach. The goal is to grow the PhD, MS and BS significantly over the next several years. Research funding is expanding significantly, and the Department has a leadership role in a Center focusing on Information Assurance, Security and Computer Forensics. Collaborations with UAB's medical enterprise are strong and growing, with many opportunities for faculty to participate in interdisciplinary work.

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

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

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

University of Arkansas

Tenured Associate or Full Professor and Tenure-Track Assistant Professor

The Department of Computer Science and Computer Engineering at the University of Arkansas invites applications for two positions. We have a tenured associate or full professor position in big data analytics and a tenure-track assistant professor position in artificial intelligence, machine learning, cyber-physical systems, or cybersecurity, both to start in August 2017. Applicants for the associate or full professor position should present an excellent track record in scholarship, sustained external funding, and teaching and are expected to have national and international recognition. Salary is very competitive. Applicants for the assistant professor position should present a promising track record in scholarship and evidence of teaching ability.

For application details, visit http://csce.uark.edu.

The UA is AA/EO employer/Veterans/Disabled.

University of California, Merced

Tenure-Track Assistant Professor

The Electrical Engineering and Computer Science (EECS) program at the University of California, Merced invites applications for one tenure-track position in the area of the Internet of Things (IoT) beginning in the 2017-18 academic year. Outstanding candidates with research interests in embedded sensors, pervasive connectivity, mobile computing, wearables, security, interoperability, mixed signal systems, fog networking/computing, and wireless embedded systems are encouraged to apply. A doctoral degree in electrical engineering, computer engineering, computer science or a related field is required at time of employment.

Details and application information can be found at https://aprecruit.ucmerced.edu/apply/JPF00359. Position is open until filled with a final closing date of June 30, 2017; consideration of applications will begin on December 31, 2016. Applications will continue to be received until the positions are filled. For inquiries and questions, please contact us at scarpin@ucmerced.edu.

EEO/AA employer.

Professional Opportunities

UC Davis

Faculty - Assistant Professor

The University of California, Department of Statistics invite applications for a tenure-track Assistant Professor position beginning 07/01/2017. Requires a Ph.D. in Statistics or a related field. All areas of statistics will be considered. Individuals specializing in statistical methods for large and complex or massive data are especially encouraged to apply.

Application review begins 11/18/2016. See http://www-stat.ucdavis.edu/ for more information.

To apply, go to https://recruit.ucdavis.edu/apply/JPF01179.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age or protected veteran status.

University of Chicago

Lecturer Position

The Department of Computer Science at the University of Chicago invites applications for the position of Lecturer. Subject to the availability of funding, this would be a two year position with the possibility of renewal. This position involves teaching in the fall, winter and spring quarters. The successful candidate will have competence in teaching and superior academic credentials, and will carry responsibility for teaching computer science courses and laboratories. Completion of all requirements for a Ph.D. in Computer Science or a related field is required at the time of appointment and candidates must have experience teaching Computer Science at the College level.

The Chicago metropolitan area provides a diverse and exciting environment. The local economy is vigorous, with international stature in banking, trade, commerce, manufacturing, and transportation, while the cultural scene includes diverse cultures, vibrant theater, world-renowned symphony, opera, jazz and blues. The University is located in Hyde Park, a Chicago neighborhood on the Lake Michigan shore just a few minutes from downtown.

Applicants must apply on line at the University of Chicago Academic Careers website at http://tinyurl.com/h84fu8p.

To be considered an applicant, the following materials are required:

- Curriculum vitae with a list of publications
- One page teaching statement
- Three reference letters, one of which must address the candidate's teaching ability

Reference letter submission information will be provided during the application process.

Review of complete applications, including reference letters, will begin October 3, 2016, and continue until the position is filled.

The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination at http://www.uchicago.edu/about/non_discrimination_statement/. Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-5671 or email ACOppAdministrator@uchicago.edu with their request

University of Chicago

Assistant Professor/Associate Professor/ Professor, Computer Science

The Department of Computer Science at the University of Chicago invites applications from qualified candidates for faculty positions at the ranks of Assistant Professor, Associate Professor, and Professor. The University of Chicago has embarked on an ambitious, multi-year effort to significantly expand its computing and data science activities. Candidates with research interests in all areas of computer science will be considered. Applications are especially encouraged in the areas of AI and Machine Learning, Cybersecurity, Human-Computer Interaction, and Visual Computing.

Candidates must have demonstrated excellence in research and a strong commitment to teaching. Completion of all requirements for a Ph.D. in Computer Science or a related field is required at the time of appointment. Candidates for Associate Professor and Professor positions must have demonstrated leadership in their field, have established an outstanding independent research program and have a record of excellence in teaching and student mentorship.

Applications must be submitted through the University's Academic Jobs website. To apply, go to http://tinyurl.com/zlx5vxx:

To be considered as an applicant, the following materials are required:

- cover letter
- curriculum vitae including a list of publications
- statement describing past and current research accomplishments and outlining future research plans
- description of teaching philosophy
- three reference letters, one of which must address the candidate's teaching ability

Reference letter submission information will be provided during the application process.

Review of complete applications will begin January 1, 2017 and will continue until all available positions are filled.

The University of Chicago has the highest standards for scholarship and faculty quality, is dedicated to fundamental

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research, and encourages collaboration across disciplines. We encourage connections with researchers across campus in such areas as bioinformatics, mathematics, molecular engineering, natural language processing, statistics, and social science to mention just a few.

The Department of Computer Science (cs.uchicago.edu) is the hub of a large, diverse computing community of two hundred researchers focused on advancing foundations of computing and driving its most advanced applications. Long distinguished in theoretical computer science and artificial intelligence, the Department is now building strong systems and machine learning groups. The larger community in these areas at the University of Chicago includes the Department of Statistics, the Computation Institute, the Toyota Technological Institute at Chicago (TTIC), the Polsky Center for Entrepreneurship and Innovation, and the Mathematics and Computer Science Division of Argonne National Laboratory.

The Chicago metropolitan area provides a diverse and exciting environment. The local economy is vigorous, with international stature in banking, trade, commerce, manufacturing, and transportation, while the cultural scene includes diverse cultures, vibrant theater, world-renowned symphony, opera, jazz, and blues. The University is located in Hyde Park, a Chicago neighborhood on the Lake Michigan shore just a few minutes from downtown.

The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination at http://www.uchicago.edu/about/non_discrimination_statement/. Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-5671 or email ACOppAdministrator@uchicago.edu with their request.

University of Illinois at Chicago

Information Retrieval / Natural Language Processing / Theoretical Computer Science Faculty

The Computer Science Department at the University of Illinois at Chicago (UIC) invites applications for multiple full-time tenure-track positions at the rank of Assistant Professor (exceptional senior level candidates will also be considered). All candidates must have a doctorate in Computer Science or a closely related field by the appointment's starting date. Candidates will be expected to conduct world class research and teach effectively at the undergraduate and graduate levels. Senior candidates must have an outstanding research record, a strong record of funded research, demonstrated leadership in collaborative research, and an excellent teaching record at the undergraduate and graduate level.

This search primarily seeks candidates in three research areas. Please clearly indicate for which one of those areas you wish to be considered. Exceptional candidates from other areas may also be considered. The focused research areas of faculty search are:

- **Information Retrieval and Web search.**
- **Natural Language Processing** and computational linguistics.
- **Theoretical Computer Science.**

In addition, we may also have a position in cyber-physical systems.

The Computer Science department has 31 tenure-system faculty and offers BS, MS and PhD degrees. Our faculty includes 11 NSF CAREER award recipients. UIC has an advanced computing and networking infrastructure in place for data-intensive scientific research that is well-connected regionally, nationally and internationally. Further information about the positions can be found at https://www.cs.uic.edu/Main/ShowJob?name=facINT.

Chicago epitomizes the modern, livable, vibrant, and diverse city. Its airports are among the busiest in the world, with frequent non-stop flights to virtually anywhere. Yet the cost of living, whether in an 88th floor condominium downtown or on a tree-lined street in one of the nation's finest school districts, is surprisingly low.

Applications must be submitted at https://jobs.uic.edu/. Include a curriculum vitae, teaching and research statements, and names and addresses of at least three references in the online application. Applicants needing additional information may contact the Faculty Search at search-chair@cs.uic.edu. For fullest consideration, apply by December 1, 2016, but applications will be accepted until the positions are filled. The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. The University of Illinois conducts background checks on all job candidates upon acceptance of contingent offer of employment. Background checks will be performed in compliance with the Fair Credit Reporting Act.

University of Kansas

Assistant Professor

The University of Kansas (KU) Department of Electrical Engineering and Computer Science seeks individuals for three tenure track positions in the disciplines of electrical engineering, computer engineering, or computer science. Candidates are expected to contribute to

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the development of academic and research programs and to the research community. Applicants are expected to have an earned doctorate, or equivalent in electrical engineering, computer science, computer engineering, or related fields at the time of appointment. The successful candidate must be eligible to work in the U.S. by the time of appointment. Applicants pursuing research in areas that are synergistic with departmental strengths are preferred. The following positions are open at the assistant professor (tenure-track) level, with the possibility of higher rank for the exceptional applicant, with experience in:

Cybersecurity – Any area in Security and Privacy, including but not limited to systems security, network security, information security and privacy. http://employment.ku.edu/academic/6860BR

Static analysis - including but not limited to: automated software engineering; program analysis; partial evaluation; symbolic execution; and model checking. Application areas including high-assurance systems; resiliency; trustworthy systems; and secure systems are particularly desirable. http://employment.ku.edu/academic/6864BR

Wireless Communications, Devices and Applications - Applicants are sought in the areas of 5G/IoT/V2X technologies, including but not limited to, distributed, multi-channel signal processing, array processing, and adaptive beamforming technologies for secure, scalable, and power/spectral efficient systems; massive MIMO; millimeter-wave circuits and/or systems. Applicants are sought who apply their expertise to implementation of applications, including but not limited to: challenged environments, e.g., civilian disasters, or military (anti-jam), or, covert/communication/radar spectrum sharing; telemetry and remote sensing; and smart grid communications systems for power distribution and monitoring. http://employment.ku.edu/academic/6866BR/

Exceptional applicants in other closely related areas to the above topics may be considered. The KU School of Engineering is rapidly expanding with research and teaching facilities. KU is focused on four key campus-wide strategic initiatives. For more information, see http://www.provost.ku.edu/planning/themes/. Successful candidates should describe in their application materials how their work addresses one or more of KU's strategic initiatives. Applications should be submitted online at the links provided above for the appropriate position. Applications should include a letter of application, curriculum vita, a statement of research interests and plans, a statement of teaching interests and plans, and contact information for three references. Applications will be reviewed beginning October 15, 2016 and will be accepted until the position is filled. The appointment will be effective as negotiated. Questions can be sent to: EECS_Search@eecs.ku.edu.

KU is an EO/AAE. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex (including pregnancy), age, national origin, disability, genetic information or protected Veteran status.

University of Massachusetts Amherst

Lecturer Positions

The College of Information and Computer Sciences at the University of Massachusetts Amherst invites applications for nine-month, non-tenure-track faculty positions at the rank of Lecturer beginning in the 2017-2018 academic year.

One general full-time Lecturer position is available to teach a variety of courses for majors and non-majors. One part-time position is also available to teach junior year writing. Primary responsibilities for the full-time position include teaching up to six courses per year (or equivalent based on other duties and activities) at both the undergraduate and MS level, curriculum development, and undergraduate advising, as well as additional administrative and scholarly duties as determined by the Chair of the Faculty. Primary responsibilities for the part-time position include teaching two sections per semester of junior year writing, a graduation requirement for all majors. The appointment period for both positions is 9 months per year, and opportunities for teaching additional summer courses may be available for additional compensation. Although not tenure track, it is expected that the person holding each position will remain with the college long term and each initial appointment will be for at least one year. These positions do not have research-related duties.

The College of Information and Computer Sciences is a stimulating, diverse environment conducive to professional growth in both teaching and research. Lecturers are an essential part of our faculty and participate in faculty meetings and many college decisions. Amherst, a historic New England town, is the center of a vibrant and culturally rich area that includes five colleges. For more information about the college, visit https://cics.umass.edu.

Applicants for the FT lecturer position must hold the equivalent of a Master's degree in Computer Science, Computer Engineering or a closely related field, with a Ph.D. strongly preferred. FT applicants must also have a strong interest in, or a proven record of excellence in teaching undergraduate computer science courses, especially undergraduate courses in software engineering and systems. Applicants for the PT lecturer position must

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hold the equivalent of a Master's degree in a relevant field, with a Ph.D. strongly preferred. It is preferred that PT lecturer candidates have experience teaching writing to computer science students.

Interested candidates should apply online at

Full-time Lecturer
http://umass.interviewexchange.com/jobofferdetails.jsp?JOBID=76585

Part-time Lecturer
http://umass.interviewexchange.com/jobofferdetails.jsp?JOBID=76591

Please submit a cover letter, curriculum vitae, description of teaching experience, and the names and contact information for three references. Review of applications will begin on November 15, 2016 and may continue until a suitable candidate pool has been identified.

The university is committed to active recruitment of a diverse faculty and student body. The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members. Because broad diversity is essential to an inclusive climate and critical to the University's goals of achieving excellence in all areas, we will holistically assess the many qualifications of each applicant and favorably consider an individual's record working with students and colleagues with broadly diverse perspectives, experiences, and backgrounds in educational, research or other work activities. We will also favorably consider experience overcoming or helping others overcome barriers to an academic degree and career.

University of Michigan

Computer Science and Engineering Faculty Positions

The University of Michigan Computer Science and Engineering (CSE) Division expects strong growth in the coming years and invites applications for multiple tenure-track positions at all levels. Exceptional candidates from all areas of computer science and computer engineering will be considered. Qualifications include an outstanding academic record, a doctorate or equivalent in computer science or computer engineering, and a strong commitment to teaching and research. The college is especially interested in candidates who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community. These positions encompass, but are not limited to, several cross-disciplinary areas as well as an endowed professorship in theoretical computer science (Fischer Chair).

The University of Michigan is one of world's leading research universities with annual research funding of well over $1 billion. It consists of highly-ranked departments across engineering, sciences, business, and arts, as well as a leading medical school, providing significant opportunities for research collaborations for Computer Science faculty. The CSE Division continues to lead as a vibrant and innovative force, with over 50 world-class faculty members, over 300 graduate students, several Research Centers, and a large and illustrious network of alumni. Ann Arbor is known to be one of the best college towns in the country.

We encourage candidates to apply as soon as possible. For best consideration for Fall 2017, please apply by December 1, 2016. Positions remain open until filled and applications can be submitted throughout the year.

For more details on these positions and to apply, please visit the Application Web Page.

The University of Michigan is a Non-Discriminatory/Affirmative Action Employer with an Active Dual-Career Assistance Program.

University of Michigan

Postdoctoral Research Fellow

The University of Michigan School of Information announces a two-year postdoctoral research fellowship position. The position will start September 1, 2017, or earlier.

The research fellow will help Professor Romero lead one or more of his current projects on examining the effects of exogenous shocks on social networks, social media, and collaborative volunteering systems. Additionally, the fellow will have the opportunity to work in collaboration with Dr. Romero on other projects of their choice. The main role of the fellow involves planning and conducting research and co-authoring papers with Professor Romero, graduate students, and possibly other faculty members. If interested, the fellow will have the opportunity to participate in writing grant proposals.

A strong background and experience with statistics, network science, machine learning and/or data mining is required.

Review of applications will begin on November 1, 2016 and continue until the position is filled.

For a full job description and to apply, please visit http://umjobs.org/job_detail/129567/postdoctoral_research_fellow

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University of Nebraska – Lincoln

Assistant Professor

The Department of Computer Science and Engineering at the University of Nebraska – Lincoln invites applications for a tenure-track faculty position at the rank of Assistant Professor to begin in August 2017.

We are seeking faculty members who can establish a strong scholarly research and teaching program in the area of software engineering. While all areas of software engineering are of interest, applicants whose research connects human centered computing, usability or human computer interaction with software engineering or programming languages are particularly welcome.

Applicants should have a demonstrated potential for outstanding research and a promise of effective teaching at the undergraduate through graduate levels including the advising of M.S. and Ph.D. students. Candidates will hold a Ph.D. in Computer Science, Computer Engineering, or a closely related discipline. Applicants should have excellent communication skills and a strong desire to work in a diverse and collaborative environment.

To apply go to http://employment.unl.edu and complete the Faculty/Administration application for requisition F_160194 and attach 1) a single-page cover letter explaining your interest in the University of Nebraska – Lincoln, 2) a curriculum vitae, 3) teaching and research statements, 4) 1-2 papers that best represent research contributions and scholarship, and 5) a list of at least three references.

Review of applications will begin on November 15, 2016, and will continue until the positions have been filled. The positions are contingent on the availability of funds.

More information can also be viewed at: http://cse.unl.edu/facultysearch. The University of Nebraska- Lincoln is committed to a pluralistic campus community through affirmative action, equal opportunity, work-life balance, and dual careers. See http://www.unl.edu/equity/notice-nondiscrimination.

University of Nebraska at Omaha

Cybersecurity Assistant/Associate Professor Position in School of Interdisciplinary Informatics

College of Information Science & Technology

The School of Interdisciplinary Informatics in the College of Information Science and Technology invites applicants for a tenure-track position in Cybersecurity at assistant or associate ranks, starting in 2017. A Ph.D. in Information Assurance or a similar field with a Cyber Security research area is required. Essential duties include pursuing an independent research career and leading and coordinating research projects, teach courses which fulfill curriculum goals and objectives, supervise graduate students at the master and doctoral level, and obtain external funding. Demonstrated potential for research/funding with agencies such as DoD, DoJ, DHS, FBI, NSA is desirable. The School is particularly interested in candidates with experience in Computer and Network Forensics related areas.

The University and department have a strong commitment to achieving diversity among faculty and staff. To apply for this position go to http://www.unomaha.edu/human-resources/index.php. A cover letter, and curriculum vita (including teaching statement, research statement, and a list of three references) must be attached to the electronic application. For more information, contact Dr. Robin Gandhi, rgandhi@unomaha.edu or (402) 554-3363.

University of Northern Colorado

Assistant Professor of Computer Science

Assistant Professor, tenure track, nine month appointment, in the School of Mathematical Sciences at the University of Northern Colorado. Primary responsibilities include teaching courses in undergraduate computer science; maintaining an active research program in computer science; and providing service to the school, university and community. Duties will include providing leadership in the University's programs in computer science, including the software engineering program offered jointly by the School of Mathematical Sciences and the Monfort College of Business.

For application details, visit https://careers.unco.edu/postings/1231

University of Oregon

Assistant Professor

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.

Professional Opportunities

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. 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. The University encourages all qualified individuals to apply, and does not discriminate on the basis of any protected status, including veteran and disability status. The successful candidate will have the ability to work effectively with faculty, staff, and students from a variety of diverse backgrounds.

University of Pennsylvania

CIS Tenure-Track Positions

The School of Engineering and Applied Science at the University of Pennsylvania is growing its faculty by 33% over the next five years. As part of this initiative, the Department of Computer and Information Science is engaged in an aggressive, multi-year hiring effort for multiple tenure-track positions at the Assistant, Associate, and Full Professor levels, with an emphasis on junior appointments. Applicants must have a Ph.D. in Computer Science. Special preference will be given to candidates in areas of immediate need for the department including Machine Learning and Data Science, Computer Graphics, and Computer Systems and Architecture. Applications are encouraged from individuals working on high-impact areas such as autonomy, cybersecurity, embedded systems, or the interface with medicine, biology, and energy and environmental science.

We are especially interested in candidates whose interests are aligned with the school's strategic plan: www.seas.upenn.edu/PennEngineering2020.

The department seeks individuals with exceptional research achievement and potential, who will excel in teaching undergraduate and graduate courses and take a position of international leadership in defining their field of study. Leadership in cross-disciplinary collaborations is of particular interest. Successful applicants will find Penn to be a stimulating environment conducive to professional growth. We seek individuals who embrace and reflect diversity in the broadest sense. To ensure full consideration, applicants are encouraged to apply by November 30th, 2016. However, applications will be accepted until positions are filled.

Learn more here: http://www.cis.upenn.edu/faculty-staff/index.php

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, color, sex, sexual orientation, gender identity, religion, creed, national or ethnic origin, citizenship status, age, disability, veteran status or any other legally protected class status in the administration of its admissions, financial aid, educational or athletic programs, or other University-administered programs or in its employment practices. Questions or complaints regarding this policy should be directed to the Executive Director of the Office of Affirmative Action and Equal Opportunity Programs, Sansom Place East, 3600 Chestnut Street, Suite 228, Philadelphia, PA 19104-6106; or (215) 898-6993 (Voice) or (215) 898-7803 (TDD).

University of Pennsylvania

Multiple Faculty Positions

The School of Engineering and Applied Science at the University of Pennsylvania is growing its faculty by 33% over the next five years. As part of this initiative, the Department of Electrical and Systems Engineering is engaged in an aggressive, multi-year hiring effort for multiple tenure-track positions at all levels. Candidates must hold a Ph.D. in Electrical Engineering, Systems Engineering, or related area. The department seeks individuals with exceptional promise for, or proven record of, research achievement, who will take a position of international leadership in defining their field of study, and excel in undergraduate and graduate education. Leadership in cross-disciplinary and multi-disciplinary collaborations is of particular interest. We are interested in candidates in all areas that enhance our research strengths in:

- Nanodevices and nanosystems (nanoelectronics, MEMS/NEMS, power electronics, nanophotonics, integrated devices and systems at nanoscale),

USC Computer Science
Multiple Tenure-Track Faculty Positions

USC Viterbi
School of Engineering
Department of Computer Science

APPLY TODAY

http://goo.gl/T4NBKu
http://cs.usc.edu

The Computer Science Department of the USC Viterbi School of Engineering is in a period of significant and sustained faculty growth We have multiple openings for tenure-track positions in all areas and at all levels of seniority. The Viterbi School of Engineering at USC is committed to increasing the diversity of its faculty and welcomes applications from women, underrepresented groups, veterans, and individuals with disabilities. While we primarily seek assistant professor applicants, we are interested in exceptional candidates at all levels.

We expect all candidates to have a strong commitment to research, doctoral student mentoring, and teaching at the undergraduate and graduate levels. All applicants must have earned a doctorate in Computer Science or a closely related field by the date of appointment.

Applicants should submit their applications online, at http://goo.gl/T4NBKu

Applications must include a cover letter indicating the applicant's area of specialization, detailed curriculum vitae, a statement on current and future research directions, a teaching statement, and names of at least three professional references. Applications should be submitted by December 2, 2016 Applications received after this deadline may not be considered.

The USC Viterbi School of Engineering is among the top tier engineering schools in the world. It counts 185 full-time, tenure-track faculty members, and it is home to the Information Sciences Institute, two National Science Foundation Engineering Research Centers, a Department of Energy EFRC (Energy Frontiers Research Center), and the Department of Homeland Security's first University Center of Excellence, CREATE. The school is affiliated with the Alfred E. Mann Institute for Biomedical Engineering, the Institute for Creative Technologies and the USC Stevens Center for Innovation. Research expenditures typically exceed $185 million annually. With 37 tenure-track, 34 research, and 14 teaching faculty, the USC Department of Computer Science is one of the nation's leading centers of research and education in the field.

USC is an equal-opportunity educator and employer, proudly pluralistic and firmly committed to providing equal opportunity for outstanding persons of every race, gender, creed and background. The University particularly encourages women, members of underrepresented groups, veterans and individuals with disabilities to apply

Professional Opportunities

- Circuits and computer engineering (analog, RF, mm-wave, and digital circuits, emerging circuit design, computer engineering, IoT, embedded and cyber-physical systems), and
- Information and decision systems (control, optimization, robotics, data science, network science, communications, information theory, signal processing, markets and social systems).

Prospective candidates in all areas are strongly encouraged to address large-scale societal problems in energy, transportation, health, food and water, economic and financial networks, critical infrastructure, and national security. We are especially interested in candidates whose interests are aligned with the school's strategic plan (www.seas.upenn.edu/PennEngineering2020).

Diversity candidates are strongly encouraged to apply. Interested persons should submit an online application at http://www.ese.upenn.edu/faculty-positions and include curriculum vitae, statement of research and teaching interests, and at least three references. Review of applications will begin on December 1, 2016.

The University of Pennsylvania is an Equal Opportunity Employer. Minorities/Women/Individuals with Disabilities/Veterans are encouraged to apply.

University of Texas at Austin

Assistant, Associate, or Full Professor

The School of Information at the University of Texas at Austin is seeking to hire a tenure-track faculty member, open rank. While all areas will be considered, we particularly seek to add to our strengths in HCI. Design, data analytics, organization of information, social network analysis, and other fields are also encouraged, but in every case we expect the applicant to explain how her or his research would fit within our information school.

See the official ad at https://www.ischool.utexas.edu/facultysearch.

University of Texas at San Antonio

Faculty Cluster Hire in Cybersecurity

The University of Texas at San Antonio (UTSA) has embarked on a focused cluster hiring plan under the Gold Star Initiative, to recruit top-tier researchers over a four year period. The plan will focus on strategic areas of research excellence, to include cybersecurity, cloud computing and data analytics. UTSA is currently looking for candidates to fill six faculty positions to foster collaborative research, education and outreach and to create interdisciplinary areas of knowledge that will advance the field of cybersecurity.

UTSA is a recognized leader in the field of infrastructure assurance and security by the National Security Agency and the Department of Homeland Security and is a designated Center of Academic Excellence in Information Assurance Education (CAE). In spring 2014, UTSA was ranked #1 nationally for Cyber Security Programs according to a national survey of certified information technology security professionals conducted for Hewlett-Packard. UTSA is home to the Institute for Cyber Security (ICS), which conducts basic and applied cybersecurity research in partnership with academia, government and industry. The Center for Infrastructure Assurance and Security (CIAS), also located at UTSA, has developed the world's foremost center for multidisciplinary education and development of operational capabilities in the areas of infrastructure assurance and security. In complement to the ICS and CIAS, the Center for Education and Research in Information and Infrastructure Security (CERI2S) conducts high impact research, as well as educates the cybersecurity workforce within the San Antonio area and beyond. In partnership with Rackspace, UTSA houses the largest open cloud infrastructure in academia. The Open Cloud Institute is an initiative to develop degree programs in cloud computing and foster collaboration with industry, positioning UTSA and San Antonio as world leaders in open cloud technology.

Required Qualifications and Responsibilities:

The successful applicant will have a Doctoral degree (Ph.D.) and publications commensurate with appointment levels in the department of interest. Successful candidates will be expected to develop and maintain externally funded research programs, engage in both undergraduate and graduate education, and contribute their leadership and innovative thinking towards global prominence in cybersecurity. Teaching opportunities will vary by department and teaching qualifications will be a consideration for fit within their respective department

Application Process:

Applicants must submit their full application package via the respective link to each position. For more information about this cluster and to access the position links, please visit http://resea rch.utsa.edu/research-news/cyber/. For general questions or additional information on the Gold Star Initiative, please contact: Bernard Arulanandam, Interim Vice President for Research at Bernard.arulanandam@utsa.edu or 210-458-8176.

Enterprise Security
Tenure-track Assistant Professor in the Department of Communication.

This position is targeted towards faculty with expertise and interest in the areas of situational awareness and decision-making, cyber data analysis, attack and response, human-machine interactions, organizational communication, information networks, and cybersecurity training.

Professional Opportunities

Cyber Analytics
Tenure-track Assistant, Tenured/ tenure-track Associate Professor in the Department of Information Systems and Cyber Security. This position is targeted towards faculty with expertise and interest in conducting transformative research and developing tangible "big data" solutions to cyber analytics challenges with interests in the following domains: embedded system security, cloud security, enterprise security situational awareness and decision making; and/or digital forensics.

Cyber Decision Support
Tenure-track Assistant, Tenured/ tenure-track Associate Professor in the Department of Information Systems and Cyber Security. This position is targeted towards faculty with expertise and interest in conducting transformative research that enables organizations to make cyber related decisions quickly, effectively, and accurately. We are particularly interested in the following areas: cyber resiliency; enterprise security situational awareness and decision making; and/or risk assessment and management.

Cloud Computing Security
Tenure-track Assistant Professor in the Department of Electrical and Computer Engineering. This position is targeted towards faculty with expertise and interest in security and privacy issues in cloud computing. Specific topics of interest include secure and privacy-aware data analytics in cloud, data analytics techniques to enhance cloud security, secure software defined networking and network function virtualization, cloud monitoring, dependability issues (availability, assurance and recover) in cloud, secure multi-tenancy, hardware architectures to improve cloud security, etc.

Embedded Systems Security
Tenure-track Assistant Professor in the Department of Electrical and Computer Engineering. This position is targeted towards faculty with expertise and interest in embedded systems security. Areas of particular interest are: security of embedded systems with applications to cyber physical systems such as the Internet of Things, energy, transportation, building design, automation, healthcare and manufacturing.

Privacy and Data Protection
Tenure-track Assistant Professor in the Department of Computer Sciences. This position is targeted towards faculty with expertise and interest in privacy protection and security. Applicants with expertise in software engineering, programming languages and compilers, or big data analytics are particularly encouraged to apply.

As an Equal Employment Opportunity and Affirmative Action employer, it is the policy of The University of Texas at San Antonio to promote and ensure equal employment opportunity for all individuals without regard to race, color, religion, sex, national origin, age, sexual orientation, gender identity, disability, or veteran status. The University is committed to the Affirmative Action Program in compliance with all government requirements to ensure nondiscrimination. The UTSA campus is accessible to persons with disabilities.

University of Waterloo

Open Rank Position in Computer Systems Software

The Department of Electrical and Computer Engineering at the University of Waterloo invites applications for a tenure-track position beginning on or around September 1, 2017. The department is particularly interested in candidates with a demonstrated research record in building, evaluating, experimenting with, and scaling of computer systems software, with contributions being publishable in operating systems venues. It is anticipated that the position will be at the rank of Assistant Professor, but exceptional cases at the Associate or Full Professor rank will be considered.

To ensure full consideration, the application must be received before December 31, 2016. For more information on the opening see: https://uwaterloo.ca/engineering/faculty-and-staff/faculty-positions#ECE1

University of Waterloo

Tenured and Tenure-Track Faculty Positions 2016-2017

Applications are invited for several tenure-track or tenured faculty positions in the David R. Cheriton School of Computer Science.

(a) Several Tenure-Track Faculty Positions. Excellent tenure-track faculty members are sought who will enhance the School's strength in Computer Science. Priority areas include Human-Computer Interaction, Computational Complexity, Scientific Computing (especially computational optimization with applications to data science), Computer Systems, and Artificial Intelligence (especially natural language processing and computer vision). As well, there are one or more positions that are open to all areas of Computer Science. Tenured appointments at the Associate and Full Professor level are possible as circumstances warrant. A senior Assistant or Associate Professor appointment may be accompanied with the endorsement of the Cheriton School of Computer Science to apply for a Tier II Canada Research Chair, which the School has available. The CRC Tier II position includes substantial research support and teaching reduction. All successful applicants are expected to engage actively in graduate student supervision and teaching, to contribute to the overall development of the School, and to be, or to have demonstrated the potential to be, leaders in their research

Professional Opportunities

field. A Ph.D. in Computer Science, or equivalent, is required. Rank and salary will be commensurate with experience; the salary range is $110,000 to $170,000 and negotiations beyond this salary range will be considered for exceptionally qualified candidates. Appointments are expected to commence during the 2017 calendar year.

(b) David R. Cheriton Chair in Software Systems. The Cheriton Chairs were created to support world-leading research in traditional and emerging areas of Computer Science and interdisciplinary fields. An outstanding researcher is sought for one endowed Cheriton Chair at the rank of Full or Associate Professor, with tenure. The chair includes substantial research support and teaching reduction. The successful applicant is expected to lead an innovative and high-impact research programme, to engage actively in graduate student supervision, and to contribute to the overall development and reputation of the School. Candidates are expected to have an outstanding research record in software systems (very broadly defined). A Ph.D. in

IQC.UWATERLOO.CA

Postdoctoral Fellowships at the Institute for Quantum Computing

The Institute for Quantum Computing is inviting applications for postdoctoral positions in all aspects of quantum information processing, bridging areas from fundamental theory to physical implementations.

Quantum information science aims to develop transformational technologies that harness the power of quantum mechanics. The Institute for Quantum Computing (IQC) is a world-leading institute for research in quantum information at the University of Waterloo. IQC has 24 faculty members and growing, whose research programs span the areas of Applied Mathematics, Chemistry, Combinatorics & Optimization, Computer Science, Electrical & Computer Engineering, Physics & Astronomy, and Pure Mathematics. IQC members have the opportunity to interact with other research groups at the University, such as the Centre for Applied Cryptographic Research and the nearby Perimeter Institute for Theoretical Physics. New infrastructure, including an advanced nanofabrication and metrology centre, support an expansion of experimental research programs at IQC. We are based in the new Mike and Ophelia Lazaridis Quantum-Nano Centre, a state-of-the-art facility at the heart of the University of Waterloo campus, which provides unprecedented opportunities for research, collaboration and innovation.

We seek promising candidates to help advance the understanding of the foundations of quantum information, to develop new quantum applications and algorithms, and to implement these ideas in laboratory experiments and engineered systems. A PhD and proven ability, or strong potential, for excellence in research is required.

For information on how to join IQC as a postdoctoral fellow, please visit the *Available positions* link at https://uwaterloo.ca/institute-for-quantum-computing/

The preferred deadline for receiving applications is November 1, 2016, but applications may be considered year-round. Candidates are also encouraged to visit the NSERC website to learn about the prestigious Banting Postdoctoral Fellowship. The deadline for the Banting Fellowship applications is September 21, 2016; qualified candidates should contact a potential supervisor immediately.

All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority. The University of Waterloo encourages applications from all qualified individuals, members of visible minorities, native peoples, and persons with disabilities.

UNIVERSITY OF WATERLOO | IQC Institute for Quantum Computing

Professional Opportunities

Computer Science, or equivalent, is required and rank and salary will be commensurate with experience; the salary range is $150,000 to $200,000 and negotiations beyond this salary range will be considered for exceptionally qualified candidates.

The David R. Cheriton School of Computer Science is the largest computer science school in Canada, with 83 faculty members. It enjoys an excellent reputation in pure and applied research and houses a diverse research program of international stature. Because of its recognized capabilities, the School attracts exceptionally well-qualified students at both undergraduate and graduate levels. In addition, the University has an enlightened intellectual property policy that vests all rights in the inventor.

Please see our web site for more information: https://www.cs.uwaterloo.ca.

]To submit an application, please register at the submission site: https://www.cs.uwaterloo.ca/faculty-recruiting. Once registered, instructions will be provided regarding how to submit your full application. Applications will be considered when they are complete and as long as positions are available. However, full consideration for the regular tenure-track positions (a) is assured only for applications received by **November 30, 2016.**

The University of Waterloo respects, appreciates and encourages diversity. We welcome applications from all qualified individuals including women, members of visible minorities, Aboriginal peoples and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

"Three reasons to apply: https://uwaterloo.ca/watport/why-waterloo."

Vanderbilt University

Two Tenure-Track or Tenured Faculty Positions in Computer Science

THE DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE AT VANDERBILT UNIVERSITY is seeking candidates for two tenured/tenure-track faculty positions in Computer Science. Appointments at all ranks will be considered, with preference for candidates at the assistant professor level. Areas of primary emphasis are (1) computer-assisted surgery and interventions and (2) Big Data/Data Science/AI. We are particularly interested in applicants with expertise in machine learning, data mining, computer vision, image processing, visualization, and artificial intelligence. The Vanderbilt CS

WHITTIER COLLEGE 1887

WHITTIER, CA

"Light, Poetry, Truth, Peace, and Love of Knowledge."

Mathematics/Computer Science

Whittier College announces a tenure-track assistant professor position in Mathematics and Computer Science beginning Fall 2017.

Applicants must have a PhD in mathematics and a Master's degree (or the equivalent) in computer science, or vice versa (ABD considered if PhD will be completed by Sept. 2017). The successful candidate will teach courses serving our newly created interdisciplinary Computer Science major, such as Operating Systems, Computer Architecture and Compilers, Introduction to Computer Science, Discrete Mathematics, and Calculus, as well as some mathematics service courses below the calculus level. The successful candidate will participate in establishing the new major.

To apply, please send a cover letter, CV, statement of teaching philosophy and experience, evidence of effective teaching, unofficial graduate transcripts, and 3 confidential letters of reference sent by the references to mathsearch@whittier.edu, (PDFs preferred). Review of applications will begin November 15, 2016, (for full consideration, complete applications must be in by Dec. 15, 2016). Women and minorities are particularly encouraged to apply.

Whittier College is an independent, four-year liberal arts college distinguished by its small size and a nationally recognized liberal arts program. Whittier College has a history of strong, innovative interdisciplinary programs and a very diverse student body with over 60% students of color. The College is ideally situated in the scenic hills 18 miles east of downtown Los Angeles and is an AA/EOE employer. More information on the position is available at **http://apptrkr.com/876813.**

Professional Opportunities

program provides a unique, collaborative, and interdisciplinary research environment. New trans-institutional programs are creating opportunities for research on issues of broad significance that create and extend collaborations across multiple fields.

Vanderbilt University is an equal-opportunity, affirmative-action employer. We strongly encourage applications from women and members of under-represented minority groups.

Applications should be submitted on-line at: https://academicjobsonline.org/ajo/jobs/7736. For more information, please visit our web site: http://engineering.vanderbilt.edu/eecs/.

Applications will be reviewed on a rolling basis beginning November 1, 2016 with telephone interviews beginning December 1, 2016. The final application deadline is January 15, 2017.

Visa Research

Research Scientist

Visa Research currently focuses on building research teams in three key areas: Data Analytics – (Machine/Deep Learning), Security – (System Security/Crypto) and Future of Payment – (HyperLedger/Blockchain). We are looking for outstanding researchers at all levels of experience.

Working on data analytics research at Visa is a unique opportunity at a time when the payments industry is undergoing a digital transformation with data as a critical differentiator. We offer you the opportunity to be at the center of innovation in the payments industry and unleash the power of data through conducting advanced research".

Please reply with a CV to: jmooney@visa.com .

Washington University in St. Louis

Tenure-Track Faculty Position

The Department of Computer Science & Engineering at Washington University in St. Louis seeks outstanding tenure-track faculty in all areas of computer science and engineering.

Our department has been growing with plans to continue expanding in the coming years. We seek talented and highly motivated individuals who will build transformative research programs through work in the core disciplines of computer science and computer engineering, as well as through interdisciplinary collaborations. While candidates from all areas of computer science and engineering will be considered, we particularly welcome those with expertise in one of the following: (1) advancing and harnessing data science with a focus on the social sciences and humanities, (2) theory and practice of data security, privacy, and safety in a world of connected resources and devices, and (3) systems and algorithmic advances supporting highly scalable, cloud-based machine learning and data analytics. In addition, the department is participating in a separate, large-scale recruiting effort with our School of Engineering and School of Medicine in the area of imaging, which aims to recruit twelve new faculty over the next few years. Successful candidates will show exceptional promise for research leadership and a strong commitment to high-quality teaching. Candidates will be expected to publish their research in peer-reviewed conferences and journals, teach, and participate in department and university service.

Our faculty is engaged in a broad range of research activities. Key strategic themes include: tight integration of computation with the human and physical worlds, the extraction of knowledge from massive data sets, and the design of safe, secure, and scalable computing systems. The impact of our work is magnified through interdisciplinary collaborations throughout the School of Engineering, with colleagues in the sciences, arts, and humanities, and with our world-renowned School of Medicine. Our doctoral graduates go on to leadership positions in both academia and industry. The department values both fundamental and applied research and has a strong tradition of successful technology transfer. Our faculty is known for its collegiality and for providing a supportive environment for new arrivals.

Washington University is a private university with roughly 7,000 full-time undergraduates and 7,000 graduate students. It is nationally known for the exceptional quality of its student body and for its attractive campus, which borders residential neighborhoods and one of the nation's largest urban parks. Many faculty walk or bike to work. St. Louis combines a Midwest cost of living with a vibrant metropolitan area, offering a wealth of cultural and entertainment opportunities.

Appointment is expected at the rank of Assistant Professor; however, exceptionally qualified applicants may be considered for appointments at the Associate or Full Professor level. Applicants must hold a doctorate in Computer Science, Computer Engineering, or a closely related field.

Qualified applicants should submit a complete application (cover letter, curriculum vitae, research statement, teaching statement, and contact information for at least three references) through AcademicJobsOnline at https://academicjobsonline.org/ajo/jobs/7957. (Candidates for the imaging search should instead visit https://engineering.wustl.edu/facultyopenings.) Other communications may be directed to Prof. Roch Guérin, Department of Computer Science & Engineering, Campus Box 1045, Washington University in St. Louis, One Brookings Drive, St. Louis, MO 63130-4899.

Professional Opportunities

Applications received by December 15, 2016 will receive full consideration.

Washington University is an Equal Opportunity and Affirmative Action employer and is strongly committed to enhancing the diversity of its faculty; applications from women and under-represented minorities are especially encouraged. Employment eligibility verification will be required upon employment.

Wesleyan University

Assistant Professor of Computer Science

The Department of Mathematics and Computer Science at Wesleyan University invites applications for a tenure track assistant professorship in Computer Science to begin in Fall 2017. We encourage candidates in all areas of Computer Science to apply, including those who deepen our existing research strengths, and especially encourage candidates who can contribute to the diversity (broadly conceived) of the department. The teaching load is 2/1 (three courses per year).

We will begin reviewing applications on Dec. 1, 2016. Applications must be submitted online at https://academicjobsonline.org/ajo/jobs/7547, where the full job description may be found.

Williams College

Tenure Track Assistant Professor in Computer Science

The Department of Computer Science at Williams College invites applications for an opening at the Assistant Professor level for the fall of 2017. This is a tenure-track position with a three-year initial term. A more senior appointment is possible in exceptional circumstances. This position is open to all areas of computer science. New faculty will join eight current members of the department in supporting a thriving and robust undergraduate computer science major. Candidates should have a commitment to excellence in teaching, an active research program, and should, by September 2017, possess a Ph.D. in computer science or a closely related field. The successful candidate will teach a total of three courses during the academic year, along with associated labs.

Williams College is a coeducational liberal arts institution located in the Berkshire Hills of western Massachusetts. The college has built its reputation on outstanding teaching and scholarship and on the academic excellence of its approximately 2,000 students. The Department of Computer Science offers a congenial working environment with small classes, an excellent and diverse student body, and state-of-the-art facilities. Many opportunities exist for collaboration across disciplines, particularly with other faculty in the sciences.

We welcome applications from members of groups traditionally underrepresented in the field, and applicants are encouraged to state in their cover letter how, if hired, they will enhance our current course offerings and educational experiences. Beyond meeting fully its legal obligations for non-discrimination, Williams College is committed to building a diverse and inclusive community where members from all backgrounds can live, learn, and thrive. Applications should also include a curriculum vitae, teaching and research statements, and three letters of reference, at least one of which speaks to the candidate's promise as a teacher. Application materials must be submitted electronically via http://www.cs.williams.edu.

Materials may be addressed to:
Professor Brent Heeringa, Chair
Department of Computer Science
Williams College
Williamstown, MA 01267

Review of applications will begin on December 1, 2016, and will continue until the position is filled. Please direct all correspondence to hiring@cs.williams.edu. All offers of employment are contingent upon completion of a background check. Further information is available at http://dean-faculty.williams.edu/prospective-faculty/background-check-policy.

York University

Sessional Assistant Lecturer (alternate stream), Course Coordinator, 3-year Contractually Limited Appointment (CLA)

The Department of Electrical Engineering and Computer Science, York University, is seeking a 3-year Contractually Limited Appointment (CLA) at the rank of Sessional Assistant Lecturer (alternate stream) to serve as Course Coordinator of all first-year Major and Service computing courses offered by the Department, to commence July 1, 2017, subject to budgetary approval. The successful candidate has demonstrated excellence in teaching, is licensed as a Professional Engineer in Canada or could obtain licensure in the very short term, and will assume the teaching of up to 6 course sections.

For full position details, see http://www.yorku.ca/acadjobs. Applicants should complete the on-line process at http://lassonde.yorku.ca/new-faculty/. A complete application includes a cover letter, a detailed curriculum vitae, statement of contribution to research, teaching and curriculum development, three sample research publications and three reference letters. Complete applications must be received by **December 31, 2016.** York University is an Affirmative Action (AA) employer. The AA Program can be found at http://www.yorku.ca/acadjobs or a copy can be obtained by calling the AA office at 416-736-5713.

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

Professional Opportunities

York University

Full/Associate/Assistant Professor (Electric Power) and Assistant Professor (Biomedical Engineering or Micro/Nanoelectronics)

The Department of Electrical Engineering and Computer Science, York University, is seeking two outstanding candidates, one at the rank of Full, Associate or Assistant Professor in the area of Electric Power Engineering and one at the rank of Assistant Professor in Biomedical Engineering or Micro/Nanoelectronics, although exceptional applicants from other areas in Electrical Engineering may also be considered. Successful candidates will have a PhD in Electrical Engineering, or a closely related field, and a research record commensurate with rank. Appointments are to commence on July 1, 2017, subject to budgetary approval.

For full position details, see http://www.yorku.ca/acadjobs. Applicants should complete the on-line process at http://lassonde.yorku.ca/new-faculty/. A complete application includes a cover letter indicating the rank for which the candidate wishes to be considered, a detailed CV, statement of contribution to research, teaching and curriculum development, three sample research publications and three reference letters. Complete applications must be received by **November 30, 2016.** York University is an Affirmative Action (AA) employer. The AA Program can be found at http://www.yorku.ca/acadjobs or a copy can be obtained by calling the AA office at 416-736-5713.

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

York University

Tenure-Track Appointment

The Department of Electrical Engineering and Computer Science, York University, invites applications for a tenure-track appointment at the rank of Assistant Professor in the area of Computer Science, to commence July 1, 2017, subject to budgetary approval. We are seeking an outstanding candidate with a particular research focus and ability to teach in Robotics or Machine Learning, although exceptional applicants in other areas of computer science will be considered. The successful candidate will have a PhD in Computer Science, or a closely related field, and a research record commensurate with rank.

For full position details, see http://www.yorku.ca/acadjobs. Applicants should complete the on-line process at http://lassonde.yorku.ca/new-faculty/. A complete application includes a cover letter, a detailed curriculum vitae, statement of contribution to research, teaching and curriculum development, three sample research publications and three reference letters. Complete applications must be received by November 30, 2016.

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