CRN At-A-Glance

Announcing the 2020 Computing Innovation Fellows

CRA and CCC are extremely excited to announce the CIFellows for 2020! They comprise 59 diverse researchers covering a broad range of research areas in computing. The class of Fellows is 52% women, come from 46 universities, and will be beginning their fellowships at 43 different universities. You can find out more about each fellow and the program here.

See page 2 for full article.

CRA Taulbee Survey Announcement

The 2020 CRA Taulbee Survey will be starting soon. As has been our recent practice, the survey will be split into two parts, salary and main (everything else). This allows us to set an earlier deadline for the salary section in order to produce a preliminary salary report in December, while giving departments more time to collect and enter the information in the rest of the survey if needed.

See page 6 for full article.

Nominations Open for 2021 CRA Award for Outstanding Undergraduate Researchers

The Computing Research Association (CRA) is pleased to announce the annual CRA Award for Outstanding Undergraduate Researchers, which recognizes undergraduate students in North American colleges and universities who show outstanding research potential in an area of computing research. The award is a wonderful way to recognize your best student researchers and your department.

See page 5 for full article.

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Announcing the 2020 Computing Innovation Fellows

This past spring, when hiring practices were rapidly changing due to COVID-19, the Computing Research Association (CRA) and its Computing Community Consortium (CCC) launched the CIFellows 2020 program, with strong support from the National Science Foundation (NSF). The program aims to provide a career-enhancing bridge experience for recent and soon-to-be Ph.D. graduates in computing. This effort was inspired by the CRA/CCC’s NSF-funded Computing Innovation Fellows Programs with cohorts starting 2009, 2010, and 2011, which funded a total of 127 fellows after the 2008 recession.

Many people invested their time and talents to our CIFellows 2020 program, including co-principal investigators on the NSF grant that funded the program: Andrew P. Bernat (CRA Executive Director), Elizabeth Bradley (CCC Chair), Ann Schwartz Drobnis (CCC Director), Mark D. Hill (CCC Chair Emeritus and CRA Board Member), and Ellen W. Zegura (PI and CRA Board Chair). Within one month of the program’s announcement, 550 applications were submitted covering a wide variety of research areas and over 140 universities. The applications were reviewed by more than 270 members of the community under a tight two week deadline. Thank you to the entire community for your involvement in promoting, mentoring, and reviewing applications for our recent graduates.

CRA and CCC are extremely excited to announce the CIFellows for 2020! They comprise 59 diverse researchers covering a broad range of research areas in computing. The class of Fellows is 52% women, come from 46 universities, and will be beginning their fellowships at 43 different universities. Below is a listing of the 2020 CIFellows. You can find out more about each fellow and the program here.

CRA and CCC are working with the computing community to ensure that this program facilitates career and skill growth for the Fellows in supportive environments to foster the talent of the future computing research community. Please join us in congratulating the new Fellows!

<table>
<thead>
<tr>
<th>CIFellow</th>
<th>Ph.D. Institution</th>
<th>Fellowship Institution</th>
<th>Mentor</th>
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<td>Alex Ahmed</td>
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<td>Rika Antonova</td>
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<td>Stanford University</td>
<td>Jeannette Bohg</td>
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<td>Georgia Institute of Technology</td>
<td>Moinuddin Qureshi</td>
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<td>Maynard Ball</td>
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<td>Huija Lin</td>
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<td>Suguman Bansal</td>
<td>Rice University</td>
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<td>Rajeev Alur</td>
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### Awards Announced (continued)

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<tr>
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<td>Richard Canevez</td>
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<td>Marco Carmosino</td>
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<td>Kathryn Cunningham</td>
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<td>Wenhan Dai</td>
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<td>Sunipa Dev</td>
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<td>Michael Ann DeVito</td>
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<td>University of Colorado Boulder</td>
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<td>Yi Ding</td>
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<td>Massachusetts Institute of Technology</td>
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<td>Houda El mimouni</td>
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<td>Emmanuel Garza</td>
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<td>Shiry Ginosar</td>
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<td>Ben Greenman</td>
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<td>Naja Mack</td>
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<td>Lara Martin</td>
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<td>David Narváez</td>
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<td>Sabrina Neuman</td>
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<td>Stan Osher</td>
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<td>Abigale Stangl</td>
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<td>Tara Zimmerman</td>
<td>University of North Texas</td>
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<td>Kenneth Fleischmann</td>
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Nominations Open for 2021 CRA Award for Outstanding Undergraduate Researchers

The Computing Research Association (CRA) is pleased to announce the annual CRA Award for Outstanding Undergraduate Researchers, which recognizes undergraduate students in North American colleges and universities who show outstanding research potential in an area of computing research. The award is a wonderful way to recognize your best student researchers and your department.

Eligible nominees must be enrolled as undergraduates in a North American college or university in Fall 2020. PhD-granting departments may nominate up to four students and other departments may nominate up to two students.

Up to four CRA Outstanding Undergraduate Research Awards will be made. Each award recipient will receive financial assistance of up to $1500 to attend a research conference of their choice. Additional nominees will be designated as runners-up, finalists, and honorable mentions. The award recipients, runners-up, finalists, and honorable mentions will be announced by e-mail in mid-December, will receive certificates of their awards, and will be recognized on CRA’s website.

Everything you need to submit a nomination for the CRA Outstanding Undergraduate Researchers Award, including detailed instructions and the nomination form, is available at: http://cra.org/crae/awards/cra-outstanding-undergraduate-researchers/.

Microsoft Research and Mitsubishi Electric Research Labs (MERL) sponsor the CRA Outstanding Undergraduate Researchers Award Program in alternate years. The 2021 award is being sponsored by Microsoft Research. This award is managed by the CRA Education Committee.

Faculty members nominating a student for the CRA award are encouraged to talk to the student about the NSF Graduate Research Fellowship Program (GRFP). The required nomination materials are similar and some can be used for both the CRA-E award and the NSF GRFP application. The NSF Graduate Research Fellowship Program recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based Master’s and doctoral degrees at accredited United States institutions. See https://www.nsfgrfp.org/ for information for applicants, letter writers, how to sign up as a panelist, and the program solicitation. Applications for GRFs are due the week after the CRA award nominations, on October 20, 2020.

Questions and inquiries about the awards should be sent to: undergradawards@cra.org. The deadline for nominations is Friday, October 16, 2020, at 9 PM ET. Please note that an account needs to be created for submitting a nomination. The nominations package needs to be submitted as one PDF file in the order specified in the instructions.

Please share this document with your colleagues!
CRA Taulbee Survey Announcement

The 2020 CRA Taulbee Survey will be starting soon. As has been our recent practice, the survey will be split into two parts, salary and main (everything else). This allows us to set an earlier deadline for the salary section in order to produce a preliminary salary report in December, while giving departments more time to collect and enter the information in the rest of the survey if needed.

Taulbee Schedule

**By September 16:** All doctoral departments will be contacted to update Taulbee user information. The academic unit head will receive an email and so will the Taulbee primary contact(s), if separate. The data-gathering pdf will also be available at this time.

**September 22:** Both Salary and Main surveys open for input.

**November 24:** Due date for salary section.

**Late December:** Preliminary salary report available to participants.

**January 20, 2021:** Due date for the main Taulbee section.

**April 2021:** Full Taulbee report to CRA members and participating departments.

**May 2021:** Published in *CRN*.

The Taulbee Survey is open to all academic units that grant doctorates in Computer Science, Computer Engineering, or Information. If you have any questions, contact Betsy Bizot at [bizot@cra.org](mailto:bizot@cra.org).
The following is a press release from the National Science Foundation about the newly announced Artificial Intelligence (AI) Institutes. In 2018-2019, the Computing Community Consortium (CCC) brought together over 100 members of the research community, led by Yolanda Gil (University of Southern California and Past President of AAAI) and Bart Selman (Cornell University and President of AAAI) to come up with a research roadmap for AI. The completed Artificial Intelligence (AI) Roadmap, A 20-Year Community Roadmap for AI Research in the US, was released in August 2019. One of the recommendations from the Roadmap was to create National AI Research Centers: multi-university centers with affiliated institutions that are focused on pivotal areas of long-term AI research. See the OSTP announcement here.

**NSF Advances Artificial Intelligence Research with New Nationwide Institutes**

By CCC Staff

The NSF-led AI Research Institutes — two USDA-NIFA AI hubs plus five NSF — comprise the nation’s most significant single federal investment in AI to date and will advance national competitiveness in AI by accelerating research, transforming society, and growing the American workforce.

WASHINGTON — The U.S. National Science Foundation is establishing new artificial intelligence institutes to accelerate research, expand America’s workforce, and transform society in the decades to come. Enabled by sustained federal investment and channeled toward issues of national importance, continued advancement in AI research holds the potential for further economic impact and improvements in quality of life.

With an investment of over $100 million over the next five years, NSF’s Artificial Intelligence Institutes represent the nation’s most significant federal investment in AI research and workforce development to date. The $20 million investment in each of five NSF AI institutes is just the beginning, with more institute announcements anticipated in the coming years.
“NSF’s long history of investment in AI research and workforce development paved the way for many of the breakthrough commercial technologies permeating and driving society today,” said NSF Director Sethuraman Panchanathan. “NSF invests more than $500 million in AI research annually. We are supporting five NSF AI Institutes this year, with more to follow, creating hubs for academia, industry, and government to collaborate on profound discoveries and develop new capabilities to advance American competitiveness for decades to come.”

Led by NSF, and in partnership with the U.S. Department of Agriculture’s National Institute of Food and Agriculture, the U.S. Department of Homeland’s Security Science and Technology Directorate, and the U.S. Department of Transportation’s Federal Highway Administration, these institutes will serve as nodes in a broader nationwide network that will pursue transformational advances in sectors of societal impact, from extreme weather preparedness to K-12 education. In addition to the five new NSF AI Institutes, USDA is announcing two of its first institutes today supported through this joint program, providing an additional $40 million over the next five years.

• **NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography**, led by a team at the University of Oklahoma, Norman, assembles researchers in AI, atmospheric and ocean science, and risk communication to develop user-driven trustworthy AI that addresses pressing concerns in weather, climate, and coastal hazards prediction. With AI certificate programs aimed at workforce skills, the institute is providing the research and training necessary for the future workforce to deliver the advances needed to deal with forecasting and prediction challenges.

• **NSF AI Institute for Foundations of Machine Learning**, led by a team at the University of Texas, Austin, focuses on major theoretical challenges in AI, including next-generation algorithms for deep learning, neural architecture optimization, and efficient robust statistics. The institute’s partners include large industrial technology companies and the city of Austin. Major online coursework and research initiatives will bring current AI tools to thousands of students and professionals across the country.

• **NSF AI Institute for Student-AI Teaming**, led by a team at the University of Colorado, Boulder, develops groundbreaking AI that helps both students and teachers to work and learn together more effectively, and equitably, while helping educators focus on what they do best: inspiring and teaching students. The vision is to develop engaging “AI partners” that will observe, participate in, and facilitate collaborative STEM learning conversations by interacting naturally through speech, gesture, gaze, and facial expression in real-world classrooms and remote learning settings.

• **NSF AI Institute for Molecular Discovery, Synthetic Strategy, and Manufacturing (or the NSF Molecule Maker Lab)**, led by a team at the University of Illinois at Urbana-Champaign, focuses on development of new AI-enabled tools to accelerate automated chemical synthesis and advance the discovery and manufacture of novel materials and bioactive compounds. The institute also serves as a training ground for the next generation of scientists with combined expertise in AI, chemistry, and bioengineering.

• **NSF AI Institute for Artificial Intelligence and Fundamental Interactions**, led by a team at the Massachusetts Institute of Technology, incorporates workforce development, digital learning, outreach, and knowledge transfer programs to develop AI methods that integrate the laws of physics as a guiding framework to advance our knowledge — from the smallest building blocks of nature to the largest structures in the universe — and galvanize AI research innovation to broaden societal impacts.

• **USDA-NIFA AI Institute for Next Generation Food Systems**, led by a team at the University of California, Davis, integrates a holistic view of the food system with AI and bioinformatics to understand biological data and processes, addressing issues of molecular breeding to optimize traits for yield, crop quality, and pest/disease resistance, agricultural production, food processing and distribution, and nutrition. Major emphasis is on inclusive education and outreach approaches to build a diverse, next-generation workforce.

• **USDA-NIFA AI Institute for Future Agricultural Resilience, Management, and Sustainability**, led by a team at the University of Illinois at Urbana-Champaign, advances AI research in computer vision, machine learning, soft object manipulation and intuitive human-robot interaction to solve major agricultural challenges including labor shortages, efficiency and welfare in animal agriculture, environmental resilience of crops, and the need to safeguard soil health. The institute features a new joint
Computer Science + Agriculture degree and global clearinghouse to foster collaboration in AI-driven agriculture research.

“The National AI Institutes being awarded today comprise large, multi-disciplinary, and multi-sector collaborations: they bring together consortia of dozens of universities and other organizations, ultimately spanning academia, government, and industry,” said Michael Kratsios, U.S. Chief Technology Officer. “In effect, over the next five years, some of the best minds in the country will be tackling some of the grandest challenges that we face, both in terms of new AI techniques as well as breakthroughs in fields of science and engineering and sectors of our economy. And along the way, they will nurture the future American workforce in AI research and practice.”

Learn more about the NSF AI Institutes and artificial intelligence research by visiting nsf.gov.

For more on NSF’s investments in AI, see our fact sheet, “American Leadership in Artificial Intelligence” and the NSF Science Matters article “New NSF AI Research Institutes Push Forward the Frontiers of Artificial Intelligence”.
By Sally Wynn

Housed at Northeastern’s Khoury College of Computer Sciences, the Center for Inclusive Computing (“the Center”) serves as a catalyst in helping universities take the lead in educating more women in computing, both to meet a significant economic need and to address the issues of social inequity and exclusion. The Center awards funding to colleges and universities to scale best practices known to increase the representation of women in undergraduate computing. While these best practices are well documented and widely known, stagnant percentages indicate that uptake has been slow.

In order to accelerate change, the Center invites nonprofit colleges and universities to apply for one of two funding opportunities: Best Practice Grants and Data Grants.

**Best Practice Grants** fund the implementation of evidence-based approaches that have been shown to quickly and substantially increase the representation of women in computing. To qualify, schools must graduate 200 or more computing graduates annually. Grants range from $500,000 to $2,000,000 with the goal of implementing tailored interventions to address each institution’s unique challenges to broadening participation. Launched last fall, the Center is actively working with twelve institutions to implement significant curricular, pedagogical, and/or cultural improvements targeted at inclusion. As part of the grant, schools receive support from Technical Advisors, senior level computing faculty who have firsthand experience in implementing changes that have led to significant increases in representation of women in computing. “We are on hand to provide feedback and guidance to the project team as they plan and implement the funded interventions. Best Practice Grants are a game changer for diversifying computing programs!” says Tracy Camp, Technical Advisor and Department Head of Computer Science at Colorado School of Mines.

In addition to funding and technical assistance, collecting data for diagnostic and evaluation purposes represents another key aspect of the Center’s work. Many of the interventions the Center funds are targeted at the introductory computer science sequence, which is widely accepted as a critical point in the computing pipeline. With this in mind, the Center designed a unique and robust survey that looks specifically at course to course persistence in introductory computer science sequences. By taking an intersectional approach and tracking gender and ethnicities of students, this data identifies precisely where groups underrepresented in computing are leaving the major.

While **Best Practice Grants** provide crucial funding and advisory support...
for transformational and sustainable changes, **Data Grants** offer schools the resources to diagnose precisely where their undergraduate pipeline may be leaking. Schools awarded a Data Grant are funded $60,000 over two years to participate in the Center’s data collection initiative, gaining access to a critical tool that can identify pivotal areas in need of improvement. To qualify, schools must graduate 100 or more computing graduates annually. The aim of the data collection is to benefit the individual schools and inform researchers and university leadership on what exactly works to make their computing program a welcome place for all.

The Center seeks to significantly grow the network of schools committed to creating sustainable change in undergraduate computing programs across the country. The goal is to award at least 25 Best Practice Grants and 40 Data Grants.

Funding will occur twice per year until those goals are reached:

- Schools can apply for a Data Grant starting **September 4, 2020**.
- Applications for Best Practice Grants and Data Grants are due **October 23, 2020**.

To learn if your institution is eligible and how to apply, please visit our [website](http://www.cra.org) for more information or email inquiries to khoury-cic@northeastern.edu.

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**About the Author**

Sally Wynn is the Program Coordinator for the Center for Inclusive Computing. She primarily handles communications and grant processing for the Center. Sally earned a master’s degree in Public Health from Boston University with a certificate in Health Policy & Law.
**Women and Non-binary Gendered Computing Professionals Report Lower Confidence in Their ability to Negotiate for Resources**

*By Heather M. Wright, Associate Director of CERP*

During the fall semester of 2018, CERP collected survey data from 1,510 respondents who were not students through the Data Buddies Survey. Of those, 88% were currently employed either full-time or part-time in a computing-related job. CERP asked to what degree survey respondents felt confident in their abilities to raise important issues in meetings, speak directly with their supervisor about issues they are having at work, and negotiate for resources related to their job (e.g., salary, lab space, equipment, etc.).

For this analysis, CERP tested whether the degree to which survey respondents felt confident in their abilities to support themselves at work differed by respondents’ reported gender identity. CERP found that compared to men, respondents who identified as women or a non-binary gender reported less confidence in their ability to negotiate for resources for their job. There were no statistically significant differences in respondents’ confidence to raise issues in meetings or with their supervisor.

### Computing professionals’ level of confidence by gender identity

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<th>Men</th>
<th>Women</th>
<th>Non-binary</th>
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<tr>
<td>I am confident that I can raise important issues in meetings</td>
<td>4.12</td>
<td>4.02</td>
<td>4.26</td>
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<tr>
<td>I am confident that I can speak directly with my supervisor about issues I am having at work</td>
<td>4.24</td>
<td>4.18</td>
<td>4.11</td>
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<tr>
<td>I am confident that I can negotiate for resources (e.g., salary, lab space, equipment, etc.)</td>
<td>3.49</td>
<td>3.15</td>
<td>2.95</td>
</tr>
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Source: Data Buddies Survey (DBS) 2018. Center for Evaluating the Research Pipeline, Computing Research Association

Notes: Sample includes non-student professionals who were employed full-time or part-time in a computing-related job at the time of the survey. Graph displays mean values (scale from 1 “strongly disagree” to 5 “strongly agree”) and 95% confidence intervals.

Sample sizes: Men ($n = 776$); Women ($n = 491$); Non-binary gender ($n = 19$).
Of importance, CERP also tested whether respondents included in this analysis were statistically different in the length of time spent in their positions. For example, it is possible that those who have been employed for a shorter length of time might be less confident in their abilities to speak up at work compared to those who have been in their positions longer-term. CERP found that all groups (men, women, non-binary gendered respondents) were statistically equivalent in their average tenure length with their current employer.

Notes:

The survey data analyzed for this infographic were collected by Center for Evaluating the Research Pipeline via The Data Buddies Project. For this analysis, CERP conducted a one-way ANOVA, with gender identity as the independent variable, and Dunnett’s t test (2-sided) post hoc comparison tests, with men treated as the “control”. Sample sizes: Men (n = 776); Women (n = 491); Non-binary gender (n = 19). Differences between means were considered statistically significant when p ≤ 0.05. Results of the one-way ANOVA are displayed below, followed by mean differences (MD) and p values for each post hoc comparison test:

- I am confident that I can raise important issues in meetings: Result of ANOVA (F(2,1283) = 2.38, p = .09). Result of Dunnett’s t test (2-sided) post hoc comparisons (Men vs Women (MD = .10, p = .09); Men vs Non-binary (MD = .14, p = .74)).
- I am confident that I can speak directly with my supervisor about issues I am having at work: F(2,1282) = .96, p = .39. Men vs Women (MD = .07, p = .36); Men vs Non-binary (MD = .14, p = .76).
- I am confident that I can negotiate for resources (e.g., salary, lab space, equipment, etc.): F(2,1281) = 17.26, p ≤ 0.001. Men vs Women (MD = .34, p ≤ 0.001); Men vs Non-binary (MD = .54, p = .05).

To ensure there were no major differences in respondents’ tenure with their current employer, CERP conducted a one-way ANOVA, with gender identity treated as the independent variable and length of time with current employer treated as the dependent variable. Results of the one-way ANOVA are as follows: F(2,852) = .062, p = .94. Average length of time and standard deviation (SD) with employer are as follows:

- Men: 1.91 years; SD = 2.61.
- Women: 1.97 years; SD = 2.64.
- Non-binary: 2.00 years; SD = 1.48.

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. Subscribe to the CERP newsletter here. Volunteer for Data Buddies by signing-up here.

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Professional Opportunities

**AAAS Science & Technology Policy Fellowships**

**ABOUT STPF**

This professional-level fellowship is the premier opportunity for outstanding computer and information scientists to learn first-hand about policymaking, bring valuable expertise to policy and enhance scientific representation in the federal government.

Fellows serve yearlong assignments in the federal government in Washington D.C. and represent a broad range of backgrounds, disciplines and career stages. STPF is seeking candidates with strong background in mathematics and computer science, an interest in career transformation, and a desire to impact federal policy.

**QUALIFICATIONS**

Eligibility requirements include U.S. citizenship and a doctoral level STEM degree.

**STIPEND & BENEFITS**

- $80,000–105,000.
- Health insurance
- Travel/training and relocation allowances.

**APPLICATION DEADLINE:**

November 1, 2020

**FELLOWSHIP YEAR:**

September 1, 2021 – August 31, 2022

**APPLY NOW:**


**Baidu Research Cognitive Computing Lab**

**Postdoctoral Researchers in Cognitive Computing**

Baidu Research Cognitive Computing Lab (CCL) is looking for outstanding researchers with strong background in machine learning, statistics, applied mathematics, systems, databases, NLP, computer vision, security, theoretical computer science, etc. Our mission is to develop next generation cognitive computing technologies for better connecting billions of users to services. Our postdoctoral researchers are expected to focus on basic research in broad AI-related fields. This would be an excellent opportunity for fresh PhD graduates in CS, Statistics, EE, Amath, etc., to spend 1 – 3 years in an industrial research environment to prepare for their long-term research careers either in academia or research labs.

Qualifications:

1. PhD in Computer Science, Statistics, Electrical Engineering, Mathematics, Operation Research, or related fields.
2. Excellent publication record in major CS conferences or premier Stat/EE/SIAM journals. Examples are CVPR, FOCS, KDD, ACL, WWW, ICML, SIGMOD, JMLR, PAMI, IEEE Info. Theory, major statistics/mathematics journals, SIAM J. Computing, SIAM J. Optimization, etc.
3. Strong analytical and problem-solving skills.
4. Team player with good communication skills.

Locations: Bellevue WA, Sunnyvale CA, or Beijing China. Please send CV to cct-job@baidu.com

**Boston College**

**Non Tenure Track Position in Computer Science**

The Computer Science Department of Boston College seeks to fill one or possibly more non-tenure track teaching positions, as well as shorter-term visiting teaching positions. **One of these positions has a January, 2021 start date.** All applicants should be committed to excellence in undergraduate education, and be able to teach a broad variety of undergraduate computer science courses. We are especially interested in candidates who are able to teach courses in systems and networks. Faculty in longer-term positions will also participate in the development of new courses that reflect the evolving landscape of the discipline.

Minimum requirements for the title of Assistant Professor of the Practice, and for the title of Visiting Assistant Professor, include a Ph.D. in Computer Science or closely related discipline.

Candidates without a Ph.D. would be eligible for the title of Lecturer, or Visiting Lecturer.

We will begin reviewing applications as they are received and will continue considering applications until the positions are filled. Applicants should submit a cover letter, CV, and a separate teaching statement and arrange for three confidential letters of recommendation that comment on their teaching performance to be uploaded directly to Interfolio. To apply go to: [http://apply.interfolio.com/78108](http://apply.interfolio.com/78108)
Boston College conducts background checks as part of the hiring process. Information about the University and our department is available at bc.edu and cs.bc.edu.

Boston College is a Jesuit, Catholic university that strives to integrate research excellence with a foundational commitment to formative liberal arts education. We encourage applications from candidates who are committed to fostering a diverse and inclusive academic community. Boston College is an Affirmative Action/Equal Opportunity Employer and does not discriminate on the basis of any legally protected category including disability and protected veteran status. To learn more about how BC supports diversity and inclusion throughout the university, please visit the Office for Institutional Diversity at http://www.bc.edu/offices/diversity.

Carnegie Mellon University
School of Computer Science

Faculty Hiring

The School of Computer Science consists of seven departments, spanning a wide range of topics in computer science and the application of computers to real-world systems. Faculty positions are specific to each department, though in certain cases, joint positions are also possible.

We are seeking tenure, research, and systems track faculty candidates with a strong interest in research, an earned Ph.D., and outstanding academic credentials. Candidates for tenure track appointments should also have a strong interest in graduate and undergraduate education.

We are also seeking teaching track faculty candidates. You should have a Ph.D. in Computer Science or a related computing discipline, a background of demonstrated excellence and dedication to teaching, the ability to collaborate with other faculty in a fast-paced environment, and must be prepared to teach in a wide variety of settings, including large undergraduate lecture courses and classes delivered in non-traditional formats.

Candidates with a commitment toward building an equitable and diverse scholarly community are particularly encouraged to apply. We continuously seek to improve the diversity of our student, staff and faculty populations, including and especially through annual faculty hiring processes. Our hiring committees thoroughly review the qualifications of every applicant, and are particularly enthusiastic about applicants whose background and experiences would make them unique among our faculty. Applications from candidates who have a demonstrated track record in mentoring and nurturing women and students from groups traditionally underrepresented in computer science are strongly encouraged.

We will begin accepting applications beginning August 1, 2020. To ensure full consideration of your application, please submit all materials no later than December 18, 2020. In your cover letter, please indicate clearly the department(s) you are applying to. You can learn more about our hiring plans and application instructions by visiting http://www.cs.cmu.edu/employment-scs.

For more information about the hiring priorities in a particular department, please visit a department site below:

Computational Biology Department: http://www.cbd.cmu.edu/tenure-track-faculty-positions-2/open/

Computer Science Department: https://csd.cmu.edu/careers/faculty-hiring

Human-Computer Interaction Institute: https://hcii.cmu.edu/careers/list

Institute for Software Research: http://www.isri.cmu.edu/jobs/index.html

Language Technologies Institute: http://lti.cs.cmu.edu/news/lti-hiring

Machine Learning Department: http://www.ml.cmu.edu/Faculty_Hiring.html

Robotics Institute: http://ri.cmu.edu/about/hiring-faculty-positions/

Please send email to faculty-search@cs.cmu.edu with any questions.

Carnegie Mellon University shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and
subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

City University of Hong Kong

Worldwide Search for Talent

City University of Hong Kong is a dynamic, fast-growing university that is pursuing excellence in research and professional education. As a publicly-funded institution, the University is committed to nurturing and developing students’ talents and creating applicable knowledge to support social and economic advancement.

Professor/Associate Professor/Assistant Professor
Department of Computer Science
[Ref. A/430/09]

The Department of Computer Science has internationally known research groups in a number of areas, including bioinformatics, cloud computing, evolutionary computation, information security, machine learning and data science, mobile computing, multimedia computing and graphics, and software engineering. The Department is ranked the 11th best Computer Science Department globally by the US News & World Report (2019).


City University of Hong Kong is an equal opportunity employer and we are committed to the principle of diversity. Personal data provided by applicants will be used for recruitment and other employment-related purposes.

The George Washington University

Post-Doctoral Scientist

The GW Institute for Data, Democracy, and Politics seeks candidates for a post-doctoral scientist for its work examining and combating disinformation and other online harms.

Specific aims are to:
1. Develop computational measures of key social scientific constructs such as hate speech, gist, and community resonance.
2. Validate these measures and the tools that generate them.
3. Generate training data and measure information flow containing these constructs.
4. Examine how such content shapes behaviors, attitudes, and beliefs.

Please apply here: http://www.gwu.jobs/postings/75875

Georgia State University

Postdoctoral Fellow position - Cybersecurity & Privacy:

https://inspire.gsu.edu/files/2020/08/Postdoc.pdf

Hampden-Sydney College

Assistant Professor of Computer Science

The Department of Mathematics and Computer Science at Hampden-Sydney College invites applications for a tenure-track Assistant Professor of Computer Science position beginning August 2021.

For more details and to apply, see https://apply.interfolio.com/77792

The Hong Kong University of Science and Technology

Job Title: Faculty Positions
Department: Department of Computer Science and Engineering
Job ID: 5459

Job Posting Details

The Department of Computer Science and Engineering of HKUST (https://www.cse.ust.hk/) is inviting applications for substantiation-track faculty openings at all levels of Professor, Associate Professor and Assistant Professor for the 2021-2022 academic year. We are looking for candidates with outstanding research record in all computer science and engineering areas, with priority given to candidates in research areas transcending one or more of the following areas:

• Artificial intelligence and data science
• Computer architecture and systems
• Information security and privacy
• Software engineering and programming languages
Applications are invited for appointment as Digital Project Manager in the Faculty of Arts (Ref: 501691), to commence as soon as possible, on a three-year fixed-term basis, with the possibility of renewal subject to satisfactory performance.

Applicants should possess a university degree in Computer Science and at least 6 years’ experience in software engineering, digital development, image processing, photogrammetry, viewer technology and user experience, information management, or an equivalent combination of experience and/or training. A demonstrated ability to identify, develop, and use research tools and methodologies in digital research (e.g. text mining and analysis, data visualization, neural networks, social network analysis, GIS & mapping, web development, new technologies and software programs etc.) is required. The appointee should have a record of successful project management, time management and organisational skills, and timely project completion, both independently and in collaboration with diverse teams; and excellent communication, written, and interpersonal skills with the ability to effectively communicate complex technical issues to both technical and non-technical audiences.

The ideal candidate should possess (a) a post-graduate qualification including but not limited to digital humanities, computer science or information systems; (b) familiarity with academic scholarship through publications, research projects and/or academic presentations; demonstrated experience working with data within a research context, for example research data management, data research techniques or data science, visualisation, software engineering, analysis tools, data manipulation, data linking, modelling, and natural language processing or text mining; (c) experience in providing high-quality support services to academic or research clients; (d) understanding of the research environment in a University; and (e) demonstrated ability to secure project-based grant funding on digital projects.

The Digital Project Manager will manage and oversee the major activities of the Faculty of Arts’ newly-formed Digital Humanities (DH) Hub. The central aims of the DH Hub are to dream up and then develop new Humanities and Arts research projects through visualization, information processing and other digital tools and applications. Working with the assistance of a dedicated computer programmer, the successful candidate is expected to (a) undertake digital research work, relating to data and information processing and visualisation; photogrammetry; gaming; animation; data management, curation, archiving, and digital infrastructure; data mining, processing and curation of audio-data; metadata specification and information modelling; natural language processing; Artificial Intelligence, neural networks; geographical information systems (GIS); and user experience and interaction design; (b) conduct research consultations on digital research tools and methods; (c) actively identify relevant methods and tools for digital research suitable for application to Arts and Humanities academic research projects; (d) develop or subcontract the programming work for new digital tools for specific Faculty of Arts research projects; and (e) collaborate with faculty members across the seven Faculty of Arts schools and centres on grant applications, including as Co-PI on major grants, and collaborate in major external projects with international and/or industry partners.

The successful candidate will be appointed at the rank of Assistant IT Director or Senior IT Manager. A highly competitive salary commensurate with qualifications and experience will be offered, in addition to annual leave and medical benefits. At current rates, salaries tax does not exceed 15% of gross income. The appointment will attract a contract-end gratuity and University contribution to a retirement benefits scheme, totaling up to 15% of basic salary.

The University only accepts online application for the above post. Applicants should apply online at the University’s careers site (https://jobs.hku.hk) and upload an up-to-date C.V. Applicants who have responded to the previous advertisements (Ref: 493781 and 494292) are not required to submit applications for this round. Applications from all rounds will be considered altogether. Review of applications will start as soon as possible and continue until August 28, 2020, or until the post is filled, whichever is earlier.

The University is committed to diversity and inclusivity. To promote gender diversity and professional advancement of women as well as men, the Faculty of Arts expressly encourages qualified persons from both genders to apply.

We also expect close research collaboration with faculty and students of the new HKUST (Guangzhou) campus being planned in such strategic research areas as artificial intelligence, data science and analytics, Internet of things, computational media and arts, financial technology, intelligent transportation, robotics and autonomous systems.

Applicants should have an earned PhD degree. Applicants at junior level should have demonstrated potential in research.
Professional Opportunities

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

Institute of Science and Technology Austria

Assistant Professor (tenure-track) and Professor positions in Computer Science and Data Science

The Institute of Science and Technology Austria invites applications for several open positions in all areas of computer science and data science.

We especially welcome applications in statistics, machine learning, optimization, bioinformatics, scientific computing, computer systems, control theory, and robotics.

IST Austria offers:

• A highly international and interdisciplinary research environment with English as working language on campus
• State-of-the-art facilities and scientific support services (www.ist.ac.at/scientific-service-units/)
• Competitive start-up package and salary
• Guaranteed annual base funding including funding for Ph.D. students and postdocs
• Wide portfolio of career support
• Child-care facilities on campus

IST Austria (www.ist.ac.at) is an international institute dedicated to basic research and graduate education in the natural, mathematical, and computational sciences. The Institute fosters an interactive, collegial, and supportive atmosphere, sharing space and resources between research groups whenever possible, and facilitating cross-disciplinary collaborations. Our Ph.D. program involves a multi-disciplinary course schedule and rotations in research groups, and we hire scholars from diverse international backgrounds. The campus of IST Austria is located close to Vienna, one of the most livable cities in the world.

Assistant professors receive independent group leader positions with an initial contract of six years, at the end of which they are reviewed by international peers. If the evaluation is positive, an assistant professor is promoted to a tenured professor.

Candidates for tenured positions are distinguished scientists in their respective research fields and have at least six years of experience in leading a research group.

Please apply online at: www.ist.ac.at/jobs/faculty/

The closing date for applications is October 30, 2020.

IST Austria values diversity and is committed to equal opportunity. We strive for increasing the number of women, particularly in fields where they are underrepresented, and therefore we strongly encourage female researchers to apply.

Jacobs Technion-Cornell Institute at Cornell Tech

Professor of Practice in Data Science, Machine Learning

The Jacobs Technion-Cornell Institute at Cornell Tech is looking to fill a Professor of Practice position in data science and machine learning. We seek an experienced professional with a record of success in the application of machine learning or data-related techniques and principles (e.g., statistics, knowledge discovery, visualization, etc.) in an industry or government setting, with an interest and comfort in teaching master's degree-level students. The Professor of Practice is expected to teach at least one master's course per semester, including an Urban Data course in Spring of 2021, to mentor student projects, and to engage with external non-academic partners. The candidate may also pursue innovation and experimentation in relevant areas.

This is a 3-year renewable non-tenure track position to be located on our campus on Roosevelt Island in New York City. A part-time appointment may be possible.

For more information, including necessary qualifications, and to apply, please see https://cornelltech.io/prof-of-practice-data-science-machine-learning

Missouri State University

Coordinator of Information Technology

The Coordinator, Residence Life Information Technology is responsible
for establishing and maintaining the link between student academic learning needs and the technological services available in the residence halls, including overall supervision, operation, and management of the Residence Life, Housing and Dining Services' servers and network functions, web development, ResNET Help Desk services, and all computing support for residence hall students, Residence Life staff, graduate assistants, and student workers. The Coordinator, Residence Life Information Technology assists in budgeting and planning for current and future technology needs, performs systems and operations tasks on networked computer systems serving staff and residents and supervises all ResNET staff.

Please apply here: Jobs.MissouriState.edu

NEC Laboratories America, Inc.
Researcher - Data Science/Networking

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

The Data Science and System Security Department aims to build novel big data solutions and service platforms that simplify complex systems management, and to develop new information technology that supports innovative applications, from big data analytics to the Internet of Things. Our research is both experimental and theoretical, covering many domains in data science and artificial intelligence, such as: time series mining, graph mining, text mining, anomaly detection, signal processing, and streaming processing. The goal of our research is to understand the dynamics of big data from complex systems and build innovative solutions to help end users manage these systems. We built several analytic engines and system solutions to process and analyze big data and support various applications in detection, prediction and optimization. Our research leads to both award-winning NEC products and publications in top conferences.

Our group is looking for researchers to work at the intersection of networking and machine learning. The ideal candidate must have a PhD in CS/CE and a strong publication record in at least one of the following areas:

- Data mining and machine learning
- Network management
- 5G networking and IoT
- Network measurements and analysis

NEC Labs is located in Princeton, NJ, home of Princeton University and one of New Jersey’s most beautiful and idyllic towns. The area offers many exciting cultural, entertainment and outdoor activities. The office is minutes away from Princeton University and an hour from New York, Philadelphia, and the Atlantic Ocean. For more information about NEC Labs, access http://www.nec-labs.com/ and submit your CV and research statement through our career center at https://www.appone.com/MainInfoReq.asp?R_ID=3123535.

Equal Opportunity Employer

NEC Laboratories America, Inc.
Researcher - Data Science

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

The Data Science and System Security Department aims to build novel big data solutions and service platforms that simplify complex systems management, and to develop new information technology that supports innovative applications, from big data analytics to the Internet of Things. Our research is both experimental and theoretical, covering many domains in data science and artificial intelligence, such as: time series mining, graph mining, text mining, anomaly detection, signal processing, and streaming processing. The goal of our research is to fully understand
the dynamics of big data from complex systems, retrieve patterns to profile them and build innovative solutions to help end user managing those systems. We have built a number of analytic engines and system solutions to process and analyze big data and support various applications in detection, prediction and optimization. Our research leads to both award-winning NEC products and publications in top conferences.

Our group is looking for researchers to work in the areas of artificial intelligence, machine learning or data mining. The ideal candidates must have expertise in one of the above areas, and can develop algorithms to analyze massive data and build innovative applications. S/he must have a PhD in CS/CE with a strong publication record in at least one of the following areas:

- Data Mining and Machine learning (especially deep neural networks)
- Time series analysis and prediction
- Text mining, natural language processing and information retrieval
- Graph and information network mining
- Large scale optimization and learning
- Signal processing, image processing and computer vision

**NEC Labs** is located in Princeton, NJ, home of Princeton University and one of New Jersey’s most beautiful and idyllic towns. The area offers many exciting cultural, entertainment and outdoor activities. The office is minutes away from Princeton University and an hour from New York, Philadelphia, and the Atlantic Ocean.

For more information about NEC Labs, please access [http://www.nec-labs.com](http://www.nec-labs.com) and submit your CV and research statement through our career center at [https://www.appone.com/MainInfoReq.asp?R_ID=3108918](https://www.appone.com/MainInfoReq.asp?R_ID=3108918).

Equal Opportunity Employer

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**Pacific Institute for the Mathematical Sciences**

**Director**

Applications are invited for the position of DIRECTOR of the Pacific Institute for the Mathematical Sciences (PIMS) for a term of up to five years, beginning on July 1, 2021. This appointment is renewable.

The Search Committee will consider dossiers beginning on October 7, 2020.

Further information about this position may be found at: [https://www.pims.math.ca/directorsearch2020](https://www.pims.math.ca/directorsearch2020).

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**Princeton University**

**Lecturer of Computer Science**

The Department of Computer Science at Princeton University seeks applications from outstanding individuals who share our strong commitment to undergraduate education to join our teaching faculty for full and part-time Lecturer positions.

Computer Science is enjoying record popularity at Princeton, and opportunities abound to engage with our outstanding students at many levels. Our large undergraduate courses are the shared responsibility of a team of faculty and graduate assistants. A successful candidate for this position will participate in such a team at the outset. Job responsibilities can also include teaching upper-level courses, advising undergraduate research, curriculum development, state-of-the-art software technology development, data analytics, outreach to under-represented groups, and online content development.

Research and scholarship in CS education or in any area of CS is also encouraged. An advanced degree in computer science, or related field, is required.

Applications must include a cover letter, curriculum vitae, teaching statement, material relevant to evaluating the applicant’s teaching abilities and research accomplishments, and contact information for at least three references.

This position is subject to the University’s background check policy. Further information about the Computer Science Department at Princeton can be found at: [http://cs.princeton.edu/](http://cs.princeton.edu/)
**Reed College**

**Tenure-Track Position in Computer Science**

**Position Description**

The Department of Computer Science at Reed College invites applications for a tenure-track faculty position, rank open, beginning in the fall of 2021. Applicants should have a Ph.D. in computer science or a closely related field by the time of the appointment and should be committed to excellence in their teaching and in their scholarship. Applicants from all areas of computer science are welcome to apply, though particular attention will be given to applicants in systems/application research areas (e.g., networks, database systems, security, distributed computing, operating systems, robotics, etc.). The successful applicant will help teach the core computer science curriculum at all levels in the major, in cooperation with their fellow faculty, and will develop one or more courses in their areas of expertise. The department is committed to giving all its students the opportunity to explore research topics in computer science and in its applications. The successful candidate will advise several year-long senior thesis projects that are required of all Reed students.

Reed is a distinguished liberal arts college with approximately 1400 students that offers a demanding academic program to bright and dedicated undergraduates. The college believes that cultural diversity is essential to the excellence of our academic program (see [reed.edu/diversity](https://www.reed.edu/diversity/)). Applicants to the position are encouraged to contact Adam Groce (agroce@reed.edu), the chair of the search committee, for further details about the position and the college’s computer science program. Information about the position is also posted at [https://www.reed.edu/computer-science/faculty-search.html](https://www.reed.edu/computer-science/faculty-search.html).

**Application Instructions**

Applicants should submit their applications electronically through Interfolio at [http://apply.interfolio.com/77853](http://apply.interfolio.com/77853) and should include a cover letter, curriculum vitae, teaching statement, research statement, diversity statement, and three letters of recommendation. The cover letter should address how the applicant’s teaching and scholarship are suited to the liberal arts college environment. The diversity statement should address how the applicant can further the diversity and inclusivity of the computer science program.

Though thorough review of applications will continue until the position is filled, applications submitted by October 30, 2020, are assured to get the fullest consideration. Reed College is an Equal Opportunity Employer and is committed to building an excellent diverse scholarly community. Members of underrepresented groups are especially encouraged to apply.

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**Santa Clara University**

**Tenure-Track Assistant Professor of Computer Science and Engineering**

**Purpose:**

The Department of Computer Science & Engineering at Santa Clara University invites applications for two tenure-track Assistant Professor positions starting in the 2021-2022 academic year. To complement the 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 specializations in software engineering, programming languages, HCI, visualization (AR/VR), and database systems. 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.

Santa Clara University ([https://www.scu.edu](https://www.scu.edu)) is a comprehensive Jesuit, Catholic university, located in the heart of Silicon Valley, offering rigorous undergraduate curricula in arts and sciences, business, and engineering, plus graduate degrees (master’s, Ph.D., and law degrees) in six disciplines. Santa Clara University is California’s oldest operating institution of higher education. Distinguished by the highest retention rate and has been ranked first among all regional universities in the West by U.S. News and World Report, Santa Clara University is now elevated to a new category in national rankings. "Doctoral/Professional
Universities.” Santa Clara University’s ranking in the 2020 edition of Best Colleges is National Universities, #54.

The University is focused on creating an academic community that educates citizens and leaders who will build a more just, humane, and sustainable world. 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 22 full-time faculty, and a strong pool of approximately 25 part-time adjunct faculty who instruct about 400 undergraduate majors, and about 450 part-time and full-time graduate (M.S. and Ph.D.) majors. The School of Engineering maintains strong ties to local industry.

SCU and the computer science and engineering profession are committed to justice, equity, diversity, and inclusion; we seek candidates whose research, teaching, and/or service have prepared them to help fulfill our commitment to these. All SCU faculty engage in teaching, research and service. The ideal candidate will express enthusiasm for teaching classes from undergraduate through graduate courses in areas of specialization, and lower-division courses of a fundamental nature, fulfilling all responsibilities related to those courses, and for engaging students from diverse backgrounds in learning. The successful candidate will be expected to develop her/his own scholarly research, including mentoring undergraduate and graduate students. Developing an active research program appropriate to Santa Clara’s mission that leads to high-quality publications, grant applications, and engages students as participants is an expectation of the position.

We welcome candidates who are ready to contribute to our mission to educate citizens and leaders of competence, conscience, and compassion and to cultivate knowledge and faith to build a more humane, just, and sustainable world. We especially encourage applicants whose goals and professional or life experiences enrich the department and school community and who can serve as a role model to a diverse student population.

Salary:
Based on experience, education, and expertise.

Basic Qualifications:
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. The full-time teaching load is nominally seven quarter-level courses per academic year (each quarter is 10 weeks excluding the final exams week), but a one-course release is given to faculty actively involved in research and course credit is also given for project, thesis, and laboratory supervision. The first-year tenure-track assistant professor is granted an additional one-course release. Limited course buyout may be approved using external grant funds.

Responsibilities:
Teaching undergraduate and graduate courses in areas of specialization, and courses of a fundamental/core nature, and fulfilling all responsibilities related to those courses.

The standard academic year course load for tenured and tenure-track positions is seven quarter-level course equivalents, generally with a one-course equivalent reduction for scholarly or creative work. The first-year tenure-track assistant professor is granted an additional one-course release.

Course equivalents include lectures and supervision of labs, theses, dissertations, and projects, distributed across three-quarters of 10 weeks each.

Developing a research program that leads to high-quality publications, competitive for funding by external sources, and engages students as participants in that research.

Appropriate service to the department, school, university, and profession.
Professional Opportunities

Start Date: 09/01/2021

Work Authorization:
A foreign national who is appointed to a tenured or tenure-track faculty position is eligible for sponsorship by Santa Clara University.

Special Instructions to Applicants:
Applicants should upload a letter of application, a detailed CV, and the names and contact information of three professional references.

All letters of application MUST include statements of research interests, statements of teaching interests, and statements of equity, diversity, and inclusion. An equity, diversity, and inclusion (EDI) statement describes past, present, and planned contributions to equity, diversity, and/or inclusion in engineering or other areas.


Complete application packets received by November 15, 2020, will receive full consideration. However, the position will remain open until filled.

EEO Statement:
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 https://university-operations.scu.edu/campus-safety/. 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.

Required Documents:
1. Letter of Interest, with statements of research interests, statements of teaching interests, and statements of equity, diversity and inclusion
2. Curriculum Vitae
3. First Professional Reference Contact Information
4. Second Professional Reference Contact Information
5. Third Professional Reference Contact Information

References:
Accept References? Yes
Minimum Number of References? 3
Maximum Number of References? 3

Stanford University
Postdoctoral Researcher in Stress x Computing - School of Medicine

The Pervasive Wellbeing Technology Lab, led by Prof. Pablo Paredes, aims to create the next revolution of evidence-based wellbeing and precision mental health field technology. We focus on understanding the role technology can play to help people stay healthy and strong emphasizing prevention and sustained health over only predicting disease or infirmity.

We are looking for a postdoctoral scholar with a background in computer science, information science, computational social science, computational statistics, or similar to join the lab this Fall 2020. Candidates should have some experience with: HCI research, Applied AI (Machine Learning, NLP, and/or Deep Learning), multi-modal systems development, analyzing large-scale data, utilizing Amazon Mechanical Turk or similar for data collection/processing, and Intervention design/evaluation (i.e., efficacy, adherence, and engagement).
Stellenbosch University

Professor/Associate Professor: Computer Science

(Ref. NW08/176/0820)

The Department of Mathematical Sciences is responsible for teaching and research in Mathematics, Applied Mathematics and Computer Science at Stellenbosch University. The Computer Science Division is research-active in artificial intelligence and machine learning, automata theory, program analysis, testing, and verification, and computer networks (more information is available on our webpage: www.cs.sun.ac.za). It is keen to strengthen its position in computer networks.

Duties:
Research and publication;
Securing research and project funding;
Advising and supervising postgraduate students;
Teaching undergraduate and postgraduate computer science modules;
Administrative leadership, including the possibility to act as division head of Computer Science on a rotational basis.

Requirements:
PhD in Computer Science or a related discipline, with extensive research expertise in computer networks;
Proven track record of conference presentations and publication in internationally recognised computer science journals and conference proceedings;
Track record of securing research or project funding;
Record of successful postgraduate student supervision up to PhD level;
Proven national recognition for and international exposure in computer network research;
Good verbal and written communication skills in English.

In addition, for appointment as Professor:
Significant international recognition as expert in computer networks;
Proven leadership abilities and experience;
Proven involvement in academic service which may include, amongst others, referee and/or programme committee member for an international conference, plenary speaker, committee member of a professional society.

Applicants are required to submit a detailed research statement and teaching philosophy. Applicants invited for interviews will be expected to present a lecture on their recent research.

Recommendations:
Existing international research contacts;
Management experience in an academic environment.

Commencement of duties: 1 October 2020 or as soon as possible thereafter

Closing date: 30 August 2020

Enquiries regarding this post:
Prof B Fischer on 021 808 4232, or at bfischer@cs.sun.ac.za

Enquiries regarding remuneration/benefits as well as technical assistance with the electronic application process: Human Resources Client Services Centre on 021 808 2753 or at sun-e-hr@sun.ac.za

The University is committed to employment equity (EE), and appointments will be made in line with the EE plan for the specific environment as well as Stellenbosch University’s institutional EE Plan.

The University reserves the right not to make an appointment.

Your application, comprising a comprehensive curriculum vitae (including the names and e-mail address of at least three referees), must reach the University before or on the closing date of the advertised post.

Apply online at www.sun.ac.za/english/careers

The University reserves the right to investigate qualifications and conduct background checks on all candidates.
Should no feedback be received from the University within six weeks of the closing date, kindly accept that your application did not succeed.

University of California, San Francisco

Postdoc - Deep Learning and Pathology

We’re looking for highly motivated postdoctoral candidates with a background in machine learning, pathology, biomedical image analysis, or related fields. The candidate would define or join a deep learning research project compatible with lab directions in neuropathology, dermatopathology, ophthalmic pathology, or by building on ongoing clinical collaborations. These may include molecular pathology, when feasible in the collaboration. Broad themes across these application domains include model interpretability and representation.

Qualifications

- Python data science expertise required. Desired skills include experience with PyTorch, pandas, OpenCV, and sklearn, or the demonstrated ability to acquire this expertise in a timely manner. Expertise with containers (e.g., NGC, singularity), AI-ops (e.g., CI/CD for ML), rapid caching, performant data formats (e.g., zarr), and/or distributed dataset/model analysis is a plus.

- A productive track record with at least one first-author publication is required. We seek a driven individual who will lead her/his research independently and communicate frequently and clearly to the field.

Interested candidates should submit a CV and 3 letters of reference to apply@keiserlab.org. Reference “postdoc-dnn-pathology-CRA”.

The University of Chicago

Masters Program in Computer Science: Full-time Teaching Positions in Databases

The Masters Program in Computer Science (MPCS) in the Department of Computer Science at the University of Chicago invites applications for all ranks of the Clinical appointment (Assistant Clinical Professor of Computer Science, Associate Clinical Professor of Computer Science, and Clinical Professor of Computer Science) in the field of Databases. These positions will teach Databases classes in the Masters Program in Computer Science (MPCS) and in its joint program with the Harris School of Public Policy, the Master of Science in Computational Analysis & Public Policy (CAPP).

These full-time, benefit-eligible appointments are for an initial three-year term, with the possibility of renewal. These are teaching positions with no research responsibilities, and a teaching load of six courses across three academic quarters of the year (Autumn, Winter, Spring).

The person holding these positions will teach at least two different courses: MPCS 53001 Databases and CAPP 30235 Databases for Public Policy. Syllabuses for the latest offerings of these classes can be found at https://mpcs-courses.cs.uchicago.edu/2019-20/spring/courses/53001 and https://www.classes.cs.uchicago.edu/archive/2019/spring/30235-l/syllabus.html. Depending on the applicant’s background and interests, the person holding this position may also be asked to teach classes covering advanced topics in Databases.

For each clinical position/rank, a PhD in Computer Science or a related field at the time of appointment, or 10 years of relevant industry experience is required. Work experience in a computing-related industry is preferred. In addition, each rank requires the following requirements:

- For the Assistant Clinical Professor of Computer Science position we require teaching experience in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant.

- For the Associate Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 1800 units of undergraduate and/or graduate course offerings in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant. For the Associate Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 1800 units of undergraduate and/or graduate course offerings in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant. For the Associate Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 1800 units of undergraduate and/or graduate course offerings in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant. For the Associate Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 1800 units of undergraduate and/or graduate course offerings in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant.

- Work experience in a computing-related industry is preferred. In addition, each rank requires the following requirements:

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professional opportunities

For the Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 3000 units of undergraduate and/or graduate course offerings in Computer Science or a related field over the span of at least 10 calendar years. 3000 units is typically equivalent to 30 quarter-long course offerings, or 20 semester-long course offerings. See https://registrar.uchicago.edu/records/transcripts/transcript-key/credit-conversion-chart-equivalencies/ for equivalencies between teaching units and semester/quarter hours.

Applications must be submitted online through the University of Chicago’s Interfolio website:

Assistant Clinical Professor:
https://apply.interfolio.com/77082

Associate Clinical Professor:
https://apply.interfolio.com/77083

Clinical Professor:
https://apply.interfolio.com/77086

Review of applications will begin August 20, 2020.

We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages diverse perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge, engagement, and exchange.

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.

Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-1032 or email equalopportunity@uchicago.edu with their request.

The University of Chicago

Masters Program in Computer Science: Full-time Teaching Positions in Systems

The Masters Program in Computer Science (MPCS) in the Department of Computer Science at the University of Chicago invites applications for all ranks of the Clinical appointment (Assistant Clinical Professor of Computer Science, Associate Clinical Professor of Computer Science, and Clinical Professor of Computer Science) in the field of Computer Systems.

These full-time, benefit-eligible appointments are for an initial three-year term, with the possibility of renewal. These are teaching positions with no research responsibilities, and a teaching load of six courses across three academic quarters of the year (Autumn, Winter, Spring).

The person holding this position must be able to teach at least two of the following courses: Introduction to Computer Systems, Advanced Computer Systems, Networks, Operating Systems, Distributed Systems, Parallel Programming, Compilers, Computer Architecture, Introduction to Computer Security, or Functional Programming. Syllabi for past offerings of these classes can be found at https://mpcs-courses.cs.uchicago.edu/ Depending on the applicant’s background and interests, the person holding this position may also be asked to teach other classes in the MPCS.

For each clinical position/rank, a PhD in Computer Science or a related field at the time of appointment, or 10 years of relevant industry experience is required. Work experience in a computing-related industry is preferred. In addition, each rank requires the following requirements:

For the Assistant Clinical Professor of Computer Science position we require teaching experience in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant.

For the Associate Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 1800 units of undergraduate and/or graduate course offerings in Computer Science or a related field over the span of at least six calendar years. 1800 units is typically equivalent to 18 quarter-long course offerings, or 12 semester-long course offerings. See https://registrar.uchicago.edu/records/transcripts/transcript-key/credit-conversion-chart-equivalencies/ for equivalencies between teaching units and semester/quarter hours.

The MPCS offers a comprehensive curriculum in the field of Computer Science, including courses in programming, software engineering, computer architecture, computer networking, and computer security. The program is designed to prepare students for careers in industry, government, or academia, as well as for further study in computer science.

We encourage applications from candidates from underrepresented groups in computing, including women, individuals from historically underrepresented racial and ethnic groups, individuals with disabilities, and people who are veterans.

Applications must be submitted online through the University of Chicago’s Interfolio website:

Assistant Clinical Professor:
https://apply.interfolio.com/77082

Associate Clinical Professor:
https://apply.interfolio.com/77083

Clinical Professor:
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The person holding this position must be able to teach at least two of the following courses: Introduction to Computer Systems, Advanced Computer Systems, Networks, Operating Systems, Distributed Systems, Parallel Programming, Compilers, Computer Architecture, Introduction to Computer Security, or Functional Programming. Syllabi for past offerings of these classes can be found at https://mpcs-courses.cs.uchicago.edu/ Depending on the applicant’s background and interests, the person holding this position may also be asked to teach other classes in the MPCS.

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The MPCS offers a comprehensive curriculum in the field of Computer Science, including courses in programming, software engineering, computer architecture, computer networking, and computer security. The program is designed to prepare students for careers in industry, government, or academia, as well as for further study in computer science.

We encourage applications from candidates from underrepresented groups in computing, including women, individuals from historically underrepresented racial and ethnic groups, individuals with disabilities, and people who are veterans.

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Assistant Clinical Professor:
https://apply.interfolio.com/77082

Associate Clinical Professor:
https://apply.interfolio.com/77083

Clinical Professor:
https://apply.interfolio.com/77086

Review of applications will begin August 20, 2020.

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The University of Chicago
For the Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 3000 units of undergraduate and/or graduate course offerings in Computer Science or a related field over the span of at least 10 calendar years. 3000 units is typically equivalent to 30 quarter-long course offerings, or 20 semester-long course offerings. See https://registrar.uchicago.edu/records/transcripts/transcript-key/credit-conversion-chart-equivalencies/ for equivalencies between teaching units and semester/quarter hours.

Applications must be submitted online through the University of Chicago’s Interfolio website:

Assistant Clinical Professor: apply.interfolio.com/77091
Associate Clinical Professor: apply.interfolio.com/77092
Clinical Professor: apply.interfolio.com/77093

Review of applications will begin on August 20, 2020.

We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages diverse perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge, engagement, and exchange.

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Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-1032 or email equalopportunity@uchicago.edu with their request

University of Chicago

Description

The Division of Social Sciences at the University of Chicago invites applications for a position as Instructional Professor (IP) in the MA program in Computational Social Science (MACSS, macss.uchicago.edu) who are capable of teaching courses in computer science with applications in social scientific research. This is a full-time, career-track teaching position; the start date is flexible between autumn 2020 through autumn 2021. The initial two-year appointment is renewable with an opportunity for promotion. Appointments at the Assistant, Associate, and Full Instructional Professor rank will be considered.

The IP will annually teach five courses, including some combination of machine learning, modeling, simulation, data visualization, high-performance computing, cloud computing, application development, or introductions to important programming languages (including R or Python). Other courses may cover applied research across some fields or research problems in the social sciences.

In addition, the IP will advise MA students: advise a limited number of MA theses as the primary supervisor; hire and manage teaching assistants; help lead the MACSS Computation Workshop; contribute to program admissions, staff hiring, and student recruitment; help train our doctoral student preceptors and contribute to the intellectual life and administrative needs of the program. The position includes support for professional development. The IP will join a dynamic community of social science researchers.

Qualifications

Applicants must have a Ph.D. in computer science, data science, sociology, economics, political science, psychology, or a related discipline. Industry experience is valued, but not required. The IP must have the Ph.D. must be in hand prior to the start date. Teaching experience is required, and preference will be given to candidates who have demonstrated experience guiding students on thesis research and writing. Applicants must have demonstrated experience advising students with a broad range of interests and a track record of interdisciplinary scholarship. Preference will be given to candidates with a demonstrated record in
Professional Opportunities

of working on a team to design and deliver a curriculum.

Application Instructions

Applicants must apply online at the University of Chicago’s Interfolio website at http://apply.interfolio.com/76367. The following materials must be submitted: 1) a cover letter, outlining the applicant’s prior computational training, prior teaching or mentoring experience, and suggested course offerings in our MA program; 2) a curriculum vitae; 3) an article-length writing sample applying a computational research design; 4) at least one-course syllabus from prior teaching or with an eye to future offerings; 5) course evaluations or other evidence of past excellence in teaching or mentoring, and 6) three letters of reference.

Review of applications will begin on July 15 and will continue until the position is filled or the search is closed. This position will be part of the Service Employees International Union.

Instructional Professor in Computational Social Science

Equal Employment Opportunity Statement

We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages diverse perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge, engagement, and exchange.

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. Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-1032 or email equalopportunity@uchicago.edu with their request.

The University of Chicago Computer Science

Senior Instructional Professor (open rank) in Data Science

Description

The University of Chicago invites applications for a Senior Instructional Professor position in the area of Data Science. The selected candidate will be appointed as Assistant Senior Instructional Professor, Associate Senior Instructional Professor, or Senior Instructional Professor, with rank determined by qualifications and years of experience in a similar role. The appointment will be for a term of up to five years, renewable. This is a career-track position with competitive salary and benefits.

The University of Chicago is initiating an ambitious plan for research and education in Data Science including new academic programs at the undergraduate level. The initiative is a collaboration among the Department of Computer Science, the Department of Statistics, and other units on campus. We particularly seek individuals who can help us fulfill our educational objectives in data science and who can direct our minor and major undergraduate programs. The person hired will teach in the Data Science program. In addition, in consultation with faculty leadership, the person hired will be responsible for leading the design, development, implementation, and academic administration of the undergraduate curriculum in Data Science; supervising other teaching personnel; and providing academic and career advice to students.

Appointments will be made in either department, jointly between Statistics and Computer Science, or jointly with another department in the University.

The Departments of Computer Science (cs.uchicago.edu) and Statistics (stat.uchicago.edu) at University of Chicago are home to a diverse community of educators and researchers focused on advancing the foundations of statistics and computing, and driving their most advanced applications. The larger data science community includes the Center for Data and Applied Computing, the Toyota Technological Institute at Chicago (TTIC), the Polsky Center for Entrepreneurship and Innovation, the
Mansueto Institute for Urban Innovation and Argonne National Laboratory.

Qualifications
A Ph.D. in Statistics, Computer Science, or a related field; two years’ experience teaching in a selective college or university as an instructor of record; and experience in management of academic programs, personnel, and budgets are required.

Preference will be given to candidates whose training and experience make them exceptionally qualified to teach undergraduate courses and develop curriculum in one or more of the following areas: data science, machine learning, artificial intelligence, and applied statistics.

Application Instructions
The following materials are required:
• cover letter;
• curriculum vitae;
• statement of teaching philosophy and curricular development experience; ability to interact with a diverse group of students is valued;
• syllabi of courses you have designed and taught;
• description of experience in managing personnel, budgets, and academic programs;
• contact information for three references who can provide confidential letters of evaluation.

The following materials are optional:
• Evidence of successful management of programs previously (or evidence of potential to do so)

Applications must be submitted online through the University of Chicago’s Academic Jobs website: [http://apply.interfolio.com/77500](http://apply.interfolio.com/77500). Review of applications will begin on August 28, 2020 and will continue until the position is filled.

Equal Employment Opportunity Statement
We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages diverse perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge, engagement, and exchange.

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.

Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-1032 or email equalopportunity@uchicago.edu with their request.

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University of Georgia

Limited Term Lecturer

The Department of Computer Science at the University of Georgia invites applications for one full-time, Limited-Term Lecturer position with a start date no later than January 1, 2021. This position is non-tenure track and can be renewed annually, but is anticipated to be two years in duration, with the possibility for renewal for a third year.

For more details and application information, please see [https://cs.uga.edu/sites/default/files/inline-files/LT%20Lecturer_Long%20Ad.pdf](https://cs.uga.edu/sites/default/files/inline-files/LT%20Lecturer_Long%20Ad.pdf)

To apply, please go to [http://www.ugajobsearch.com/postings/157611](http://www.ugajobsearch.com/postings/157611)

Review of candidates will begin on August 15, 2020 and will continue until the position is filled.

Please see [http://www.cs.uga.edu](http://www.cs.uga.edu) for more information about the job and the Department.

University of New Haven

Cluster Hire – Cybersecurity and Computer Science Faculty

The University of New Haven invites applications for tenure-track and non-tenure-track positions at any rank for Cybersecurity and Computer Science position for August 2020. For a full description click here.

AA/EOE
Professional Opportunities

University of New Orleans

Tenure Track Assistant Professor

The Department of Computer Science at the University of New Orleans invites applications for a tenure-track Assistant Professor position starting in Spring 2021. We are primarily looking for applicants whose expertise would extend and complement existing strengths within the department. Candidates with expertise in environmental informatics, machine learning and AI, and big data are especially encouraged to apply. Exceptional candidates in other related areas will also be considered. A Ph.D. in computer science or a closely related field is required for appointment; successful applicants must possess a record of research excellence and demonstrate strong teaching commitments to graduate and undergraduate courses. Applications will be evaluated on a rolling basis, starting August 2019 until the position is filled.

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

Applications should submit a cover letter, teaching & research statements, resume, transcripts and three recommendation letters via: https://www.uno.edu/careers/26981.

University of Ottawa

Research Fellow position on machine learning-based software testing

Applications are invited for a Research Fellow (Postdoc) position on software testing at the Nanda Lab, School of EECS, University of Ottawa, Canada (https://www.nanda-lab.ca).

The position is for one year, renewable, starting as soon as possible. The main duties and responsibilities of the Research Fellow will be to research and develop AI-based testing techniques in the context of a large project with an industrial partner.

Position requirements:
- Ph.D. in software engineering or machine learning
- background in automated software testing or machine learning
- good software development skills
- good communication skills in English

Excellent working conditions will be offered.

The University of Ottawa is located downtown Ottawa, the federal capital of Canada (www.uottawa.ca).

The University of Ottawa aims to increase the percentage of women in research and teaching, and therefore encourages female candidates to apply.

To apply, please send a CV with a brief description of research interests and adequacy to the position as described above, and a list of at least two references to Lionel Briand: lbriand@uottawa.ca (http://www.lbriand.info).

U.S. Naval Academy

Faculty Positions in Cyber Science

The U.S. Naval Academy invites applications for tenure-track faculty positions in the Department of Cyber Science, beginning as early as January 2021 for the Spring semester.

The Cyber Science Department operates the Academy's growing cybersecurity education initiatives, including a rapidly growing, ABET-accredited cyber operations major, and a brand new, state-of-the-art building to support multi-disciplinary cybersecurity education and research.

The requirements of the positions include teaching and developing undergraduate cyber operations courses and academic research. Candidates should have experience in technical areas such as systems security, network security, or SCADA systems.

A Ph.D. or other terminal degree in a cyber technology-relevant field (which includes fields such as Computer Science, Information Technology, Information Science, Computer Security,
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Computer Engineering, and Electrical Engineering) is required.

For full details and application instructions see:

https://www.usna.edu/HR0/jobinfo/Tenure-track-Cyber-AY21.php