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CRN At-A-Glance

CRA Update: NSF CSGrad4US Fellowship Program Shines at AI Education Showcase on Capitol Hill

The NSF CSGrad4US Fellowship and Mentoring Program, administered by CRA, was highlighted at the "Empowering the Al Talent of Today and Tomorrow" event on Capitol Hill. The showcase, co-hosted by the House and Senate Al Caucuses, emphasized the critical role of Al education in workforce development. Learn about how more than half of NSF CSGrad4US Fellows are conducting research in Al-related areas.

Read more on page 2

2024 CRA Taulbee Survey Kicks Off Data Collection Under New Leadership

CRA is launching data collection for the 2024 CRA Taulbee Survey, now under the leadership of Jasmine Batten, PhD. The survey, a vital resource for tracking trends in computing research, will gather data on student enrollment, degree production, and faculty salaries.

Read more on page 4

Grand Challenges from the 11th Heidelberg Laureate Forum

At the 11th Heidelberg Laureate Forum, Haley Griffin from the Computing Community Consortium explored some of the field's grand challenges, including improving Al accuracy, reducing power requirements, and fostering computing talent. Dive into her insights and learn what these challenges mean for the future of tech.

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CRA Update: NSF CSGrad4US Fellowship Program Shines at AI Education Showcase on Capitol Hill



Last month, the U.S. National Science Foundation (NSF) CSGrad4US Fellowship and Mentoring Program, administered by the Computing Research Association (CRA), took center stage at the **"Empowering the Al Talent of Today and Tomorrow: NSF Investments in Al Education and Development"** event, held at the Rayburn House Office Building on Capitol Hill. Co-hosted by the House and Senate Al Caucuses, the Congressional Showcase highlighted the essential role of Al education in preparing the nextgeneration workforce.

CRA and community members play a pivotal role in supporting the NSF CSGrad4US Fellowship Program, providing administrative support and mentorship to guide Fellows through their transition into PhD programs. This partnership has allowed the program to thrive, helping bachelor's degree holders return to academia and contribute to the growing field of computing research, particularly in artificial intelligence.

The event featured remarks from Members of Congress, including Representatives Anna Eshoo (CA-16), Maxwell Frost Amo (FL-10), and Henry Cuellar (TX-28), as well as opening remarks from NSF Director Dr. Sethuraman Panchanathan. Dr. Panchanathan emphasized the critical role NSF plays in shaping a future-ready AI workforce, ensuring that every state and community has the tools and resources to lead in AI innovation.

The event showcased 14 NSF-funded projects, underscoring the importance of federal investments in Al education and workforce development. The NSF CSGrad4US Fellowship Program, with 52 percent of its Fellows conducting research in Al-related areas, was a key part of this conversation, demonstrating its impact in driving innovation and meeting the growing demand for Al expertise.



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NSF Director Sethuraman Panchanathan (center right) with NSF CSGrad4US Fellows Kate Glazko (left), Sarah Boelter (center left), and Steven Shi (right). Photo credit: Charlotte Geary/NSF.



NSF Director Sethuraman Panchanathan (right) with NSF CSGrad4US Program Chair Lori Pollock (center) and CRA Associate Director of Government Affairs Brian Mosley (left). Photo credit: Charlotte Geary/NSF.



NSF Director Sethuraman Panchanathan (center right) with NSF CSGrad4US Program Chair Lori Pollock (left) and NSF CSGrad4US Fellows Sarah Boelter (center left) and Steven Shi (right). Photo credit: Charlotte Geary/NSF.



NSF CSGrad4US: Preparing a Diverse AI Workforce

The NSF CSGrad4US Fellowship Program is designed to increase the number of diverse, domestic graduate students pursuing careers in research and innovation. Specifically aimed at individuals with bachelor's degrees who are currently working in industry, the program helps them return to academia to pursue PhDs in computer and information science and engineering (CISE) fields. The program provides personalized coaching, feedback on application materials, and strategies for thriving in graduate school, along with financial support for graduate school application fees.

Fellows receive significant financial support, including a \$37,000 annual stipend for three years, a \$16,000 annual cost-of-education allowance for tuition and fees, and travel funds to present research at technical conferences. In addition to financial assistance, the program offers mentorship and guidance, while fostering a sense of community among Fellows, helping them build professional networks with other Fellows and faculty advisors.

Sarah Boelter, a Fellow from the University of Minnesota who attended the event, shared her experience with the program:

"As someone coming from an industry-focused background, the NSF CSGrad4US Fellowship & Mentoring Program helped me develop realistic expectations for graduate school. The Fellowship gave me the opportunity to leverage the skills I developed over the course of my career and empowered me to bring new ideas and perspectives into the world of academic research."

steven Shi, a Fellow from The University of Texas at Austin, also shared his journey:

"I had always wanted to pursue a PhD in the AI/ML field but had financial obligations to meet after graduating. Wanting to return to academia years later, I found it difficult to be a competitive applicant particularly due to my lack of research experience. Receiving the CSGrad4US Fellowship not only provided funding for my PhD, it also meant having a dedicated mentor during the application process to help tailor my statements to what admissions committees were looking for and befriending a rich network of Fellows who were transitioning from a similar stage in life as me back into academia."

These experiences underscore the unique value of the program in helping professionals transition from industry to academia, bringing their diverse expertise into high-impact research areas, including artificial intelligence.

Also in attendance representing the program and CRA was Fellow **Kate Glazko**, PhD student at the University of Washington; NSF CSGrad4US Program Chair **Lori Pollock**, Alumni Distinguished Professor in the Department of Computer and Information Science at the University of Delaware; and **Brian Mosley**, CRA Associate Director of Government Affairs.

Engaging Policymakers on AI Workforce Development

The Capitol Hill event provided an opportunity for NSF-funded teams, including the NSF CSGrad4US Fellowship Program, to engage directly with Congressional stakeholders. The discussions focused on how federal investments are critical in preparing the next generation of researchers and professionals, particularly in the fast-evolving field of artificial intelligence.

Representatives from the NSF CSGrad4US program emphasized the importance of personalized mentoring in ensuring Fellows are well-prepared for the challenges of PhD study and equipped to contribute to cutting-edge AI research. With the majority of its Fellows conducting research in AI-related areas, the program is a key contributor to building a diverse and capable AI workforce.

The Role of NSF CSGrad4US in Shaping the Future of AI

As the demand for AI professionals continues to grow, programs like NSF CSGrad4US are essential in broadening participation in AI education and research. By supporting individuals from diverse backgrounds, the program ensures that a wide range of voices and

CRA Update (continued)



perspectives contribute to the development of AI technologies that will shape the future of industries such as healthcare, national defense, and beyond.

The Capitol Hill showcase underscored the critical role of federal support in fostering innovation in Al education. With the continued backing of policymakers and the NSF, the NSF CSGrad4US Fellowship and Mentoring Program is poised to make significant contributions to the development of the next generation of Al researchers and professionals.

Get Involved with NSF CSGrad4US

For more information about the NSF CSGrad4US program, visit cra.org/csgrad4us. Interested in applying, or know someone who might be? Sign up to receive notifications when applications for the next cohort open.

Are you a faculty member interested in mentoring an NSF CSGrad4US Fellow? This year's cohort is actively exploring research opportunities and preparing their PhD applications. To share your research and lab opportunities with these prospective Fellows, submit your details via this submission form, and it will be made available to them as they consider their PhD paths.

2024 CRA Taulbee Survey Kicks Off Data Collection Under New Leadership



By Matt Hazenbush, Director of Communications

The Computing Research Association (CRA) is marking the beginning of an exciting new chapter as it launches data collection for the 2024 CRA Taulbee Survey.

This annual survey, a cornerstone of the computing research community, tracks essential data on student enrollment, degree production, faculty salaries, and employment trends in academic units that grant PhDs in computer science (CS), computer engineering (CE), or information (I) in the U.S. and Canada.

As the survey kicks off this year, CRA is also celebrating the retirement of **Betsy Bizot**, Senior Research Associate, after 20 years of remarkable service. Betsy's leadership has been instrumental in shaping the CRA Taulbee Survey into the trusted resource it is today, providing vital insights to academic institutions and industry leaders alike. Her dedication to the computing research community has left an indelible legacy.

Welcoming Jasmine Batten, PhD

In her place, CRA is pleased to introduce **Jasmine Batten**, who joined CRA in August 2024, as the new lead for the CRA Taulbee Survey. Batten, a Research Associate with CRA's Center for Evaluating the Research Pipeline (CERP), brings new energy to this long-standing project and will guide its future development.



Jasmine Batten

Taulbee (continued)



As we embark on the 2024 survey, we are excited to announce the following key dates for data collection:

- October 7, 2024: Data gathering PDFs will be released.
- October 14, 2024: Both the CRA Taulbee Main Survey and the CRA Taulbee Salary Survey will open for input.
- November 29, 2024: The CRA Taulbee Salary Survey will close.
- January 24, 2025: The CRA Taulbee Main Survey will close.

With data collection underway, we took the opportunity to sit down with Jasmine Batten to discuss her vision for the survey and her thoughts on the future of this critical resource.

First, welcome to CRA and congratulations on your new role leading the CRA Taulbee Survey! Could you start by telling us a bit about your background and what drew you to this position?

Thank you so much for the warm welcome! I am so thrilled to be working at CRA. As a quick background, I started as a computer science education (CS ed.) undergraduate researcher in 2017 at Florida International University (FIU) in Miami, FL working with Dr. Monique Ross. During my time in her LEARN-CS lab as an undergraduate research assistant, she encouraged me to go to graduate school. Ultimately, I enrolled in my PhD program (with her as my advisor) in 2019 at Florida International University (FIU). During my PhD, I published several conference and journal articles with the support of my National Science Foundation (NSF) Graduate Research Fellowship related to efforts to broaden participation. My dissertation was specifically focused on how we can improve computing classrooms and their mindset cultures. My goal of focusing on this topic was to better understand how we can improve learning environments for female and minoritized students in computing at the undergraduate degree level. I graduated from FIU in July 2024 with my PhD in computer science with a focus on CS ed.

What drew me to this role was actually my participation in the CRA-WP Grad Cohort for Women Workshop in 2023. I attended in San Francisco, CA with one of my research group peers and we had an amazing time—I was surrounded by so many female and minoritized students, faculty, and other professionals. I presented a poster at the workshop and met so many amazing student scholars across many different computing disciplines, which was truly inspiring. I was exposed to so many new topics and ideas I had never heard of. Additionally, I have never felt as safe at a networking event as I did at the CRA-WP Grad Cohort for Women Workshop. I saw the impact of this cohort on creating inclusive and mindful networking experiences firsthand, and during my participation at the workshop, I knew I wanted to continue contributing towards these efforts to improve inclusivity in computing at CRA specifically. I am super honored to have been chosen to work on the critically important CRA Taulbee survey, which aligns with my own career goals in continuing to broaden participation in computing.

As a researcher, when did you first become aware of the CRA Taulbee Survey, and what role did it play in your own research or career development?

I first became aware of the CRA Taulbee survey a year or two into my PhD program after we were looking into statistics on intersectional enrollment rates in computing. This data was incredibly important in supporting our arguments related to the need to improve efforts to broaden participation at the undergraduate degree level. Without the data from the CRA Taulbee survey, it would have been more challenging to demonstrate the necessity for this work.

The CRA Taulbee Survey is of course a well-known resource in the computing community, and many have come to rely on it for tracking key industry trends. What do you see as the key priorities for the survey moving forward?

There are a few priorities we will be focusing on related to reporting and data quality of the survey results. We will also be focusing on improving the reporting efforts. The annual CRA Taulbee survey report has so much information to share with stakeholders that it can be



Taulbee (continued)

a lot to sift through. Moving forward, there is going to be a big effort towards the improvement of just the visualization of the results, but also the navigability of the report. Additionally, we will be focusing on improving the clarity of the survey questions, which will hopefully help increase general participation for CRA Taulbee, and the participation of other North American academic units.

One of the challenges with the survey is ensuring that it reflects the evolving landscape of computing research. Are there any changes or enhancements you're considering to keep the survey relevant and valuable?

There are several dimensions we are currently grappling with given the rapid evolution of computing research and education. One of the biggest challenges related to CRA Taulbee is determining the boundaries related to the types of computing programs it should collect data on. Given that CRA Taulbee is a longitudinal survey, maintaining consistency across measures is important. At the same time, evolution and providing the community with relevant, useful data is also necessary. For instance, newer computing-related degree programs such as data science and artificial intelligence (AI) are becoming more prevalent as technology advances and higher education attempts to keep pace. I think we are still trying to figure out the best way to go about this without: (I) overhauling the survey too much from year to year, and (2) increasing the survey burden for the academic units that already participate in CRA Taulbee. In addition to newer computing fields, there are also considerations related to how the survey categorizes faculty (and how that has evolved), and how we can improve it to stay up-to-date. These are issues we are having ongoing conversations about within CERP and during survey committee discussions.

Looking at the trends in the computing field, what do you think will be the most impactful insights from the CRA Taulbee data in the coming years?

I think the enrollment and awarded degree trends for female and minoritized students is highly valuable for getting a sense of whether students are enrolling into different computing degree programs, especially given the increased need for more specialized (and diverse) computing knowledge that serves all of our communities. If students are not finishing their computing degrees, why? If not, how can we as a computing community work to support them? CRA Taulbee data allows the community to begin answering these types of questions. I think this data is the first step for not only researchers but other stakeholders to continue addressing these concerns.

As you step into this new role, how can the community best support your efforts and the future of the CRA Taulbee Survey?

If your academic unit participates in CRA Taulbee, that's some of the best support you can provide! Otherwise, if you have any recommendations on how to improve the survey, feel free to reach out via email to **taulbeesurvey@cra.org**. We are always open to feedback from the community.

A New Chapter Begins

As data collection for the 2024 CRA Taulbee Survey gets underway, the computing research community can expect continued excellence and exciting new developments under its new leadership. With a strong foundation in place, the CRA Taulbee Survey will remain a vital resource for tracking the trends that shape the future of computing research and education.

CRA is committed to working closely with the community to ensure the survey evolves to meet emerging needs and continues providing invaluable data for years to come. If you have questions about participation, please feel free to reach out via email at taulbeesurvey@cra.org.



By Richard E. Ladner, Professor Emeritus, Paul G. Allen School of Computer Science and Engineering, University of Washington



Richard E. Ladner

For the first time in 2021, the CRA Taulbee Survey reported on disability status for students.[1] The survey chose to report on the number of students who received disability accommodations from the disability services office at their university. This number is typically much lower than the number of students who identify as having a disability. Nonetheless, for US institutions, it is an institutional number that is reported to the U.S. Department of Education and is important for budgeting purposes at each university. While the National Center for Education Statistics (NCES) reported that, in 2020-2021, 20.5 percent of undergraduate students identify as having a disability.[2] only about 8 percent of them are registered with their student disability services office according to the Postsecondary National Policy Institute.[3] Just concentrating on undergraduates over the past three CRA Taulbee Surveys, Table 1 shows the CRA Taulbee disability data so far.

Year	Depts reporting to Taulbee	Depts responding to disability question	Percent Enrollment with Accommodations	Percent of Depts Reporting zero Student with Accommodations	Max Department percent with Accommodations
2021	171	51	4.1%	35%	17%
2022	182	56	4.1%	38%	34%
2023	176	69	3.4%	40%	22%

Table 1: Summary of undergraduate data on disability over three years of the CRA Taulbee Survey.

Although the number of departments responding to the disability question has grown slightly, the percentage of departments responding remains about one-third. Further, the percentage of those responding to the disability question who answer zero has reached 40 percent in 2023.

This article addresses two questions. First, how would a department get the disability data that is requested by the CRA Taulbee Survey? Second, why should a department care about this disability data? I address the questions in this order under the assumption that many CRA member departments want to report this data, but have not done so yet. The primary purpose of this article is to give some guidance to departments who want to report disability data.

How to Get Disability Data

The disability data that is relevant to the CRA Taulbee Survey is institutional data that is typically found in the university's student database, namely, whether a student is registered for disability services in a particular year. Other socioeconomic student data requested by the CRA Taulbee Survey, such as whether a student has a Pell Grant or is identified as being a first generation college student, is also typically found in the university's student database. The question for a department trying to answer the disability question is how does the department request all the standard CRA Taulbee Survey student data, including gender, race, ethnicity, and citizenship. A department should be able to get the student disability data in the same way. A new database query may need to be developed for disability and the other new socioeconomic student data. The student database is typically managed by the university's office of institutional research (OIR). Each university will have its own protocol for interacting with the OIR to facilitate student database queries. Whatever protocol is being used to get student demographic data, the same one can be used for disability data.

Disability Data (continued)



There may be pushback from a university's OIR with regard to disability data because of privacy and FERPA compliance concerns. If this pushback occurs at a U.S. university, it might be helpful to remind the OIR that it is required by Section 132 of the Higher Education Act of 1965 (P.L. 110-315),[4] as amended, to provide the very similar data to the National Center for Education Statistics (NCES) to be posted on the NCES College Navigator website.[5] Disability data that is anonymized should not fall under FERPA.

One bit of advice: do not ask your university's office of student disability services for disability data. They may have the data, but it is not likely they will share it with a department. Hopefully, they will refer you to the university's OIR.

Another piece of advice: do not expect university administrators to know that this kind of disability data is in the student database. I can recall several years ago talking to a high level administrator at the University of Washington who had no idea that this student disability data exists in the student database. The people who know the most about student data are those who work in the university's OIR.

I looked up the percentage of undergraduate students enrolled who are formally registered with the office of disability services, for Fall 2022, on the College Navigator for U.S. universities that are CRA members, and put the percentages into a spreadsheet. There are 216 CRA member universities in the spreadsheet. If a university has multiple departments as CRA members, I only have one entry for the university. There were only three U.S. CRA member universities that did not have the disability data on the College Navigator. Summarizing what I found:

- 29 universities who reported "3 percent or less" and 187 reported a percentage greater than 3 percent.
- For the 187 universities with more than 3 percent, the percentages ranged from 3.38 percent to 32.00 percent with a median of 9.03 percent.
- For the 187 universities with more than 3 percent, the average, weighted by undergraduate enrollment for just those universities, is 9.26 percent.
- Assigning 0 percent to the 29 universities who reported "3 percent or less" the average, weighted by undergraduate enrollment for all 216 universities, is 7.75 percent.

It is safe to say that the actual percentage of undergraduates at all the CRA member universities is between 7.75 and 9.26 percent, which is relatively close to the 8 percent reported by the Postsecondary National Policy Institute. Nonetheless, it shows that the CRA members who report disability data to the CRA Taulbee Survey have far less participation by disabled students compared with the population at their universities. It suggests that the same is true for the combined CRA membership.

For those who are interested in finding their university's disability data on the College Navigator, first find your university, then go to the "General Information" tab, then look at the right-hand column to find the data.[5] The College Navigator disability data only includes undergraduates, not Masters and PhD students. You might be interested in going to the Integrated Postsecondary Education Data System (IPEDS) to look for disability data. There is no variable related to disability that is available to the public on IPEDS.

I am concerned about the number of departments that are currently reporting zero undergraduates who receive disability accommodations to the CRA Taulbee Survey. I hope that each of these departments reach out to their OIR to make sure they are using the proper query or if they are trying to find this data elsewhere. It is highly unlikely that a department with more than 100 undergraduate majors has zero students who are registered with their student disability services office.

Why Get Disability Data

Broadening participation in computing (BPC) is a core value of the computing community. I wrote about this in my Viewpoints article in December 2009 in the Communications of the ACM.[6] The reasons for broadening participation in computing I outlined in that article still apply today:

Disability Data (continued)



- Numbers: There is still a high demand for computer professionals. The computing profession needs to attract people from all demographics.
- Social Justice: People from all demographics should have equal opportunity to become computer professionals.
- Quality: Diverse groups of designers and engineers tend to develop better computing products and services.

For these reasons and others, the NSF's CISE Directorate, which is the major funding agency for computer and information science research in the U.S., has instituted programs and policies that promote BPC. Programs include the NSF BPC Alliances and the NSF CSGrad4US program, both of which fund CRA activities. Policies include the requirement that BPC Plans be included in medium to large proposals submitted to NSF CISE. CRA runs BPCnet.org, which provides many resources for proposal writers to CISE programs.

Along with other minoritized groups, disabled people are identified by NSF as a group that needs increased participation in STEM fields including computing fields.[7] Tracking the participation of members of these groups in undergraduate and graduate programs, and in computing professions, is important to understand if BPC activities are making an impact and for planning. Unfortunately, disability data is hard to collect and understand.[8] It took some time, but the CRA Taulbee Survey found a good demographic to track for disabled students, namely, the number of students registered with the disability services to receive accommodations at their universities. Let's call this number DS for Disability Services. DS doesn't tell the whole story about the participation of disabled students in computing degree programs, but it is a strong indicator of their participation for the following reasons:

- Comparing the university wide DS with the departmental DS will guide departments on whether they should be attracting more disabled students to their program.
- Tracking departmental DS over time will help a department understand if interventions they are using to attract disabled students are working.
- Sharing the departmental DS with the Taulbee survey will help the entire computing field understand how the field as a whole is doing with disability inclusion.

In this article, I covered the how and why of collecting disability data for the CRA Taulbee Survey. As an action item for readers of this article, please pass it on to the people in your department who submit data to the CRA Taulbee Survey. Readers may be interested in reading an older article I wrote in 2020 about disability data at all levels from K-12 to the workforce.[9]

Acknowledgement

This material is based upon work supported by the National Science Foundation under Grant No. 2137312. Thanks to Briana Blaser and Maya Cakmak for valuable input for this article.

- [1] CRA Taulbee Survey. https://cra.org/resources/taulbee-survey/
- [2] National Center for Education Statistics, Table 311.10. https://nces.ed.gov/programs/digest/d22/tables/dt22_311.10.asp
- [3] Postsecondary National Policy Institute: Students with Disabilities in Higher Education. https://pnpi.org/wp-content/uploads/2023/11/ StudentswithDisabilities-Nov-2023.pdf
- [4] Higher Education Act of 1965 (P.L. 110-315). https://www.govinfo.gov/content/pkg/COMPS-765/pdf/COMPS-765.pdf
- [5] NCES College Navigator. https://nces.ed.gov/collegenavigator/
- [6] R.E. Ladner. 2009. Broadening Participation Opening Remarks. Commun. ACM 52, 12 (December 2009), 22–24. https://doi.org/10.1145/1610252.1610263.
 [7] Broadening Participation in STEM homepage at NSF. https://new.nsf.gov/funding/initiatives/broadening-participation.
- [8] B. Blaser and R.E. Ladner. Why is Data on Disability so Hard to Collect and Understand? 2020 Research on Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT), Portland, OR, USA, 2020, pp. 1-8, http://doi.org/10.1109/RESPECT49803.2020.9272466.
- [9] Richard E. Ladner. 2020. Expanding the Pipeline: The Status of Persons with Disabilities in the Computer Science Pipeline. Computing Research News. November 2020, Vol. 32/No. 10. https://cra.org/crn/2020/11/expanding-the-pipeline-the-status-of-persons-with-disabilities-in-the-computer-science-pipeline/

Nominations Open for 2025 CRA Undergraduate Research Faculty Mentoring Award



CRA-I

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By Denys Poshyvanyk, CRA-E Board, College of William and Mary

The CRA Undergraduate Research Faculty Mentoring Award recognizes individual faculty members who have provided exceptional mentorship, undergraduate research experiences and, in parallel, guidance on admission and matriculation of these students to research-focused graduate programs in computing.

Eligible nominees are full-time faculty members at North American academic institutions. Faculty members include tenured and tenure-track faculty, instructors, and professors of the practice. Current members of CRA-E are not eligible to be nominated or to serve as the nominator. A nominee must be nominated by a faculty member or a researcher in the computing field. Nominations will be accepted until **November 22, 2024**, and award decisions will be announced in **February 2025.** To be considered, nominees must be full-time faculty members at a North American academic institution.

Click here to view the 2024 award winners and here to view the FAQs.

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

To learn more about the award, please visit this page on our website. Questions and inquiries can be directed to: mentoring_awards@cra.org

Bruce Henrickson (LLNL) and Ronak Shah (NVIDIA) Join CRA-Industry Council

By Helen Wright, Manager, CRA-I

CRA-Industry (CRA-I) is pleased to welcome Bruce Henrickson (LLNL) and Ronak Shah (NVIDIA) to the CRA-I Council. They join an expanding group of Council members, under the leadership of CRA-I Council Chair Ron Brachman (Cornell Tech), who will continue collaborating with the CRA-I Steering Committee. Together, they will focus on shaping the committee's future directions, engaging with the community, and advancing the goals of CRA-I.



Bruce Hendrickson is the Principal Associate Director for Computing and Lawrence Livermore National Lab. In this role, he leads the largest computing organization in the U.S. national lab system. Bruce's research interests include computational science, applied combinatorics, parallel computing and computer architecture. He is a Fellow of SIAM and AAAS. Bruce has degrees in Mathematics and Physics from Brown University and a Ph.D. in Computer Science from Cornell University.

Bruce Hendrickson





Ronak Shah

Ronak Shah is a Senior Manager at NVIDIA, where he oversees research institution relationships. His team helps researchers accelerate their time-to-science, fosters innovative methods, and builds partnerships. Ronak joined NVIDIA in 2016 as a Senior Account Manager for Higher Education and later managed Account Managers in the Northeast US. Prior to his tenure at NVIDIA, he was an Executive Account Manager at CDW Government, managing higher education business relationships. Ronak holds a BS in Industrial Management with a specialization in Manufacturing Engineering Technology from Northern Illinois University.

Welcome, Bruce and Ronak!

Please help the industry research community by continuing to nominate outstanding colleagues for the CRA-I Council. We have a goal to reach a steady state of 21 members that represent the breadth of the industry computing research community. Read more here and send nominations to industryinfo@cra.org.

Nominate a PhD Student for the CRA-E Graduate Fellows Program



By Sheila Khan, Program Associate, CRA-E

The Computing Research Association Education Committee (CRA-E) will be accepting nominations for the CRA-E Graduate Fellows Selection Program from **October 14, 2024 to November 18, 2024**. Award decisions will be announced in **February 2025**.

About the Graduate Fellow Program

CRA-E aims to support the health of the computing research pipeline by promoting undergraduate research, providing resources to faculty to help students prepare for research, and encouraging undergraduate students to pursue graduate education in computing.

The Graduate Fellows Selection Program offers Ph.D. candidates in computing fields a chance to contribute to CRA-E projects, network with computing research education advocates, and promote undergraduate computing research education.

CRA-E typically has two fellows and appoints a new graduate fellow per year. Fellows engage in committee activities and contribute to the creation of resources for undergraduate and graduate students. On average, Fellows contribute approximately 5 hours per month.

How to Nominate a Student

Nominations for the Graduate Fellows program will be accepted from **October 14, 2024 to November 18, 2024.** Faculty members are invited to nominate one graduate student from their institution.

Note: Multiple nominations are permitted by different faculty members at the same institution

CRA-E Computing Research Association Education

Nominations include:

- 1. A faculty recommendation letter; this letter should highlight the nominee's interpersonal skills, Ph.D. research involvement, mentoring experience with undergraduates, and overall interest in the Graduate Fellow role.
- 2. Student's C.V.; this document should list a student's research interests and accomplishments
- 3. Student's personal statement; this one-page statement should be written by the student and explain their interest in being a fellow, experience mentoring undergraduates, and future career goals.

To learn more about the program and nominate a student, please visit this page on our website.

Securing Machine Learning with Sequestered Encryption on GPU Hardware

By Alejandro Velasco Dimate (CRA-E Fellow, College of William & Mary) and Emma McDonald (CRA-E Fellow, University of Alberta)

This Q&A highlight features Maryam Abuissa, an Honorable Mention in the 2024 CRA Outstanding Undergraduate Researchers award program. Maryam finished their undergrad in Math and Computer Science at Amherst College and is now pursuing their PhD in Computer Science at Brown University.

What brought you to computing research?

I got involved in research when Professor Matteo Riondato at Amherst College offered me a research assistant position. Before that, I had only done research in my classes, mostly in the humanities, and I did not enjoy it. However, my professor encouraged me to try, because I had done well in the introductory computer science class and helped him design course materials over the summer. I trusted him, so I gave it a shot and found that I enjoyed it. My first project was in data mining, where we designed a new null model to validate patterns in observed datasets. Existing models assumed the order of data points mattered, which is not always true. We created order-agnostic models and developed an algorithm to sample from



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Maryam Abuissa, B.S. in Math and Computer Science, Amherst College

them efficiently. The results of our work were published in the Journal of Data Mining and Knowledge Discovery.

How did you select your research topic?

Through my first project, I discovered my passion for research and decided to continue, potentially pursuing graduate studies. I was interested in exploring multiple fields before committing to one. After enjoying a class in computer security, I talked with my advisor, Professor Scott Alfeld, and applied to NSF-REU opportunities in that research area. As a result, I worked with Professor Omer Khan on a hardware-focused security project, which offered a new direction from my previous research.

What can you tell us about your research?

My work extended a security framework called sequestered encryption to GPU hardware, which is essential for modern machine learning. I developed a solution that maintained the same security guarantees as sequestered encryption, designed specifically for GPUs, and analyzed its efficiency. As machine learning becomes more prevalent and models grow larger, there is increasing interest in running machine learning on sensitive data, like medical records, while maintaining privacy. Current solutions struggle to balance efficiency and security, and while sequestered encryption offered a good balance, it was designed for outdated hardware. Our design adapted it for modern GPUs, allowing us to retain its benefits in a more realistic hardware environment. I documented the results of our work and presented them to my cohort in the REU program.

What challenges did you have during research?

Because I was new to computer science when I started research, I was unfamiliar with tools like IDEs, terminals, scripts, and version control systems, and I often felt confused by things that seemed basic to others. After discussing this with my professor, he recommended MIT's **The Missing Semester of Your CS Education**, an online lecture series that helped me understand these tools and boosted my confidence as a computer scientist and researcher. I also struggled with prioritizing tasks and committing to a research direction without frequent input from my advisor. Additionally, as a nonbinary person, I sometimes felt out of place in peer groups that were mostly men, even though they were generally welcoming. Over time, I learned the importance of trusting my own judgment while working and regularly updating my advisor to ensure I stayed on track. Through this experience, I learned more about the balance of communicating with my advisor that worked for me.

What are your favorite aspects of research?

I enjoy learning and group problem-solving. A lot of my time, especially in theoretical research, is spent exploring new concepts through textbooks or papers and collaborating with other students or my advisor at the whiteboard. For me, those two things are the most fun way to entertain my curiosity about the world.

How do you keep your motivation in research?

I go through periods of feeling more and less inspired. I think that you can't expect yourself to feel constantly engaged in something that can be as exhausting and foreign as research, especially as a young researcher. I often find motivation when I talk to others about research or give myself time to think deeply about problems, even if it does not lead to immediate results. Exploring interesting questions inspires future work and I believe it is important for researchers to find balance, keeping the big picture in mind while also focusing on the details. For me, making time for art and music is essential to feeling fulfilled and excited about research. Although it is possible to blend research and art, I enjoy them for different reasons, even if it means stepping away from research temporarily.

Do you have any advice for other students looking to get into research?

I would encourage students interested in research to allow themselves to feel confused. When I first started, I thought I must not be cut out for research because I felt confused all the time, but my confusion was a sign that I was challenging my limits. If you wait until you have figured everything out to start doing research, you will never actually do any research. It has been extremely helpful for me as a researcher to get comfortable with feeling uncomfortable, confused, and out of my depth.

Carla Brodley to Speak at Upcoming BPC Community Forum: Identifying and Removing Institutional Barriers to BPC



By Andres Purpuro, Program Assistant, CERP

Join us for the next BPCnet.org BPC Community Forum on Friday, November I, at noon EST, for a discussion led by **Carla Brodley**, Executive Director, and **Catherine Gill**, Program Director, of the **Center for Inclusive Computing (CIC)**. They will explore strategies to overcome institutional barriers in undergraduate computing programs.

REGISTER TO ATTEND

CIC partners with universities to identify and remove the—often unintentional—barriers that prevent students from discovering and thriving in computing education. To remove these barriers, CIC Partner Schools implement evidence-based, systemic, and sustainable interventions that don't require ongoing funding. The CIC works in partnership with 100+ universities across the country to ensure that students of any intersectional demographic identity can discover, thrive, and persist in computing.

In this talk, Dr. Brodley will explore the most common institutional barriers found in undergraduate computing programs and the concrete actions that can be taken to remove these barriers such as handling the distribution of prior computing experience in the intro sequence, rethinking the placement of math requirements, creating interdisciplinary computing BS/BA degrees, ensuring that multi-section courses use common assessment and more. Dr. Brodley will present results for the 21 partner schools who have had 2+ years to implement changes.

The presenters and the BPCnet.org team look forward to sharing this information with the BPC community and hope to receive feedback on what *systemic* interventions might be missing from this list.

Registration is required to attend this Zoom event. After registering with your name and email address, you will receive an email confirmation with the Zoom link.

The live transcript will be turned on for this BPCnet.org Community Forum. If you have any accessibility needs, please reach out to bpcinfo@cra.org.

CERP Infographic: How Do Faculty Advisors Shape CS PhD Student Outcomes?



By Kari George, Postdoctoral Fellow at the University of Illinois Urbana-Champaign

Persistent equity gaps in computing doctoral degree attainment motivated a new study that examined what influences students' consideration of departure. As an important precursor to their decisions to stay or leave their programs, understanding what shapes students' thoughts of leaving is critical to supporting a robust graduate population.

As described in the September issue of **Computing Research News**, Drs. Kari George and Kaitlin Newhouse used data from the 2018 CERP Graduate Student Data Buddies Survey to test a conceptual framework of doctoral students' consideration of departure.

CERP Infographic (continued)



Using structural equation modeling and data from nearly 1,100 students across more than 100 research universities, the framework included important psychosocial characteristics known to be important to students' educational and career trajectories throughout computing, such as sense of belonging in computing, computing identity, and researcher self-efficacy, among others.

The full conceptual framework and findings from the study are available in **this article**, published in *Research in Higher Education*. Summarized below is an excerpt of the framework, highlighting the critical role of faculty advisors and *how* they influence PhD students' experiences and outcomes.



Figure 1: An excerpt from the conceptual model of computing doctoral students' consideration of departure. Standardized beta coefficients for each path are shown in the gray and blue boxes, with blue being a positive predictor and grey being a negative predictor. All path coefficients are significant at p<.05.

Students who were more satisfied with their advisors were more involved in professional development activities, had more positive perceptions of the departmental community, and reported higher researcher self-efficacy. Greater satisfaction with faculty advisors also served as a protective factor because it reduced students' disappointment in their accomplishments, and reduced the likelihood that students considered departure. Additionally, this model shows both what satisfaction with advisors directly influence, as well as indirect paths of influence. For example, greater satisfaction with advisors enhances researcher self-efficacy, which then reduces the likelihood of students' consideration of departure.

The research suggests advisors are important because the student-advisor relationship influences what students *do*, how students *feel* in the computing community, how students *see* themselves, and ultimately, whether they consider leaving their programs. Computing departments and faculty members are encouraged to cultivate stronger relationships between faculty and PhD students. Recommendations for how to engage in quality mentorship practices can be found in resources such as the **Equity-Minded Mentorship Toolkit**.

CERP Infographic (continued)



Notes

The measure of Satisfaction with Advisor was computing using factor analysis (= 0.871) from three items that asked students about their satisfaction with how often they meet with their advisor, the guidance their advisor provides, and the career advice their advisor provides (factor loadings of 0.746, 9.956, and 0.803 respectively).

The survey data analyzed for this infographic were collected by the Center for Evaluating the Research Pipeline via The Data Buddies Project. 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.

This material is based upon work supported by the National Science Foundation under grant numbers [#2030859, #2137647]. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

A Better Understanding of the Faculty Educating Computer Science Students in the United States



CKA Computing Research Association

By Craig E. Wills, Worcester Polytechnic Institute

The motivation for this work is a better understanding of the faculty educating Computer Science students in the United States. Most previous work has largely concentrated on research faculty at PhD-granting institutions.

A broader look at faculty educating CS students is needed as CS PhD-granting "R1" institutions in the U.S. account for about half of the Bachelor's degrees awarded, but less than 15 percent of the institutions doing so. These percentages translate into over 800 non-CS-PhD-granting institutions awarding more than 50,000 Bachelor's degrees over two years of data. PhD-granting and research-focused institutions also account for a small percentage of institutions designated as serving populations of minority students.

Motivated by the need to not only examine a range of institution types, but also both "dual-track" (traditional tenure-track) and teaching-track faculty at these institutions, we take an approach where we gather public data about faculty at institutions offering Computer Science degrees. This approach allows us to select the institutions and faculty we study to ensure representation of a variety of types.

Over two years we have collected information about more than 16,000 Computer Science faculty from nearly 550 institutions awarding Computer Science degrees. These institutions are divided into nine distinct groups based on the highest CS degree offered and Carnegie Classification of the institution. We use graduate CS ranking to further assist in distinguishing PhD-granting institutions. We also have three groups for institutions designated as minority serving for specific population groups.

Given this motivation and approach, we are able to determine answers to questions regarding different types of faculty at different types of institutions. Results from this analysis include: size and composition of dual- and teaching-track faculty, representation of teaching-track faculty of full-time faculty across all institutions, ratios between degrees awarded and faculty, predicted gender



distribution, rates for promotion in rank of dual- and teaching-track faculty, churn of faculty via additions and losses, and movement of faculty from one institution to another.

Notable results include:

- Teaching-track faculty represent about a quarter of full-time faculty across all institutions. This percentage ranges from 15 percent for BS/ BA-granting Baccalaureate institutions to 33 percent for MS-granting Masters institutions. Teaching-track faculty represent 25 percent of all full-time faculty in public and 19 percent in private institutions.
- Employing a name-based gender prediction tool, aggregate results show that 21 percent of all Full Professors, 25 percent of Associate Professors and 30 percent of Assistant Professors are predicted as female. Results are similar for teaching-track faculty with 26 percent of those faculty at a promoted rank and 30 percent at an initial rank predicted to be female.
- In terms of the number of additions and losses relative to the number of faculty in the previous year, the results show that overall
 institutions added 9 percent new dual-track faculty while losing 6 percent for a net gain of 3 percent. During the same timeframe
 institutions added 15 percent new teaching-track faculty while losing 9 percent for a net gain of 6 percent.
- Results for movement of faculty from one institution for another show that movement within the same institution group accounts for 40 percent of all dual-track transitions with 17 percent of all transitions from one top-ranked PhD institution to another. The remaining faculty transitions were between institution groups with the most movement (generally "upward") involving institutions in the next two groups of PhD-granting institutions. A similar analysis for teaching-track faculty shows movement is largely to top-ranked PhD institutions.

In addition to the results obtained thus far, we have established a baseline for future work including longitudinal analysis as well as following up with faculty of interest for demographic and background information to better understand the pathways taken by CS faculty at different types of institutions.



The full report is available here.

Whiskers show 10th and 90th %iles. Boxes show 25th, median and 75th %iles.

Figure 1. Teaching-Track Percentage of Full-Time Faculty. Teaching-track faculty represent about a quarter of full-time faculty across all institutions. This percentage ranges from 15 percent for BS/BA-granting Baccalaureate institutions to 33 percent for MS-granting Masters institutions. Teaching-track faculty represent 25 percent of all full-time faculty in public and 19 percent in private institutions.



Educating Computer Science Students (continued)



Figure 2. Percentage Gains and Losses of Dual-Track and Teaching-Track Faculty. In terms of the number of additions and losses relative to the number of faculty in the previous year, the results show that overall institutions added 9 percent new dual-track faculty while losing 6 percent for a net gain of 3 percent. During the same timeframe institutions added 15 percent new teaching-track faculty while losing 9 percent for a net gain of 6 percent.



Figure 3. Movement of Dual-Track Faculty. Results for movement of faculty from one institution for another show that movement within the same institution group accounts for 40 percent of all dual-track transitions with 17 percent of all transitions from one top-ranked PhD institution to another. The remaining faculty transitions were between institution groups with the most movement (generally "upward") involving institutions in the next two groups of PhD-granting institutions. A similar analysis for teaching-track faculty shows movement is largely to top-ranked PhD institutions.

The Security Risks of Generative AI: From Identification and Mitigation to Responsible Use



By Mihai Christodorescu (Visa Research), Somesh Jha (University of Wisconsin-Madison), Rebecca Wright (Barnard College), John Mitchell (Stanford University), Matt Turek (Defence Advanced Research Projects Agency)

We hosted a panel discussion on GenAl opportunities and risks at the 2024 CRA Conference at Snowbird, which we summarize below. We thank Divesh Srivastava for the invitation, Tracy Camp and Janine Myszka for organizing and hosting the session, and the CRA for creating this fantastic venue for idea exchange.

Generative AI (GenAI) techniques, such as large language models (LLMs) and diffusion models, have shown remarkable capabilities such as in-context learning, code-completion, and text-to-image generation and editing. These excitingly broad capabilities also present a dual-use dilemma—the new technology has the potential to be used not only for good but also by malicious actors to improve and accelerate their attacks. In this context, we wanted to discuss the risks of GenAI and ways to mitigate them as GenAI continues to revolutionize computing research, computer science broadly considered, and many other fields.

We had the pleasure of debating with three leading computer scientists on our panel:

- **Rebecca Wright**, Druckenmiller Professor and Chair of Computer Science at Barnard College, Director of Vagelos Computational Science Center, and Co-chair of the Cybersecurity Research Center in the Data Science Institute at Columbia University
- John Mitchell, Mary and Gordon Crary Family Professor of Computer Science and (by courtesy) Electrical Engineering and Education at Stanford University
- Matt Turek, Deputy Director of the Information Innovation Office (I20) at DARPA

We acted as moderators, with the help of a lively audience who drove the debate.

Before diving into the details of the panel discussion, we highlight several topics that arose during the discussion:

- We do not have a foundational theory on evaluating GenAI models. Thus a key imperative is developing evaluation approaches for GenAI and GenAI-based systems, including their impact as sociotechnical systems.
- Threat models for GenAl are currently driven by empirical observations of attacks, and significant research is needed to understand adversaries and their potential uses for GenAl.
- While the GenAl boom is largely sustained by industry, academia plays a key role in driving open-ended research to answer fundamental questions for broad societal impact.

In the opening remarks, Somesh mentioned that GenAl amplifies creativity and productivity because of all the amazing things it can do, but it also exposes the potential for dual use, where the same GenAl technology can be used both for good and bad purposes. Rebecca saw GenAl as a promising technology that brings new threats we have not addressed yet, from deep fakes, to helping attackers create new exploits, and to privacy risks. John mentioned how GenAl can help automate some basic teaching activities, based on his experience with education through online courses, where GenAl can help with grading assignments and with better feedback. However, even in that context, students may try to trick Al tools associated with a course into revealing answers to homework and exams. Matt introduced DARPA as part of the US Department of Defense that is uniquely open to collaboration across industry and academia. He also made the case that some of the risks of GenAl come from the speed and scale at which things can go wrong, and thus the goal must be to build Al systems that you can bet your life on.



Panel Discussion

The panel focused on three questions:

- Which GenAl directions are most exciting? How to realize them?
- Which GenAl risks are most likely? How to mitigate them?
- What is the role for the computing research community?

Somesh kicked off the discussion with a question about which GenAl capabilities most excite the panelists, and what the biggest risks are keeping them up at night. John described several experiences in classroom settings, where Al models turned out to be quite good at summarizing and extracting subtle points from conversations, and also quite powerful in providing information on many topics thanks to the background knowledge from training data. And yet models are not good conversationalists as they have no sense of when to intervene in a conversation, thus making them not yet ready to help people work together constructively in team/group scenarios. The properties that models need to have in this context are not measured in current model leaderboards. John also worried about adversarial manipulation of such systems, where they can be tricked into making the wrong decisions of various kinds.

Rebecca saw a future enabled by GenAl where everything gets better and easier, as people get to do jobs that are more interesting because the less interesting jobs are taken care of. This assumes that we avoid a more dystopian future where human creativity is replaced by GenAl. She also worried about becoming too quickly overly dependent on responses from GenAl based systems and drawing incorrect conclusions or having incorrect behavior, and about misinformation and disinformation amplified by GenAl.

Matt was excited about the potential of GenAl to improve software systems by finding vulnerabilities and fixing them (a goal of the currently ongoing **DARPA AI Cyber Challenge**), maybe by working alongside formal method systems to generate code and proofs, transforming how we create robust software. On the flip side, he thought the evaluation of AI systems needs to be solved, from establishing trust into an AI system, to understanding which classes of questions AIs can answer, and to determining which AI can optimally solve a particular class of problems (goals for DARPA's **In the Moment program** and **AI Quantified program**).

Audience Questions

The audience drove the remainder of the panel discussion, with a series of questions that covered a lot of ground.

On the question of the use of AI in wars, Matt mentioned that one use is to have AI systems assist humans in decision making (he gave the example of battlefield triage). In such settings, the fundamental question is how to build a quantitative alignment framework, such that the AI can take into account human attributes and core values. Ongoing work at DARPA involves not just AI researchers, but also cognitive scientists, subject matter experts, and decision making researchers.

A question from the audience touched on the risk of bad Al-generated content polluting the Internet and in turn being used in training new Al models, creating a downward spiral of worse and worse Al. John mentioned research work from Stanford that **this problem, termed "model collapse**", can be triggered by some threshold in the Al-generated content on the Internet. This is an open problem without a clear path to a solution.

Another audience question was about AI impact on scale, where even imperfect AI models can be combined together to be more efficient than a human (say, 1000 copies of an AI model can replace one human). Rebecca observed that efficiency is an easy goal for companies and institutions to optimize for, and that scaling can also help adversaries, in which case maybe we can look at AI to help defenders scale as well ("use AI to fight AI"). Matt noted that even when adversaries do not use AI, there is a concern that they can bring more human power to an attack, basically to overwhelm defenses, and this creates unique and interesting challenges for US DOD.



Security Risks of Generative AI (continued)

A follow-up question continued the topic of model collapse due to dataset pollution, and wondered whether "out of band" mechanisms such as network analysis of content and content provenance, both building on the social nature of Internet content, may be useful in this space. Matt pointed out that in this line of thinking, DARPA projects such as **Semantic Forensics (SemaFor)** looked at questions of attribution ("Does this media come from where it claims to?") and characterization ("Was the media generated for malicious purposes?"). Rebecca brought up the topic of accountability, as an alternative to provenance, especially to the degree that accountability can be combined (or traded off) against privacy. The key insight is that accountability needs to be aligned with incentives to make attacks more expensive and less scalable, possibly by purposefully slowing down the spread of inflammatory content. John discussed how research in fact checking uncovered that professional fact checkers already consider provenance first and foremost, before even looking at the content itself. He also pointed out that we should not expect LLMs to do everything for us, but rather we should integrate LLMs into larger systems that give us better trust guarantees.

An interesting question focused on the unequal distribution of GenAl benefits and risks, where underprivileged groups may be affected negatively by lack of access to GenAl. Rebecca discussed that inequities of all kinds can arise from GenAl adoption, especially that GenAl R&D is often focused towards monetizable audiences. From the education standpoint, John commented that design characteristics of the GenAl can lead to different outcomes when rolling out such capabilities to students. The announcement of "hey, Al is out there to help you" has a different effect based on the level of academic development. From the national security perspective, Matt observed that US DOD is the world's second largest employer, with a diverse mix of employees from various disadvantaged backgrounds, and as such they are actively interested in equitable GenAl.

The discussion then focused on how the computing research community (academia and industry) can best engage with the GenAl space. Rebecca discussed how computing education must change to include GenAl use, and this will require people from multiple backgrounds, multiple disciplinary, economic, racial, and ethnic backgrounds -- to be able to talk to each other, to work together, and to draw on different ways of thinking, learning, creating, and building. John thought that to solve problems that are compelling to researchers and students and have social significance, we may need to change the structure of conferences, as such topics may not fit squarely in the tradition of existing conferences. The other point he made for the department chairs in the audience is that Al research requires lots of resources, so the academic starter packages must account for that.

A final question from the audience touched on the system view of GenAl threats and how to model them. We discussed some of the attacks that have appeared up to now, including the use of GenAl for creating spearfishing, deep fakes, and better exploits. Additionally threats related to the prompt injections, to hallucinations, unpredictability, and data-feedback loops of Al are on everyone's radar. John drew a parallel between the problem of prompt injection and the field of network security, where we have reasonably well established strategies, from modeling the attacker to analyzing the network system against that model. He thought this is a solvable problem, though it may take some time to address it.

Conclusion

In their closing comments, the panelists put forth key topics where they think the computing research community can focus in the GenAl space, especially given the GenAl development is driven by industry at a rapid pace. Matt saw a need to develop foundational theories on evaluating Al models and Al-based systems, and consider their impact as sociotechnical systems. Rebecca supported the need for foundational work to understand adversaries and potential defenses, and emphasized the need to explore how attackers' capabilities are amplified by Al. John underlined the fact that a lot of the open-ended research comes from universities, focused on broad societal themes and supported by open publications, and that it is important this model of research needs to be sustained.

The panelists and the audience explored a wide set of topics around the risks of GenAl and where the research community can best play a role in shaping the development, evaluation, and deployment of GenAl-based systems. Many parallels can be drawn with the

Security Risks of Generative AI (continued)

general field of cybersecurity, where technologies often have both benign and malicious uses as they amplify the capabilities of users and adversaries and can result in uneven impact due to inequities and unexpected consequences.

Explore More from the 2024 CRA Conference at Snowbird

For those interested in diving deeper into the discussions and topics from this year's CRA Conference at Snowbird, you can explore the session slides and other resources available on the conference webpage. Visit our CRA 2024 Conference Resources page to access PDF slide decks from various sessions, including the panel on GenAI.

Grad Cohort for Women -Participant Spotlight: Suzzana Rafi, George Mason University

By Lauren Lashlee, Senior Program Associate CRA-WP

The CRA-WP Grad Cohort for Women Workshop is a transformative event designed to support and mentor women and gender-marginalized students pursuing graduate studies in computing. Through workshops, networking sessions, and mentorship opportunities, participants gain valuable skills and insights to navigate their academic and professional journeys.

Suzzana Rafi, a 4th-year PhD student in the Department of Computer Science at George Mason University, embodies the workshop's impact. Suzzana's research focuses on software testing, particularly improving testing techniques using AI, and she has already made strides in the field by addressing issues like flaky tests. Dr. Wing Lam, her advisor, noted, "Since attending the workshop, Suzzana has gained confidence and has become more engaged, contributing more during seminars and discussions."

Applications for the 2025 workshop are now open, with a deadline to apply by **November 15**. Click here to apply.

Below, Suzzana shares her experiences and insights from attending the Grad Cohort for Women Workshop.

Q&A with Suzzana Rafi

What motivated you to attend the CRA-WP Grad Cohort for Women Workshop, and how did you hear about it?

I was motivated to attend because I wanted to connect and share experiences with other women in computing and get insights on navigating grad school. I first heard about it from my advisor. The first time I attended, I was in my second year of grad school and looking for my place in the research field, and it seemed like a great opportunity to get some motivation.

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Suzzana Raf (continued)



How did the interactions with senior women in computing influence your perspective on navigating graduate school or research?

Talking to senior women was incredibly encouraging. They shared practical advice and real-world experiences that helped me understand how to balance research, life, and career development. It helped me see both the academia and industry side of computing jobs.

Were there any particular sessions or speakers that resonated with you?

Yes, sessions like "Storytelling for Powerful Communication" and "Building Your Professional Persona" stood out. The speakers shared relatable struggles and successes, offering practical advice that helped me feel more confident in presenting myself professionally.

How have the mentorship and networking opportunities influenced your academic journey since attending?

The mentorship and peer connections are a great support system. I've stayed in touch with several peers, and we share research, career, and personal updates. These connections have been motivating and have provided new perspectives.

Did attending the workshop increase your confidence in your ability to succeed in graduate school or computing?

Definitely. Hearing others share their struggles and successes made me feel like I'm not alone, and it provided strategies to overcome challenges in grad school and computing.

How has the workshop helped you improve your research output or approach to publishing papers?

The workshop provided practical tips on publishing papers, from choosing the right venue to structuring drafts and navigating the submission process, making the journey of getting published feel more manageable.

Looking to the future, how do you plan to apply what you learned at the workshop to your career in computing?

I plan to use the networking and communication skills I learned to actively seek collaborations and mentorship opportunities, which will be valuable as I refine my career path.

What advice would you give to a student considering attending the Grad Cohort for Women Workshop?

Go for it! It's a unique experience—an opportunity to learn, connect, and be inspired. Engaging with both peers and mentors can provide some of the most useful feedback and support.

Apply Now for the 2025 Grad Cohort for Women Workshop

The workshop is not only an opportunity for professional growth but also a supportive community that empowers women to thrive in computing. If Suzzana's experience resonates with you, we encourage you to apply for the 2025 CRA-WP Grad Cohort for Women Workshop!

The 2025 Grad Cohort Workshop will be held at the Hilton Denver City Center in Denver, Colorado, from April 3-5, 2025. Click here to apply.

Apply Now

Applications are open now and must be submitted by November 15. For more information and FAQs, visit CRA-WP Grad Cohort for Women.

Grand Challenges from the 11th Heidelberg Laureate Forum



By Haley Griffin, Senior Program Associate, CCC

The Computing Community Consortium's Senior Program Associate, Haley Griffin, attended the 11th Heidelberg Laureate Forum at the end of September. Below is an excerpt from her blog series highlighting the experience.

Today is day 4 of the **11th Heidelberg Laureate Forum**, and throughout the week I have been asking the computing laureates to identify the grandest grand challenges in computing research, and extrapolating grand challenges based on relevant lectures and discussions. Here are some of the challenges that emerged:

- Increasing Data Efficiency of Computing Systems. Dr. Alexei Efros posited that computers need to require less data to perform well in order to solve a wider range of problems. While children are very good at learning from a few examples, computers are much less data efficient.
- Improving Accuracy of Large Language Models. Dr. Vinton Cerf identified hallucination as a significant problem with LLMs today, especially regarding serious topics like financial or medical advice. He explained that the projected confidence of Chatbot style systems is due to the quality of human writing that they are generating conclusions from, and not based on their actual performance. He concluded, "we have a big job in the community that works in this to find ways of detecting and defending against that kind of failure."
- **Understanding the "Why" of AI**. Dr. David A. Patterson discussed the domination of AI in the field of computing today, and how well many experts have ideas on how to improve AI, especially how it understands and interprets information, there is no underlying theory as to why we need it to achieve these things. He believes that if we are able to understand the "why", we'd be able to make more efficient use of AI.
- Reducing the Power Requirements of Computing. Dr. Vinton Cerf explained the importance of reducing power needs of computing systems due to environmental and cost concerns. On a related note, he also expressed the need to find different ways of generating power that don't produce carbon dioxide.
- Identifying Malicious Deep Fakes and Disinformation. Dr. Raj Reddy spoke about the deep fakes and disinformation that are "the bane of our society", and suggested using Al tools to help identify them in order to enable correction and/or removal.

When I asked **Dr. John Hopcraft** about the grand challenges in computing he replied from a computing education lens: "I think the grand challenges are not actually in the computer itself, but in creating the talent of computer scientists. Some of the problems in the US, there is so much emphasis on success [publications and awarded funding] that I think it's hurting things...one of the grand challenges is, how do we get the creation of talent better?"

CCC is continuing to work on identifying and defining grand challenges in computing research today, and there will be more to come on these efforts.

CISE Faculty and Department Leaders Are Invited To Join UR2PhD for an Informational Session October 17



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Education

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By Julia Sepulveda, Senior Program Associate, CRA-E

The UR2PhD program is an initiative that is building capacity within computer science to advance the representation of women and gender-marginalized students, especially those who identify as historically underrepresented. In efforts to help advance this mission, the UR2PhD team partners with schools and departments that are committed to diversifying and expanding their undergraduate research programs and opportunities.

On **Thursday, October 17 at 2:00 pm ET,** the UR2PhD Program Leadership is hosting a two-hour informational session for North American CISE faculty and department leaders. The purpose of this session will be to share information about the program, better understand the challenges and opportunities for undergraduate research, and answer any questions about the program structure, eligibility, and entry points.

As a small token of appreciation for folks' time, energy, and participation, up to one representative from each institution who attends and completes an informational form will receive \$100. To be eligible for the \$100, participants must: be faculty or department leaders at a North American institution, attend the full session, complete the post-meeting form, and complete required CRA documentation. Faculty and departmental leaders at institutions that serve large populations of historically marginalized students within CS are highly encouraged to attend.

To participate, faculty and departmental leaders must register.

Register Today

Undergraduates and Recent Graduates Are Encouraged to Attend Fall Workshops



In addition to offering structured training opportunities for students, the **UR2PhD program** is designed to help support students in their engagement with research. To help encourage and facilitate continued engagement, the UR2PhD team is offering two workshop series this fall: the Computing Research Engagement & Awareness Series and the Graduate School Application Workshops for Computing Programs.

The **Computing Research Engagement and Awareness Series** is focused on enabling students to learn more about what research is, what it can look like, and how students can get involved. Earlier this fall, the team hosted two workshops: "Computing Pathways: What Degree Is Right for Me?" and "How to Get Involved in Research?" Both workshops highlighted the diversity of pathways within computing, with the former showcasing how different degrees can open differing opportunities and the latter highlighting how opportunities are available in various settings. The next workshop in the series will be an "Ask Me Anything," where participants will be able to ask questions to other undergraduate researchers as well as the facilitators of the series. Undergraduates are invited to join the AMA on **Monday, October 21 at 6:00 pm ET**.

Fall Workshops (continued)



In addition to keeping students involved in research, the UR2PhD team strives to make it easier for students to bridge the gap between a first research experience and graduate study. Students in their penultimate and ultimate years of undergraduate study are encouraged to participate in the **Graduate School Application Workshops Series**. The series was launched in September. The first workshop, "Getting Started & Making A Plan" provided a broad overview of the series and of graduate application components. The second session, "Highlighting Your Personal Experiences & Interests," dove deeper into resumes, letters of recommendation, and application management/tracking. During both sessions, the facilitators shared resources for students to leverage during the fall, including a short checklist and an application tracker. Any student or recent graduate that is interested in exploring graduate study is encouraged to attend upcoming workshops. The next workshop "Writing a Strong Personal Statement" is scheduled for **Wednesday, October 23 at 4:00 pm ET.**

Registration is required for both sessions. To register for the Engagement and Awareness workshops, visit **this link**. To register for the Graduate School Application Workshops visit **this link**. To learn more about undergraduate opportunities available through the UR2PhD program, **please visit our webpage**.



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Column Editors

Expanding the Pipeline Soha Hassoun, Tufts University Patty Lopez, New Mexico State University



Amherst College

Assistant Professor of Computer Science -Data Structures and Algorithms

The Amherst College Department of Computer Science invites applications for a full-time tenure-track position at the rank of assistant professor, beginning July 1, 2025. Candidates with research in any area of data structures and algorithms, broadly construed, are welcome to apply. Amherst College is one of the most diverse liberal arts colleges in the country. During the 2023-2024 academic year, nearly one-quarter of Amherst's students were Pell Grant recipients, nearly half identified as domestic students of color, and 11 percent were international students, with non-U.S. citizenship; 16 percent were the first members of their families to attend college. Amherst is committed to providing financial aid that meets 100 percent of every student's demonstrated need, and nearly 60 percent of our students receive financial aid. Our expectation is that the successful candidate will excel at teaching and mentoring students who are broadly diverse. The department and college are committed to increasing the diversity of our faculty and to helping all members of our community thrive.

Both research and teaching are strongly supported by the college, which is situated within a vibrant intellectual community (including the University of Massachusetts Amherst, an R1 university with a highly ranked CS department). The department has nine tenure-line faculty with research programs in areas including performance modeling. natural language processing, data science, machine learning, algorithms, complexity, and systems. A number of faculty are supported by NSF research grants. The department is housed in a recently constructed science center that contains top-notch research and teaching facilities. The teaching load is two courses per semester, in addition to advising senior honors theses. The successful candidate will also be expected to participate in the department's governance and intellectual community and to engage in the life of the college.

Amherst College is a small, highly selective liberal arts college located in western Massachusetts. The college is part of the Five College Consortium, which supports collaborations with nearby Hampshire, Mount Holyoke, and Smith Colleges, and affords many opportunities for joint work with researchers at the University of Massachusetts.

The successful candidate must have a Ph.D. in computer science or have fulfilled all requirements for the degree by the start of the appointment. Candidates are asked to submit a cover letter, curriculum vitae, research and teaching statements, and three confidential letters of recommendation electronically to *http:// apply.interfolio.com/151826*. Applications received by October 14, 2024, will be assured of full consideration. Review of applications will continue until the position is filled.

Statement of Nondiscrimination

Amherst College does not discriminate in admission, employment, or administration of its programs and activities on the basis of race, national or ethnic origin, color, religion, sex or gender (including pregnancy, sexual orientation, gender expression, and gender identity), age, disability, genetic information, military service, or any other characteristic or class protected under applicable federal, state or local law. Amherst College complies with all state and federal laws that prohibit discrimination, including Title VII of the Civil Rights Act. Title IX. Section 504 of the Rehabilitation Act. the Americans with Disabilities Act. the Equal Pay Act, and the Age Discrimination in Employment Act. Inquiries should be addressed to the chief equity and inclusion officer, Amherst College, P.O. Box 5000. Amherst. MA 01002-5000.

Amherst College

Assistant Professor of Computer Science - Systems

The Amherst College Department of Computer Science invites applications for a full-time tenure-track position at the rank of assistant professor, beginning July 1, 2025. Candidates with research in any area of computer systems, broadly construed, are welcome to apply. Amherst College is one of the most diverse liberal arts colleges in the country. During the 2023-2024 academic year, nearly onequarter of Amherst's students were Pell Grant recipients, nearly half identified as domestic students of color, and 11 percent were international students, with non-U.S. citizenship; 16 percent were the first members of their families to attend college. Amherst is committed to providing



financial aid that meets 100 percent of every student's demonstrated need, and nearly 60 percent of our students receive financial aid. Our expectation is that the successful candidate will excel at teaching and mentoring students who are broadly diverse. The department and college are committed to increasing the diversity of our faculty and to helping all members of our community thrive.

Both research and teaching are strongly supported by the college, which is situated within a vibrant intellectual community (including the University of Massachusetts Amherst, an R1 university with a highly ranked CS department). The department has nine tenure-line faculty with research programs in areas including performance modeling, natural language processing, data science, machine learning, algorithms, complexity, and systems. A number of faculty are supported by NSF research grants. The department is housed in a recently constructed science center that contains top-notch research and teaching facilities. The teaching load is two courses per semester, in addition to advising senior honors theses. The successful candidate will also be expected to participate in the department's governance and intellectual community and to engage in the life of the college.

Amherst College is a small, highly selective liberal arts college located in western Massachusetts. The college is part of the Five College Consortium, which supports collaborations with nearby Hampshire, Mount Holyoke, and Smith Colleges, and affords many opportunities for joint work with researchers at the University of Massachusetts.

The successful candidate must have a Ph.D. in computer science or have fulfilled all requirements for the degree by the start of the appointment. Candidates are asked to submit a cover letter, curriculum vitae, research and teaching statements, and three confidential letters of recommendation electronically to *http:// apply.interfolio.com/151829*. Applications received by October 14, 2024, will be assured of full consideration. Review of applications will continue until the position is filled.

Statement of Nondiscrimination

Amherst College does not discriminate in admission, employment, or administration of its programs and activities on the basis of race, national or ethnic origin, color, religion, sex or gender (including pregnancy, sexual orientation, gender expression, and gender identity), age, disability, genetic information, military service, or any other characteristic or class protected under applicable federal, state or local law. Amherst College complies with all state and federal laws that prohibit discrimination, including Title VII of the Civil Rights Act, Title IX, Section 504 of the Rehabilitation Act. the Americans with Disabilities Act. the Equal Pay Act, and the Age Discrimination in Employment Act. Inquiries should be addressed to the chief equity and inclusion officer, Amherst College, P.O. Box 5000, Amherst, MA 01002-5000,

California State Polytechnic University

Assistant Professor, Computer Science

The Computer Science Department at Cal Poly Pomona invites applications for one tenure-track position at the rank of Assistant Professor, appointment effective Fall 2025. We have a strong commitment to inclusive excellence and to educational experiences that leverage the diverse perspectives and experiences needed to succeed and thrive in a diverse society. Duties and responsibilities: actively engage in the teaching, research and curricular development activities of the department at both undergraduate and graduate levels; actively engage in department/university services.

Required Qualifications: Possess at the time of appointment, a Ph.D. in Computer Science or closely related area. Demonstrated commitment to inclusivity and equity. Demonstrated potential to establish an active research program with undergraduate and/or master's students. Demonstrated potential to teach a broad range of undergraduate courses and graduate courses.

Consideration of completed applications will begin on Sept. 29, 2024 and will continue until the position is filled. For expanded position description and application information, please go to *PageUp job Ad* . For general inquiries, please call 909-869-3440 or email *cs@cpp.edu*. EOE



Carnegie Mellon University

2024-25 INI Teaching Track and Non-Tenure Track Faculty Positions

The Information Networking Institute (INI) at Carnegie Mellon University (CMU) is soliciting applications for faculty at all levels for CMU's main campus in Pittsburgh, PA. We are primarily seeking teaching track faculty candidates, however there are opportunities for special track faculty and/or research track faculty jointly with other departments at Carnegie Mellon.

The INI educates and develops engineers through technical, interdisciplinary master's degree programs in information networking, information security, Al and mobile and IoT engineering that incorporate business and policy perspectives. Established in 1989 in response to a demand from industry for professionals skilled in both computer science and engineering, the INI has evolved over the past three decades to become an integral part of Carnegie Mellon's College of Engineering (a top ten engineering school as ranked by U.S. News and World Report). Given the interdisciplinary nature of our programs, INI students have the unprecedented flexibility to take courses across disciplinary boundaries, such as computer science, engineering, public policy, management, machine learning and human-computer interaction, among others.

Carnegie Mellon University

INI Adjunct Instructor 2024-2025

The Information Networking Institute (INI) at Carnegie Mellon University (CMU) is soliciting applications for adjunct instructor(s) to teach courses within the INI's graduate programs in Pittsburgh, PA.

This position can accommodate teaching in the evening to work with an instructor's full-time, job schedule. Qualified candidates would have previous teaching and/or work experience related to our core technical areas of networking, information security, mobile and IoT engineering, and AI engineering, including but not limited to: mobile computing, embedded systems, Internet of Things technologies, telecommunications, data analytics and artificial intelligence, information security, software security, network security and cyber operations. Outstanding candidates in other areas related to networking, security, mobile and IoT engineering, and AI engineering are encouraged to apply.

To learn more about the INI, our programs and current course offerings please visit the *academics page on our website*. Learn more about working at the INI on our website.

Clemson University

Assistant Professor Faculty Positions in Computer Science

The Division of Computer Science within Clemson University's School of Computing invites applications for four assistant level tenure-track faculty positions to start Fall 2025. Three positions are focused on candidates with expertise in software engineering: systems and networking: NLP and LLMs; and algorithms/theory. Another position is focused on explainable AI, which is a joint position with Artificial Intelligence-Enabled Devices for the Advancement of Personalized and Transformative Health Care in South Carolina (ADAPT-SC).

Applicants should indicate their specific research specialties/interests in their cover letter. Application materials, including a vita, statements on teaching and research and contact information for securing three confidential reference letters should be submitted at this link: *http://apply.interfolio.com/138333*

College of the Holy Cross

Tenure-Track Assistant Professor of Computer Science Faculty Position

The Department of Mathematics and Computer Science at the College of the Holy Cross invites applications for a fulltime tenure-track Assistant Professor in Computer Science beginning August 2025. All research specialties will be considered.

This position carries a 3-2 teaching load with a research leave prior to tenure review of either a full year at 80% salary or a semester at full salary, and generous sabbatical and fellowship leaves for tenured faculty. Faculty receive start-up funding to support their research and professional development and have a one-course reduction in their first year



of teaching (i.e., 2-2). Candidates must demonstrate excellence in scholarship and a commitment to effective undergraduate teaching in the context of a liberal arts college. A Ph.D. in computer science or closely related field is required by the beginning of the appointment.

The College of the Holy Cross uses Interfolio to collect job applications electronically. Please visit https://apply. interfolio.com/151805 for application details and to submit an application. The College, a highly selective Catholic liberal arts college in the Jesuit tradition, values dialogue among people from diverse perspectives as integral to the mission and essential to the excellence of our academic program. The College is an Equal Employment Opportunity Employer and complies with all Federal and Massachusetts laws concerning equal opportunity and affirmative action in the workplace.

Application review will begin on October 8, 2024 and continue until the position has been filled. Direct questions to Professor Laurie King, *lking@holycross.edu*.

College of the Holy Cross

Tenure-Track Barrett Assistant Professor of Computer science Faculty Position

The Department of Mathematics and Computer Science at the College of the Holy Cross invites applications for the Barrett Assistant Professor of Computer Science, a full-time tenure-track position to begin in August 2025. Applicants should demonstrate an interest and expertise in the ethical, legal, and moral dimensions of computing and technology, and conduct research or teaching in related areas such as: data privacy and data ethics; alignment and algorithmic fairness; information, speech, and policy; technology ethics; design/engineering of ethical technologies; technologies and methods related to misinformation, disinformation, trust, and authenticity; algorithmic bias and accountability; or equitable computing.

This position carries a 3-2 teaching load with a research leave prior to tenure review of either a full year at 80% salary or a semester at full salary, and generous sabbatical and fellowship leaves for tenured faculty. Faculty receive start-up funding to support their research and professional development and have a one-course reduction in their first year of teaching (i.e., 2-2). Candidates must demonstrate excellence in scholarship and a commitment to effective undergraduate teaching in the context of a liberal arts college. A Ph.D. in computer science or closely related field is required by the beginning of the appointment.

The College of the Holy Cross uses Interfolio to collect job applications electronically. Please visit *https://apply. interfolio.com/151804* for application details and to submit an application. The College, a highly selective Catholic liberal arts college in the Jesuit tradition, values dialogue among people from diverse perspectives as integral to the mission and essential to the excellence of our academic program. The College is an Equal Employment Opportunity Employer and complies with all Federal and Massachusetts laws concerning equal opportunity and affirmative action in the workplace.

Application review will begin on October 8, 2024 and continue until the position has been filled. Direct questions to Professor Kevin Walsh, *kwalsh@holycross.edu*.

Columbia University

Lecturer in Discipline or Senior Lecturer in Discipline in Computer Science

The Department of Computer Science at Columbia University in the City of New York invites applications for faculty at the rank of Lecturer in Discipline or Senior Lecturer in Discipline beginning in the 2025-26 academic year. Lecturers in Discipline are full-time non-tenure track faculty members whose primary responsibility is teaching. Lecturers in the department enjoy voting rights at faculty meetings, serve on department committees, and earn a Dean's Leave on a timeline similar to that of tenure-track faculty. The Department of Computer Science is committed to hiring outstanding teachers to support the growing needs of its exceptionally strong undergraduate and graduate programs. Teaching responsibilities for lecturers include courses throughout the computer science curriculum, from introductory to graduate level courses, with a typical teaching load of two courses per semester.

Qualifications

Candidates must have a PhD or its professional equivalent by the starting date of the appointment. Candidates at



the rank of Lecturer in Discipline are expected to have teaching experience, documented evidence of pedagogical excellence, and evidence of professional growth and activity in the given field. Candidates at the rank of Senior Lecturer in Discipline are expected to have substantial experience and accomplishments, a superlative record of teaching as a lecturer, and documented evidence of pedagogical excellence in carrying out administrative or other department responsibilities.

Application Instructions

Applications should be submitted electronically to *http://apply.interfolio. com/153382* and include the following: a cover letter, current CV, teaching statement, brief summary of research, and three letters of recommendation. At least two of the letters of recommendation must address teaching ability. Applicants are also encouraged to submit a statement addressing contributions to diversity initiatives, if applicable. To ensure full consideration, applications must be submitted by October 15, 2024. Review of applications will begin on October 1, 2024.

Hiring Salary Range: Lecturer in Discipline: 104K-127K; Senior Lecturer in Discipline: 123K 160K. The salary of the finalist selected for this role will be set based on a variety of factors, including but not limited to departmental budgets, qualifications, experience, education, licenses, specialty, and training. The above hiring range represents the University's good faith and reasonable estimate of the range of possible compensation at the time of posting. Columbia University is an equal opportunity employer/disability/veteran.

Columbia University

Lecturer in Discipline or Senior Lecturer in Discipline in Data Science (within the Department of Computer Science)

Position Description

The Department of Computer Science at Columbia University in the City of New York invites applications for faculty at the rank of Lecturer in Discipline or Senior Lecturer in Discipline in Data Science beginning in the 2025-26 academic year. Lecturers in Discipline are full-time nontenure-track faculty members whose primary responsibility is teaching. Join our dynamic team, where you'll work closely with world-class faculty and contribute to cutting-edge research and education in Data Science. Lecturers in the department enjoy voting rights at faculty meetings, serve on department committees, and earn a Dean's Leave on a timeline similar to that of tenure-track faculty, offering excellent opportunities for professional development and career advancement. The Department of Computer Science is committed to hiring outstanding teachers to support the growing needs of its exceptionally strong undergraduate and graduate programs. Teaching responsibilities will center on courses in the MS in Data Science program, with a balanced teaching load of two courses per semester.

The MS in Data Science program is one of the most highly regarded and soughtafter data science programs in the world. This program is a collaboration between the Data Science Institute and the Departments of Computer Science, Statistics, and Industrial Engineering and Operations Research. Your expertise will directly influence the future of Data Science education, preparing students for highimpact careers in academia and industry.

Experience the vibrant academic and cultural atmosphere of New York City, a global hub for technology and innovation, while benefiting from Columbia's state of-the-art facilities and extensive research resources.

Qualifications

Candidates must have a PhD or its professional equivalent by the starting date of the appointment. Candidates at the rank of Lecturer in Discipline are expected to have teaching experience, documented evidence of pedagogical excellence, and evidence of professional growth and activity in the given field. Candidates at the rank of Senior Lecturer in Discipline are expected to have substantial experience and accomplishments, a superlative record of teaching as a lecturer, and evidence of pedagogical excellence in carrying out administrative or other department responsibilities.

Application Instructions

Applications should be submitted electronically at *http://apply.interfolio. com/153593* and include the following: a cover letter, current CV, teaching statement, brief summary of research, and three letters of recommendation. At least two of the letters of recommendation must address teaching



ability. Applicants are also encouraged to submit a statement addressing contributions to diversity initiatives, if applicable. To ensure full consideration, applications must be submitted by October 15, 2024. Review of applications will begin on October 7, 2024.

Hiring Salary Range

Lecturer in Discipline: 104K-127K; Senior Lecturer in Discipline: 123K-160K The salary of the finalist selected for this role will be set based on a variety of factors, including but not limited to departmental budgets, qualifications, experience, education, licenses, specialty, and training. The above hiring range represents the University's good faith and reasonable estimate of the range of possible compensation at the time of posting.

Columbia University is an equal opportunity employer/disability/veteran.

Cornell University

Cornell Ann S. Bowers College of Computing and Information Science

Faculty Positions - Computer Science, Cornell Tech

The Cornell University Department of Computer Science (CS) in the Cornell Bowers College of Computing and Information Science (Bowers CIS) has tenure-track and tenured faculty positions





available at the Cornell Tech campus in New York City. Cornell CS is ranked among the top computer science departments in the country. Applications are welcome from all areas of computer science and related fields. We especially welcome applicants whose scholarship and service further the department's goals around diversity and inclusion.

Faculty hired in these positions at Cornell Tech will be members of the Department of Computer Science, which spans the Ithaca and New York City campuses. Their teaching and research will be based in New York City. A separate application is needed to be considered for a Computer Science position at the Ithaca campus; please visit the website *http://www. cs.cornell.edu/information/jobpostings* for further information about the Ithaca application process.

Cornell Tech is a research and graduate education campus of Cornell University located on Roosevelt Island in New York City. In addition to world-class academic research, a distinguishing characteristic of our work is that it engages deeply with external communities, organizations, and industry to address real-world problems and contexts that amplify the direct societal and commercial impact of our research.

Applicants must hold the equivalent of a Ph.D. degree. Applicants must have demonstrated an ability to conduct outstanding research, and should have a strong commitment to engagement and impact outside of academia. Successful candidates are expected to pursue an active research program, to teach Masters and Ph.D.-level graduate courses, and to supervise graduate students.

To ensure full consideration, applications should be received by December 1, 2024, but will be accepted until all positions are filled.

Applicants should submit a curriculum vitae and statements of research and teaching interests, identify one or two top publications to which they have made significant contributions, and arrange to have at least three reference letters submitted. In accordance with Cornell Tech's emphasis of external engagement, the candidate should address prior accomplishments and future plans related to the commercial and/or broader public engagement and societal impact dimensions of their research, within a clearly identified subsection of the Research Statement. We ask applicants for all faculty positions to share their experiences and/or approaches (past, current, or future) to fostering learning, research service, and/or outreach in a diverse community. Applicants may choose to submit a stand-alone statement or embed the information in other parts of their application materials.

The application should be submitted online at: *https://academicjobsonline. org/ajo/jobs/28427*.

Salary Range: \$79,400 - \$329,600

The salary range reflects an aggregate of qualifications and disciplines across Cornell University. Actual salary offers for Cornell Tech will be based on education, experience, discipline, and relevant skills. Inquiries about your application may be directed to *frecruit@cs.cornell.edu*.

Fostering an inclusive environment is a core value of the Computer Science Department, Cornell Tech, and Cornell as a whole. In line with Cornell's historical commitment to educating "... any person ... in any study...", we seek candidates who will create a climate that helps attract and is inclusive of all students, including students from historically underrepresented groups and students who have overcome personal challenges.

Cornell is a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities. We also recognize a lawful preference in employment practices for Native Americans living on or near Indian reservations. Cornell University is an innovative Ivy League university and a great place to work. Our inclusive community of scholars, students, and staff impart an uncommon sense of larger purpose, and contribute creative ideas to further the university's mission of teaching, discovery, and engagement.

Cornell University

Cornell Ann S. Bowers College of Computing and Information Science

Tenured/Tenure-Track Faculty-Computer Science

The Cornell University Department of Computer Science (CS) in the Cornell Ann S. Bowers College of Computing and Information Science (Bowers CIS) has



multiple faculty positions available at its Ithaca campus (tenured and tenuretrack). Cornell CS is ranked among the top computer science departments in the country (*http://www.cs.cornell.edu/*). Ithaca, NY is in the heart of the Finger Lakes region, which offers a vibrant cultural life and a wide range of sporting and outdoor activities with the pleasures of both city and country close at hand.

Applications from all areas of computer science and related fields are welcome.

Faculty hired in these positions will be members of the Department of Computer Science, which spans the Ithaca and New York City campuses, but their teaching and research will be based in Ithaca. A separate application is needed to be considered for a Computer Science position at the New York City campus; please visit the website *https://www. cs.cornell.edu/information/jobpostings/ facultypositionsnyctech* for further information about the New York City application process.

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

To ensure full consideration, applications should be received by December 1, 2024, but applications will be accepted until all positions are filled. Fostering an inclusive environment is a core value of the Computer Science Department and Cornell as a whole. In line with Cornell's historical commitment to educating "... any person ... in any study...", we seek candidates who will create a climate that helps attract and is inclusive of all students, including students from historically underrepresented groups and students who have overcome personal challenges.

Applicants should submit a curriculum vitae and brief statements of research and teaching interests, identify one or two top publications to which they have made significant contributions, and arrange to have at least three reference letters submitted at: https://academicjobsonline. org/ajo/jobs/28414. We ask applicants for all faculty positions to share their experiences and/or approaches (past, current, or future) to fostering learning, research service, and/or outreach in a diverse community. Applicants may choose to submit a stand-alone statement or embed the information in other parts of their application materials.

Salary Range: \$79,400 - 329,600 The salary range reflects an aggregate of qualifications and disciplines across Cornell University. Actual salary offers in Bowers CIS will be based on education, experience, discipline, and relevant skills.

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

Cornell University seeks to meet the needs of dual career couples, has a Dual Career program, and is a member of the Upstate New York Higher Education Recruitment Consortium to assist with dual career searches.

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities. We also recognize a lawful preference in employment practices for Native Americans living on or near Indian reservations. Cornell University is an innovative lvy League university and a great place to work. Our inclusive community of scholars, students, and staff impart an uncommon sense of larger purpose, and contribute creative ideas to further the university's mission of teaching, discovery, and engagement.

Dartmouth College

Assistant Professor of Computer Science, Machine Learning/Al

The Computer Science department at Dartmouth College invites applications for a full-time tenure-track position at the rank of Assistant Professor in the broad area of Applied Machine Learning/ Al. Core technical contributions could come from multiple areas, including but not limited to: computational health, visual computing, music technology, cybersecurity, neuroscience, Human-Computer Interaction (HCI), Computational Linguistics, and digital arts. Applicants should have a track record of publications in CS/machine learning-related fields.



The Computer Science department is home to 24 tenure-track faculty members and is committed to growing that number by 50% over the next decade. The department is housed in the recently opened Class of 1982 Engineering and Computer Science Center. Our curriculum includes strong Ph.D. and M.S. programs and outstanding undergraduate majors. Graduate students and postdoctoral scholars are supported by the *Guarini* School for Graduate and Advanced Studies, including their diversity and *inclusion initiatives*. We are especially interested in applicants who have a demonstrated ability to contribute to Dartmouth's diversity initiatives in STEM research, such as the Women in Science Program, E. E. Just STEM Scholars Program, Wright Center for the Study of Computation and Just Communities, and Academic Summer Undergraduate Research Experience.

Dartmouth is committed to academic excellence and encourages the open exchange of ideas within a culture of mutual respect. People with different backgrounds, life experiences, and perspectives make the Dartmouth community diverse, which enhances academic excellence. Applicants should include a statement that addresses how their research, teaching, service, and/or life experiences prepare them to advance Dartmouth's commitment to diversity in service of academic excellence.

Qualifications

Applicants must have a Ph.D. in Computer Science or a closely related field, or be All But Dissertation (ABD) with a degree conferred by the start of the appointment. Effective classroom teaching is essential for this position.

Application Instructions

Please submit all materials electronically via Interfolio. Letters may be addressed to the search committee chair, Professor Andrew Campbell.

1. CV

- 2. Statement of research experience and plans (up to 5 pages)
- 3. Statement of teaching experience and plans (up to 5 pages)
- Statement of how the applicant's research, teaching, service, and/or life experiences prepare them to advance Dartmouth's commitment to diversity in service of academic excellence (up 5 to pages)
- 5. Four (4) letters of recommendation, at least one of which should comment on teaching

Review of applications will begin on December 1, 2024, and continue until the position is filled.

For questions regarding this position, please contact the search chair, Professor Andrew Campbell: *Andrew.Campbell@ Dartmouth.edu*.

For all openings in *Arts and Sciences*, please visit our *Faculty Recruitment* page.

Equal Employment Opportunity Statement

Dartmouth College is an equal opportunity/affirmative action employer with a strong commitment to diversity and inclusion. We prohibit discrimination on the basis of sex, race, color, religion, age, disability, status as a veteran, national or ethnic origin, sexual orientation, gender identity, gender expression, or any other category protected by applicable law, in the administration of its educational policies, admission policies, scholarship and loan programs, employment, or other school administered programs. Applications by members of all underrepresented groups are encouraged.

If you are an applicant with a disability and need accommodations to assist in the job application or interview process, please email *ADA@dartmouth.edu*. In the subject line, please state "Application Accommodations" and include the job number or title. Someone from the ADA Compliance Office will be in touch within 2 business days.

For additional employment opportunities at Dartmouth College, please visit the *Dartmouth Interfolio Job Board*, the *Office of the Provost*, and the *Office of Human Resources*.

Offers of employment are contingent upon consent to a pre-employment background check with results acceptable under Dartmouth policy. Please visit the *Office of Human Resources* for details.

All Dartmouth College employees must comply with the College's health and safety guidelines and protocols, including but not limited to those related to COVID-19, such as any testing, masking, or distancing requirements that may be in place at any given time or place.



Dartmouth College

Assistant Professor of Computer Science, Robotics

The Computer Science department at Dartmouth College invites applications for a full-time tenure-track position at the rank of Assistant Professor, in the areas of Robotics. Core technical contributions could come from multiple areas, including but not limited to, cyber-physical systems, embodied artificial intelligence, edge intelligence, reinforcement learning, human-robot interaction, multimodal sensing, and/or sensor fusion. Applicants should have a track record of publications in CS/robotics-related fields.

The Computer Science department is home to 24 tenure-track faculty members and is committed to growing that number by 50% over the next decade. The department is housed in the recently opened Class of 1982 Engineering and Computer Science Center. Our curriculum includes strong Ph.D. and M.S. programs and outstanding undergraduate majors. Graduate students and postdoctoral scholars are supported by the *Guarini* School for Graduate and Advanced *Studies*, including their *diversity and inclusion initiatives*. We are especially interested in applicants who have a demonstrated ability to contribute to Dartmouth's diversity initiatives in STEM research, such as the Women in Science Program, E. E. Just STEM Scholars Program, Wright Center for the Study of Computation and Just Communities, and Academic Summer Undergraduate Research Experience.

Professional Opportunities

Dartmouth is committed to academic excellence and encourages the open exchange of ideas within a culture of mutual respect. People with different backgrounds, life experiences, and perspectives make the Dartmouth community diverse, which enhances academic excellence. Applicants should include a statement that addresses how their research, teaching, service, and/or life experiences prepare them to advance Dartmouth's commitment to diversity in service of academic excellence.

Qualifications

Applicants must have a Ph.D. in Computer Science or a closely related field, or be All But Dissertation (ABD) with a degree conferred by the start of the appointment. Effective classroom teaching is essential for this position.

Application Instructions

Please submit all materials electronically via Interfolio. Letters may be addressed to the search committee chair, Professor Alberto Quattrini Li.

1. CV,

- 2. Statement of research experience and plans (up to 5 pages);
- Statement of teaching experience and plans (up to 5 pages);
- Statement of how the applicant's research, teaching, service, and/or life experiences prepare them to advance Dartmouth's commitment to diversity in service of academic excellence (up 5 to pages);
- 5. Four (4) letters of recommendation, at least one of which should comment on teaching.

Review of applications will begin on December 1, 2024 and continue until the position is filled.

For questions regarding this position, please contact the search chair, Professor Alberto Quattrini Li: *alberto.quattrini.li@ dartmouth.edu*.

For all openings in Arts and Sciences, please visit our *Faculty Recruitment* page.

Equal Employment Opportunity Statement

Dartmouth College is an equal opportunity/ affirmative action employer with a strong commitment to diversity and inclusion. We prohibit discrimination on the basis of sex, race, color, religion, age, disability, status as a veteran, national or ethnic origin, sexual orientation, gender identity, gender expression, or any other category protected by applicable law, in the administration of its educational policies, admission policies, scholarship and loan programs, employment, or other school administered programs. Applications by members of all underrepresented groups are encouraged.

If you are an applicant with a disability and need accommodations to assist in the job application or interview process, please email *ADA@dartmouth.edu*. In the subject line, please state "Application Accommodations" and include the job number or title. Someone from the ADA Compliance Office will be in touch within 2 business days.

For additional employment opportunities at Dartmouth College, please visit the *Dartmouth Interfolio Job Board*, the *Office of the Provost*, and the *Office of Human Resources*.



Offers of employment are contingent upon consent to a pre-employment background check with results acceptable under Dartmouth policy. Please visit the *Office of Human Resources* for details.

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Davidson College

Assistant Professor of Mathematics and Computer Science

The Department of Mathematics and Computer Science at Davidson College invites applications for a tenure-track appointment in Computer Science at the rank of Assistant Professor, beginning July 1, 2025.

We seek candidates with a strong commitment to improving access to computer science for all students, enthusiasm for teaching all levels of undergraduate students, and a research program that can involve undergraduate researchers. The department welcomes applicants from all areas of computer science who can support and expand our *curriculum*, and enhance research opportunities for our majors.

For a full job description and to apply, please visit *https://employment. davidson.edu*. Applications completed by **Tuesday, October 8** will receive priority consideration, though the position will remain open until filled.

COMPUTATIONAL SCIENCE GRADUATE FELLOWSHIP

The Department of Energy Computational Science Graduate Fellowship (**DOE CSGF**) provides up to four years of financial support for students pursuing doctoral degrees in fields that use high-performance computing to solve complex problems in science and engineering.

The program also funds doctoral candidates in applied mathematics, statistics, computer science, computer engineering or computational science – in one of those departments or their academic equivalent – who undertake research in enabling technologies for emerging high-performance systems. **APPLY TODAY!**

ENERGY Office of Science

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Applications Due **1.16.2025** www.krellinst.org/csgf

RELL

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At Davidson College, we believe the college grows stronger by recruiting and retaining a diverse faculty and staff committed to building an inclusive community. In order to achieve and sustain educational excellence, we seek to hire talented faculty and staff across the intersections of diverse races, ethnicities, religions, sexual orientations, gender identities, ages, socio-economic backgrounds, political perspectives, abilities, cultures, and national origin.

Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

Professor of Intelligent Speech Systems (Open Rank)

The Faculty of Engineering at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) invites applications for a

Professor of Intelligent Speech Systems

(Open Rank)

at the Department of Computer Science, either as an associate professor (W2) with tenure track to a full professorship (W3) or a permanent full professor (W3). The associate professorship with tenure track (W2 to W3) is appointed for an initial period of six years. FAU offers the long-term perspective of a permanent appointment to a full professorship if the requirements of the tenure evaluation are met. The appointment to an associate professorship with tenure track (W2 to W3) or full professorship (W3) will be determined by the applicant's qualifications.

We seek to appoint a leading expert with an internationally visible profile in research and teaching. The aim of the professorship is to establish a Chair in Computer Science that is affiliated with the Al Network Bavaria and the High-Tech



Agenda Bavaria. The professor is expected to represent the field in research and teaching. Applicants must have experience in at least one of the following subjects:

- Automated speech recognition
- Dialog systems
- Language assistance systems
- Pathologic speech processing
- Cognitive language processing
- Computer linguistics
- Natural language processing
- Multimodal processing combined with language
- Large language models (LLMs)

We also require that candidates have in-depth knowledge and experience of machine learning and machine learning methods. The professor is expected to teach in the degree programs Computer Science, Artificial Intelligence, Medical Engineering and Data Science.

Successful candidates should demonstrate an excellent academic track record in research and teaching at the highest international standards. They should have substantial research experience abroad and/or international cooperations as well as experience in managing research projects and in raising third-party funding. A university degree and an outstanding doctoral degree as well as a passion for education and relevant teaching experience are prerequisites. Candidates who are able and willing to teach in both English and German are preferred. The position also requires additional postdoctoral qualifications. These should be in the

form of a habilitation (postdoctoral thesis) or equivalent academic qualifications. These qualifications may also have been achieved in a non-university context or through a junior faculty position (for example as assistant professor).

For appointment to an associate professorship (W2) with tenure track to a full professorship (W3), the following are also expected: a broad research spectrum, international visibility, a track record of international publications, and good teaching experience.

For appointment to a permanent full professorship (W3), the following are also expected: a broad range of research, high international visibility, regular international publications at a very high level, in-depth experience in teaching as well as leadership and management skills.

The successful candidate should become actively involved in administering academic affairs and in developing strategic initiatives. FAU pursues a policy of intense student mentoring and therefore expects its teaching staff to be present during lecture periods.

FAU offers career development and an attractive initial package. Based on international standards and transparent performance agreements, FAU ensures a fair tenure-track evaluation process.

FAU offers an outstandingly productive research environment as well as a passionate and multi-disciplinary scholarly community within a vibrant institutional network. In its pursuit of academic excellence, FAU is committed to equality of opportunity and to a proactive and inclusive approach, which supports and encourages all underrepresented groups, promotes an inclusive culture, and values diversity. FAU is a family-friendly employer and responsive to the needs of dual career couples.

Please submit your complete application documents (CV, list of publications, teaching concept and research concept [max. 2 pages each], list of third-party funding, copies of certificates and degrees, preferably in English) online at *https://berufungen.fau.de* by **September 30, 2024**, addressed to the Dean of the Faculty of Engineering. Please contact *tfdekan@fau.de* with any questions.

Indiana University

Assistant/Associate/Full Professor of Computer Science

The Indiana University Luddy School of Informatics, Computing and Engineering at IU Indianapolis invites applications for multiple open rank tenured or tenure-track assistant, associate or full professor positions in computer science. Appointments will begin August 1, 2025 on the Indianapolis campus. Candidates must demonstrate an outstanding scholarly record of research, exhibited by highimpact peer-reviewed publications and a forward-looking, externally funded research agenda as Principal Investigator (PI).

Research expertise in the following areas of computer science will be considered: Fundamentals of Artificial Intelligence and



Machine Learning, Robotics, Computer Vision, Cyber security, Cyberphysical Systems, and Quantum Computing. Candidates with experience in applications to biomedical and health sciences are strongly encouraged to apply.

As the state's premier urban research institution, IU Indianapolis is committed to being a welcoming and inclusive campus community. We seek candidates who will pursue the highest standards of academic excellence and whose research, teaching, and community engagement efforts contribute to welcoming, respectful, and inclusive learning and working environments for our students, staff, and faculty.

To ensure full consideration, please submit your application materials by January 2, 2025. However, the positions will remain open until filled.

How to apply: *https://indiana. peopleadmin.com/postings/25734*

Application documents:

- CV
- Letter of application
- Research agenda
- List of references

Questions pertaining to this position can be directed to Lisa Battiato, Assistant to the Dept Chair, Ibattia(at)iu.edu

Qualifications

 Ph.D. in Computer Science or related discipline. Applicants must complete their degree before the starting date of the appointment.

- Demonstrated ability to teach effectively in-person, online, or in blended learning for general computer science courses.
- A record of outstanding research productivity and impact in any of the above-mentioned areas, or a demonstrated ability to develop one. The demonstrated ability or potential to secure external funding is required.

The Institute of Science and Technology Austria (ISTA)

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

The Institute of Science and Technology Austria (ISTA) invites for faculty applications in computer science; candidates from CS systems are especially encouraged to apply; and in data science with a focus on candidates in statistics and bioinformatics.

Interdisciplinary applications bridging between areas are particularly encouraged to apply.

Assistant professors start with independent group leader positions for six years, progressing to tenured positions after a positive evaluation by international peers.

Tenured positions welcome distinguished scientists with proven leadership in research.

At ISTA, we promote a diverse and inclusive working environment and

are committed to the principle of equal employment opportunities for all applicants, free of discrimination. We strongly encourage individuals from underrepresented groups to apply.

ISTA (www.ista.ac.at) is an

interdisciplinary research institution that combines basic science research with graduate education in theoretical and experimental research in Mathematical and Physical Sciences, Life Sciences, and Information and System Sciences.

Why ISTA

- Impactful research in a vibrant, international, and interdisciplinary research environment.
- Advanced facilities and comprehensive scientific support.
- Attractive salaries and generous resources.
- Guaranteed annual funding, including support for PhD students and postdocs.
- Graduate school with highly selective admissions.
- Professional development opportunities and employee support services.
- On-campus childcare facilities.
- Inclusive working environment.
- Proximity to Vienna, consistently ranked among the most livable cities worldwide.

Take the next step in your academic career and apply at: www.ista.ac.at/jobs/faculty/

The closing date for applications in Data Science is October 24, 2024.

The closing date for applications in Computer Science is November 28, 2024.





KENNESAW STATE UNIVERSITY COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING

s one of the nation's largest and most dynamic computing colleges, the College of Computing & Software Engineering at Kennesaw State University is expanding and inviting applications for both nontenure-track and tenure-track positions across all ranks. We are seeking talented individuals in Computer Science, Information Technology, Software Engineering, Game Development, and Data Science and Analytics. We offer competitive salaries and startup packages to support research faculty in initiating their research projects.

Join us to teach in comprehensive degree programs, designed to produce top career-ready talent in cutting-edge areas of computing. Contribute to our extensive research portfolio and increase the impact through transformative ideas and multidisciplinary collaborations.

The college provides bachelor's, master's, PhD degrees, and certificate programs in various aspects of computing. With an enrollment of over 6,000 students and over 150 faculty and staff, our programs span the Departments of Computer Science, Information Technology, Software Engineering and Game Development, and the School of Data Science and Analytics.



Additional information about the College of Computing and Software Engineering and all <u>academic units</u> can be found on our website.

To apply, visit our job postings.



Position Information

- Location: Metro Atlanta, GA
- R2 University
 - 24 positions available in:
 - Administration
 - Tenure Track Open Rank
 - Non-Tenure Track
 - Areas:
 - Artificial Intelligence
 - Computer Science
 - Cybersecurity
 - Data Science
 - Game Design
 - Information Technology
 - Software Engineering
- Competitive salary
- Generous start-up packages for research faculty
- Professional development
- Industry collaboration opportunities
- Interdisciplinary research opportunities with 11 other colleges





Lehigh University

Open Rank Data Science for Health

The Rossin College of Engineering and Applied Science (RCEAS) at Lehigh University invites applications at all ranks for a tenure-track or tenured position in Data Science for Health. The start date is July 1, 2025. This search is being conducted jointly by the Department of Industrial and Systems Engineering (ISE) and the Department of Computer Science and Engineering (CSE) and is one of several expected hires in Data Science for Health. Human health is an identified area of strategic importance for Lehigh, as reflected by the recent establishment of a new College of Health (CoH). Candidates must possess a Ph.D. (or equivalent by date of hire) in Computer Science, Industrial Engineering, Statistics, or related areas.

Founded in 1865, Lehigh University has combined outstanding academic and learning opportunities with leadership in fostering innovative research. Recognized among the nation's highly ranked research universities, Lehigh offers a rigorous academic community for nearly 7,000 students and about 550 full-time faculty members. Lehigh University is in Bethlehem, PA, a vibrant and historic area. Over 800K people live in the Lehigh Valley, which is near New York City and Philadelphia.

Junior (tenure-track) applicants should apply at *https://academicjobsonline. org/ajo/jobs/28351* and senior applicants at *https://academicjobsonline.org/ajo/ jobs/28353.* Review of applications will begin October 15, 2024, and will continue until the position is filled. Lehigh University is an affirmative action/ equal opportunity employer and does not discriminate based on age, color, disability, gender identity or expression, genetic information, marital or familial status, national or ethnic origin, race, religion, sex, sexual orientation, or veteran status.

Massachusetts Institute of Technology

Assistant Professor of Economics and Computing - Tenure Track

The Department of Economics together with the MIT Schwarzman College of Computing (SCC) at the Massachusetts Institute of Technology (MIT), located in Cambridge MA, invites applications for a faculty position in the area of Social, Economic, and Ethical Implications of Computing and Networks at the level of tenure-track Assistant Professor beginning July 1, 2025, or as soon thereafter as possible.

Rapid advances in computing are expected to have wide-ranging implications for myriad aspects of economic activity. As such, this search is intentionally broad: areas relevant for this search could include, but are not limited to, the implications of computing for labor markets, health, education, macroeconomics, development, industrial organization and innovation.

A PhD in Economics or a closely related field with a specialization in the social, economic, and/or ethical implications of computing and networks is strongly preferred by the start of employment, and with strong recommendations from graduate school faculty and established potential in research and teaching. The successful candidate will have a shared appointment in both the Department of Economics and the SCC, in either the Department of Electrical Engineering and Computer Science (EECS) or the Institute for Data, Systems, and Society (IDSS), depending on best fit.

Michigan Technological University

Cybersecurity and Computer Science Faculty Positions

The College of Computing at Michigan Technological University invites applications for four tenure track faculty positions in the broad areas of cybersecurity and computer science. Primary consideration will be for applicants at the rank of Assistant Professor, although applicants with the experience and accomplishments commensurate with a higher rank may be considered for an appointment at the rank of Associate Professor or Professor. We encourage applicants in all research areas of computer science, especially those with expertise in cybersecurity, artificial intelligence, software engineering, data science, and systems. Successful candidates will demonstrate a passion for their research, an enthusiasm for undergraduate and graduate education, and a strong commitment to cultivating diverse and inclusive environments. The anticipated start date is August 2025.

Michigan Tech is Michigan's flagship technological university and will be a



Carnegie classified RI institution in 2025. The university provides its graduates with an extremely high return on investment through its academic rigor and focus on experiential learning. Located near the shore of Lake Superior in Michigan's scenic Upper Peninsula, the university provides a high standard of living. The community offers a small-town environment with outstanding fourseason recreational opportunities.

Founded in 2019, Michigan Tech's *College of Computing* is Michigan's first and largest computing- focused college. The College is in a phase of rapid growth and investment, including multiple new faculty positions, new academic programs, and planning for a new building. Since 2019, enrollment in the college has grown by two-thirds and research expenditures have tripled. Last year alone, Michigan Tech climbed 26 spots nationally, from 115th to 89th, for computing and information science research expenditures (source: NSF-HERD survey). The College is organized into two departments, the *Department of Computer Science* and the *Department* of Applied Computing, with several programs collaboratively supported by faculty from both departments. It is expected that three of the positions will have primary appointments in Computer Science and one will be in Applied Computing. Joint appointments are possible when appropriate. The successful candidates will also be supported by the university's fastestgrowing research institute, the *Institute* of Computing and Cybersystems (ICC).

Applicants must have earned a PhD degree in computer science, cybersecurity, or a closely related discipline at time of employment. Michigan Tech places a strong emphasis on balancing cutting-edge research with effective teaching. Candidates for these positions are expected to demonstrate potential for excellence in independent research, excellence in teaching, the ability to contribute service to their department and profession, and a demonstrated commitment to promote a diverse, equitable, and inclusive environment. Salary is negotiable depending upon gualifications.

Review of applications will begin on October 15, and continue until the positions are filled. Applicants should submit a cover letter, a curriculum vitae, brief research and teaching statements, names of at least three references, and identify one or two top publications to which they have made significant contributions. We strongly encourage applicants to address the required and desired qualifications in their cover letter along with an explanation of how they will contribute to the *Vision and* Mission of Michigan Tech. Applications must be submitted online at http:// www.employment.mtu.edu/cw/enus/job/493690. For more information, please contact the search committee chair. Dr. Yu Cai.

Michigan Tech is an Equal Opportunity Educational Institution/Equal Opportunity Employer that provides equal opportunity for all, including protected veterans and individuals with disabilities.

New Mexico State University

College Assistant Professor

The Department of Computer Science at New Mexico State University invites applicants for a college professor position to be filled at the College Assistant Professor level beginning in Fall 2025. This position will support the teaching and advising needs of the department; there is no research component. This position is expected to teach computer science courses in all levels such as Freshman, Sophomore, Junior, and Senior level courses. Individuals interested in contributing to a diverse academic community are particularly encouraged. Candidates with excellent communication skills and a sustained demonstrated excellence in teaching at the college level are preferred. For a more comprehensive description and to apply, please visit: http://careers.nmsu.edu/cw/en-us/ *job/501312*. NMSU is an equal opportunity and affirmative action employer. Women, minorities, people with disabilities and veterans are strongly encouraged to apply.

New York University Arts and Science

Faculty Position in Brain and Behavior, Department of Psychology and Center for Neural Science

The Department of Psychology and Center for Neural Science in the Faculty of Arts and Science at New York University invites applications for a joint, tenure-track assistant professor



position to study the neural basis of

cognition. The appointment is expected to begin September 1, 2025, pending budgetary and administrative approval. We seek applicants with an outstanding record of research in human systems neuroscience. Examples of research areas include, but are not limited to, attention, perception, decision making, memory, and executive function.

Pay Transparecy

In compliance with NYC's Pay Transparency Act, the annual base salary range for this position is \$90,000-\$130,000.. New York University considers factors such as (but not limited to) the scope and responsibilities of the position, the candidate's work experience, education/training, key skills, internal peer equity, as well as market and organizational considerations when extending an offer.

Application Instructions

To apply, please follow the Interfolio link *https://apply.interfolio.com/153500*.

For more information about the academic environment, please visit each department's website *http://as.nyu.edu/ psychology.html*; *https://as.nyu.edu/ cns.html*).For questions or additional information, please contact Professor Clayton Curtis at *clayton.curtis@nyu.edu*.

Review of applications will begin October 15, 2024. The electronic application should include a CV, statements of research (no more than three pages) and teaching interests (no more than two pages), copies of at least three representative publications, and contact information for at least three references.

In addition, diversity, inclusion, and belonging, are important parts of the NYU mission. Therefore, applicants should also include a statement describing how your (1) scholarship, (2) teaching and mentoring, and/or (3) service and engagement demonstrate your commitment to diversity, equity, and inclusion. We are particularly interested in hearing about (1) concrete steps you have taken (or are planning to take) to foster an inclusive intellectual environment in your research lab, in the classroom, in the department and on campus, and/or in your field more generally, and (2) how these steps connect with your broader views on the topics of diversity, equity, and inclusion.

The Faculty of Arts and Science at NYU is at the heart of a leading research university that spans the globe. We seek scholars of the highest caliber, who embody the diversity of the United States as well as the global society in which we live. Because broad diversity is essential for creating an inclusive climate, we are committed to the fair treatment of and equal access to opportunity and advancement for all, and will assess the many qualifications of all applicants. We strongly encourage applications from women, racial and ethnic minorities. and other individuals who are underrepresented in the profession, across color, creed, race, ethnic and national origin, physical ability, gender and sexual identity, or any other legally protected basis. NYU affirms the value of differing perspectives on the world as we strive

to build the strongest possible university with the widest reach. To learn more about the FAS commitment to diversity, equality and inclusion, please read here: *http://as.nyu.edu/facultydiversity. html*. EOE/Affirmative Action/Minorities/ Females/Vet/Disabled/Sexual Orientation/ Gender Identity.

Employment Opportunity Statement

For people in the EU, click here for information on your privacy rights under GDPR: www.nyu.edu/it/gdpr

NYU is an Equal Opportunity Employer and is committed to a policy of equal treatment and opportunity in every aspect of its recruitment and hiring process without regard to age, alienage, caregiver status, childbirth, citizenship status, color, creed, disability, domestic violence victim status, ethnicity, familial status, gender and/or gender identity or expression, marital status, military status, national origin, parental status, partnership status, predisposing genetic characteristics, pregnancy, race, religion, reproductive health decision making, sex, sexual orientation, unemployment status, veteran status, or any other legally protected basis. Women, racial and ethnic minorities, persons of minority sexual orientation or gender identity, individuals with disabilities, and veterans are encouraged to apply for vacant positions at all levels.

Sustainability Statement

NYU aims to be among the greenest urban campuses in the country and carbon neutral by 2040. Learn more at *nyu.edu/sustainability*



Princeton University

Lecturer of Computer Science

The Department of Computer Science seeks applications from exceptional individuals who share our strong commitment to undergraduate education, to join our department in a full-time, teaching career-track position at the rank of Lecturer. Initial appointments will be for one year and are renewable, pending satisfactory performance and the teaching needs of the department.

The department is world renowned for its unique combination of excellent scholarship and exemplary undergraduate education. Computer Science is the largest major at Princeton, and opportunities abound to engage with our outstanding students at many levels. Our lecturers are supported in contributing broadly to our department's mission, including various rewarding opportunities such as teaching introductory and upperlevel courses, advising undergraduate and Master's-level research, developing curricular materials, leading or participating in outreach programs and developing EdTech software.

Candidates in all core computer science areas are encouraged to apply. The department is committed to fostering a diverse and inclusive academic community.

An advanced degree in computer science or a related field is required. We welcome applications from candidates with prior experience in industry, government, or research and development institutions. Applications must include a cover letter, curriculum vitae, teaching statement (including strategies, techniques, and experience), research statement, material relevant to evaluating the applicant's teaching abilities and research accomplishments, and contact information for at least three references. To be considered, please apply online at *https:// www.princeton.edu/acad-positions/ position/36122*. Providing supplementary materials, such as links to course websites, videos of instructional sessions, etc., is encouraged.

Review of applications will begin on October 15, 2024 for a September 1, 2025 start date.

This position is subject to the University's background check policy. The work location for this position is in-person on campus at Princeton University.

Further information about the Computer Science Department at Princeton can be found at: *https://cs.princeton.edu*

Princeton University is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Princeton University

Assistant Professor of Computer Science

The Department of Computer Science at Princeton University invites applications for tenure track faculty positions at the Assistant Professor level. We are accepting applications in all areas of Computer Science. Applicants must demonstrate superior research and scholarship potential as well as teaching ability.

The department is committed to fostering a diverse and inclusive academic community with a culturally diverse faculty. We are particularly interested in receiving applications from members of groups that have been historically underrepresented in Computer Science. A PhD in Computer Science or a related area is required. Candidates should expect to receive their PhD before September 1, 2025. Successful candidates are expected to pursue an active research program and to contribute significantly to the teaching programs of the department.

Applications should be submitted online at *https://www.princeton.edu/acadpositions/position/35661* and should

include a CV, research statement, teaching statement, and contact information for at least three people who can comment on the applicant's professional qualifications. We seek faculty members who will create a climate that embraces excellence and diversity, with a commitment to teaching and mentoring that will enhance the work of the department and attract and retain a diverse student body. Candidates progressing in the selection process will be asked to provide a link to a short



video presentation of a research talk. For full consideration we recommend that applicants apply by December 1, 2024, though we will continue to review applications past that date as needed. This position is subject to the University's background check policy

Princeton University is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, protected veteran status, or any other characteristic protected by law. EEO IS THE LAW. https://rrr.princeton.edu/ equal-opportunity-policy

Requisition No: D-25-COS-00001

Princeton University

Associate or Full Professor of Computer Science

The Department of Computer Science at Princeton University invites applications at the Associate and Full Professor level. We are accepting applications in all areas of Computer Science. Applicants must demonstrate superior research and scholarship as well as an excellent teaching record.

The department is committed to fostering a diverse and inclusive academic community with a culturally diverse faculty. We are particularly interested in receiving applications from members of groups that have been historically underrepresented in Computer Science. A PhD in Computer Science or a related area is required. Successful candidates are expected to pursue an active research program and to contribute significantly to the teaching programs of the department.

Applications should be submitted online at https://www.princeton.edu/acadpositions/position/35663 and should include a CV, research statement, teaching statement, and contact information for four people (no more than 5) who can comment on the applicant's professional qualifications. We seek faculty members who will create a climate that embraces excellence and diversity, with a commitment to teaching and mentoring that will enhance the work of the department and attract and retain a diverse student body. Candidates progressing in the selection process will be asked to provide a link to a short video presentation of a research talk. For full consideration we recommend that applicants apply by December 1, 2024, though we will continue to review applications past that date. This position is subject to the University's background check policy.

Princeton University is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, protected veteran status, or any other characteristic protected by law. EEO IS THE LAW. https://rrr.princeton.edu/ equal-opportunity-policy

Requisition No: D-25-COS-00002

Purdue University

Post-doctoral Fellow in Purdue NSF Center CHORUS

We are recruiting for multiple Post-doctoral Fellow positions to join our newly funded National Science Foundation (NSF) Center CHORUS (*www.choruscomputes.xyz*). The positions are available immediately and we are filling the positions on a rolling basis. The Fellows will work with at least two faculty across 4 universities and supervise multiple top PhD students.

Pl: Prof. Saurabh Bagchi, Purdue ECE and CS

Requirements

- PhD from a top CS or ECE department in the US, completed in the last 2 years, or expected soon
- 2. Expertise in one of the following two areas and interest in the other:
- Security/reliability in Al
- Theoretical ML
- Expertise is demonstrated through publications at top conferences (4 firstauthored papers is a typical minimum requirement)

To apply

https://bit.ly/purduepostdoc24



RIT | Rochester Institute of Technology

Lecturers in the Golisano College of Computing and Information Sciences

The Golisano College of Computing and Information Sciences at RIT invites applications for multiple nontenure-track Lecturers in the departments of Computer Science, Software Engineering, Cybersecurity, School of Information, and the School of Interactive Games and Media.

These Lecturer positions begin January 2025 or August 2025. Successful applicants will be able to teach a broad range of courses in areas of high demand for each department.

Please visit this website to see a listing with details of all the open positions: https://apptrkr.com/5635532

About Golisano College of Computing and Information Sciences at RIT

The Golisano College of Computing and Information Sciences prepares students to improve lives and change the world through computing. We are the largest college at RIT, with over 140 full-time faculty, 3,900 undergraduate students, and 1,100 graduate students. The college is home to several highly ranked degree programs: For instance, our BS in Computer Science program is ranked 63rd in the U.S. News and World Reports ranking of Best Undergraduate Computer Science Programs, and the MS in Computer Science program is ranked 77th. Our Game Design and Development programs, at both the graduate and undergraduate levels, are in the top 10 in the Princeton Review, U.S. News & World Report, and the Animation Career Review. Our college-wide PhD program in Computer and Information Sciences is ranked 56th by CSRankings.org.

Learn more about the Golisano College of Computing and Information Sciences at https://www.rit.edu/computing/

To view the full job descriptions and to apply, go to http://careers.rit.edu/faculty and search under Golisano College of Computing & Info Sciences.

As a member of the RIT community, you'll receive a well-balanced benefits package that offers a variety of choices and access to additional employment advantages.

Salary range for Non-Tenure-Track Lecturer openings (9-month base): \$80,000 - \$85,000 Full-Consideration Application Deadline: Review of applications will begin immediately and will continue until the position is filled.

Anticipated Start Date: January/August 2025



RIT | Rochester Institute of Technology

Tenure Track in Computer Science

The Department of Computer Science in the Golisano College of Computing and Information Sciences at RIT invites applications for multiple full-time tenure-track assistant professor positions in all areas of artificial intelligence. Successful applicants are expected to contribute to the scholarship of the department and college through externally funded research and through teaching and mentoring of BS, MS, and PhD students.

The Computer Science (https://cs.rit.edu) department is the largest department at RIT. Our student-centered programs are home to over 1,500 students pursuing BS, MS, BS/MS, and PhD degrees. Upon graduation, our students pursue successful careers with leading technology companies. The BS in Computer Science program at RIT is ranked 63rd in the latest U.S. News and World Reports ranking of Best Undergraduate Computer Science Programs. Additionally, the MS in Computer Science program at RIT is ranked 77th in the latest U.S. News and World Reports ranking of Best Graduate Computer Science Programs. The college-wide PhD program in Computer and Information Sciences is ranked 56th by CSRankings.org. Funded research is carried out in the areas of artificial intelligence, computing education, data science, distributed systems, graphics and visualization, pervasive computing, programming languages, security, and theory (https://rit.edu/computing/department-computer-science#research).

We are seeking an individual who has the ability and interest in contributing to a community committed to student centeredness; professional development and scholarship; integrity and ethics; respect, diversity and pluralism; innovation and flexibility; and teamwork and collaboration. Select to view links to RIT's core values, honor code, and statement of diversity.

Review of applications will begin December 1, 2024, and will continue until the position is filled. The application should include a cover letter, CV, teaching statement, research statement, contact information for three professional references and a diversity statement. A PhD in Computer Science or closely related discipline by the date of appointment is required.

Founded in 1829, beyond our main campus in Rochester, New York, RIT has international campuses in China, Croatia, Dubai, and Kosovo. And with more than 19,000 students and more than 125,000 graduates from all 50 states and over 100 nations. The Golisano College of Computing and Information (GCCIS) has over 140 full-time faculty, 3,900 undergraduate students, and 1,100 graduate students. RIT is interdisciplinary research hub, with research groups and communities encompassing a range of domain areas, including cybersecurity, Artificial Intelligence, personalized healthcare technology, STEM teaching, Learning and Evaluation, Computational relativity, sustainability among others.

You can contact the search committee with questions on the position at: **cs-facsearch@rit.edu**.

To review the full description and to apply, go to https://apptrkr.com/5635498 and search for 9156BR.

As a member of the RIT community, you'll receive a well-balanced benefits package that offers a variety of choices and access to additional employment advantages.

Salary range (9-month base): \$105,000 - \$135,000 Full-Consideration Application Deadline: December 1, 2024 Anticipated Start Date: August 13th, 2025



RIT | Rochester Institute of Technology

Tenure Track in Cybersecurity

The Department of Cybersecurity (CSEC) in the Golisano College of Computing and Information Sciences (GCCIS) at RIT invites applications for a tenure-track assistant professor position, with special interest in candidates whose research intersects with artificial intelligence, or which makes use of AI techniques. Successful applicants are expected to contribute to the research of the department and college through external funding and through teaching and mentoring of BS, MS, and PhD students.

The CSEC department currently has 18 full-time faculty and is committed to excellence in teaching and research. The department offers BS and MS degrees in Cybersecurity, with a current enrollment of 553 and 77 students, respectively. Our Ph.D. program is administered at the college level and has about 150 students.

RIT is making a major investment in cybersecurity, recently receiving a \$20 million gift to support our cybersecurity programs, including building the ESL Global Cybersecurity Institute (ESL GCI). ESL GCI brings together over 40 faculty from across the university to address the growing challenges in cybersecurity with an interdisciplinary approach and to establish RIT as a leader in the field. Our recent faculty hires have excellent research records, including multiple publications in venues like IEEE Security & Privacy, USENIX Security, CCS, NDSS, and more. Please visit https:// cybersecurity.rit.edu for more information.

We are seeking an individual who has the ability and interest in contributing to a community committed to studentcenteredness; research and professional development; integrity and ethics; respect, diversity, and pluralism; innovation and adaptability; and teamwork and collaboration. Select to view links to RIT's core values, honor code, and statement of diversity.

REQUIRED MINIMUM QUALIFICATIONS:

- Ph.D. in a computing or related discipline by date of appointment.
- Recent scholarly dissemination record that demonstrates exceptional potential in cybersecurity research from the
 perspective of the candidate's discipline of expertise. Scholarly dissemination includes presentations in academic
 conferences, publications in peer-reviewed journals, and/or development of externally evaluated software products
 or data sets.
- Evidence of experience or potential to establish an independent, externally funded research program.
- Commitment and potential to teach effectively at the undergraduate and graduate levels, and the ability to mentor master/doctoral students.
- An interest in working in a collaborative, collegial department and among colleagues in the department, college, and institution.
- Ability to contribute in meaningful ways to the college's continuing commitment to cultural diversity, pluralism, and individual differences.

Apply Online at: https://apptrkr.com/5635477 Keyword Search: 9160BR.

As a member of the RIT community, you'll receive a well-balanced benefits package that offers a variety of choices and access to additional employment advantages.

Salary range (9-month base): \$105,000 - \$135,000 Full-Consideration Application Deadline: December 1, 2024 Anticipated Start Date: August 13th, 2025



RIT | Rochester Institute of Technology

Tenure Track in Interactive Games and Media

The School of Interactive Games and Media (IGM) in the Golisano College of Computing and Information Sciences at RIT is growing significantly. As a result, applications are invited for a tenure-track assistant professor who will start in August 2025.

We are seeking candidates specifically in research in areas related to game design and development. Of particular interest are candidates who incorporate Artificial Intelligence and/or methods at the intersection of digital twins, interactive simulation, modeling, and computational media.

Successful applicants are expected to contribute to the scholarship of the school and college through externally funded research and teaching and mentoring of BS, MS, and PhD students.

Additionally, successful candidates must possess the ability and interest in contributing to RIT's commitment to student centeredness; professional development and scholarship; integrity and ethics; respect, diversity and pluralism; innovation and flexibility; and teamwork and collaboration. For more information, please click the links to RIT's core values, honor code, and statement of diversity.

Minimum Qualifications begin at:

- PhD in related discipline by the start date of the appointment.
- Record of publicly disseminated scholarly and/or creative work in game and/or interactive media development.
- Demonstrated potential to teach at the college/university level.
- Demonstrated potential for conducting independent scholarship.
- Demonstrated potential to attract external funding.
- Demonstrated interest in mentoring undergraduate and graduate students.
- Ability to communicate effectively in English.
- Ability to contribute in meaningful ways to the College's continuing commitment to cultural diversity, pluralism, and individual differences.

The School of Interactive Games and Media (IGM; https://igm.rit.edu) has 34 full-time faculty and is committed to excellence in teaching and research. IGM offers undergraduate Bachelor of Science degrees in Game Design and Development, New Media Interactive Development, a Master of Science in Game Design and Development, and an accelerated BS/MS in Game Design and Development. IGM serves over 800 undergraduate students and about 60 graduate students.

IGM currently ranks in the top 10 in the Princeton Review, U.S. News & World Report, and the Animation Career Review for Game Design and Development programs at the undergraduate and graduate levels.

IGM works closely with RIT's MAGIC (Media, Arts, Games, Interaction & Creativity) Center, a university-wide collaboration for research and publishing in games and digital media. The MAGIC Center comprises a university research and development center and an independent game publishing studio.

To review the full description and to apply, go to https://apptrkr.com/5635511 and search for 9162BR.

As a member of the RIT community, you'll receive a well-balanced benefits package that offers a variety of choices and access to additional employment advantages.

Salary range (9-month base): \$105,000 - \$135,000 Full-Consideration Application Deadline: December 1, 2024 Anticipated Start Date: August 13th, 2025



RIT | Rochester Institute of Technology

Tenure Track in School of Information

As part of a growing, strategic research focus in artificial intelligence (AI), data science, and large-scale data management, the School of Information at RIT invites applications for a full-time tenure-track assistant professor, beginning August 2025.

We seek candidates with research in AI, machine learning, data science and/or large-scale data management. Successful applicants are expected to contribute to the scholarship of the school and college through externally funded research and through teaching and mentoring of BS, MS, and PhD students. Example subareas include (but are not limited to): generative AI (genAI), large-language models (LLMs), deep learning or other machine learning frameworks, computer vision, multimodal machine learning, data mining, knowledge representation, human-computer interaction with AI systems, and human-in-the-loop AI. Outstanding applicants in other areas of AI, data science, human-computer interaction, or data analytics will be considered, especially those with collaboration potential.

Applicants should possess a PhD degree in Computer Science, Informatics, Information Science, or a related field by the start date. A commitment to undergraduate and graduate teaching and mentoring, the ability for innovative, cutting-edge research and high-impact publications, and potential for externally funded research is required.

We are seeking an individual who has the ability and interest in contributing to a community committed to student centeredness; professional development and scholarship; integrity and ethics; respect, diversity, and pluralism; innovation and flexibility; and teamwork and collaboration. Select to view links to RIT's core values, honor code, and statement of diversity.

Assistant professors are offered a low teaching load, a third-year mid-tenure review, with tenure review during year six, after which the teaching load will be adjusted according to the intensity of the research. RIT provides excellent competitive startup funding for PhD students, equipment, and travel in support of building an outstanding research program along with support for gaining external funding, including internal seed funding opportunities.

The Golisano College of Computing and Information Sciences is home to the departments of Computer Science, Software Engineering, Cybersecurity, School of Information, and the School of Interactive Games and Media. The college-wide PhD program in Computer and Information Sciences is ranked 56th by CSRankings.org.

RIT is an interdisciplinary research hub and includes the ESL Global Cybersecurity Institute, the Center for Human-Aware Artificial Intelligence, RIT's Personalized Healthcare Technology initiative, the Center for Accessibility and Inclusion Research, the Center for Advancing STEM Teaching, Learning and Evaluation, the Media Arts Games Interaction Creativity (MAGIC) Center, the Center for Computational Relativity and Gravitation, the Golisano Institute for Sustainability.

To review the full description and to apply, go to https://apptrkr.com/5635521 and search for 9183BR.

As a member of the RIT community, you'll receive a well-balanced benefits package that offers a variety of choices and access to additional employment advantages.

Salary range (9-month base): \$105,000 - \$135,000 Full-Consideration Application Deadline: December 1, 2024 Anticipated Start Date: August 13th, 2025



RIT | Rochester Institute of Technology

Tenure Track in Software Engineering

The Department of Software Engineering at RIT seeks a tenure-track assistant professor with research in the fields of software engineering, data science, or artificial intelligence. Successful applicants are expected to contribute to the scholarship of the department and college through externally funded research and through teaching and mentoring. While excellent candidates in any of the three fields will be considered, our preferences are those with research expertise falling in AI/data science for software engineering or software engineering for AI/data science. PhD is required by the start date.

RIT is committed to being a student-centered research university. As part of that commitment, assistant professors will be offered a low teaching load, a mid-tenure review in the third year, with tenure review during year six, after which the teaching load will be adjusted according to the intensity of the research load. RIT is also positioned to provide excellent competitive startup funding in support of building an outstanding research program as well as internal seed funding opportunities for gaining external funding.

We are seeking an individual who has the ability and interest in contributing to a community committed to student centeredness; professional development and scholarship; integrity and ethics; respect, diversity and pluralism; innovation and flexibility; and teamwork and collaboration. Select to view links to RIT's core values, honor code, and statement of diversity.

The College:

As RIT's largest college, The Golisano College of Computing and Information Sciences (GCCIS) is home to the departments of Computer Science, Software Engineering, Cybersecurity, School of Information, and School of Interactive Games and Media. The college-wide PhD program is ranked 56th by CSRankings.org. The college has over 140 full-time faculty, 3,900 undergraduate students, and 1,100 graduate students.

The Department:

Founded in 1996, the RIT Department of Software Engineering is the first department of its kind in the US. The department has 18 full-time faculty members, 28 Ph.D. students, and multiple postdocs. The department offers Bachelor of Science and Master of Science degrees in Software Engineering, as well as Master's in Data Science.

The University:

Founded in 1829, RIT is a diverse and collaborative community of engaged, socially conscious, and intellectually curious minds. Through creativity and innovation, and an intentional blending of technology, the arts and design, we provide exceptional individuals with a wide range of academic opportunities, including a leading research program and an internationally recognized education for deaf and hard-of-hearing students. Find out more at www.rit.edu.

To review the full description and to apply, go to https://apptrkr.com/5635489 and search for 9168BR.

As a member of the RIT community, you'll receive a well-balanced benefits package that offers a variety of choices and access to additional employment advantages.

Salary range (9-month base): \$105,000 - \$135,000 Full-Consideration Application Deadline: December 1, 2024 Anticipated Start Date: August 13th, 2025



AI Strategist



San Francisco Bay University (SFBU) is a small-sized nonprofit, WASC-accredited university located in Fremont, California. We offer degrees in computer science (BS, MS), electrical engineering (MS), business (BABS/ MBA/ MSBan/ MSDS), and professional educational programs.

We seek a highly motivated AI Strategist with your expertise to develop strategy, policies, resources, and tools. This role reports to the Vice President for Strategy and Innovation and plays a pivotal role in shaping SFBU's future as a leader in AI education and integration.

See full details https://apptrkr.com/5435219

Stanford University

Faculty Positions in Operations, Information and Technology

The Operations, Information and Technology (OIT) area at the Graduate School of Business. Stanford University. is seeking gualified applicants for fulltime, tenure-track positions, starting September 1, 2025. All ranks and relevant disciplines will be considered. Applicants are considered in all areas of Operations, Information and Technology (OIT), including the management of service and manufacturing systems, supply and transportation networks, information systems/technology, energy systems, and other systems wherein people interact with technology, markets, and the environment. Applicants are expected to have rigorous training in management science, operations research, engineering, computer science, economics, and/ or statistical modeling methodologies. Candidates with strong empirical training in economics, behavioral science or computer science are encouraged to apply. The appointed will be expected to do innovative research in the OIT field, to participate in the school's PhD

program, and to teach both required and elective courses in the MBA program. Junior applicants should have or expect to complete a PhD by September 1, 2025.

Applicants should submit their applications electronically by visiting the web site *http://www.gsb.stanford. edu/recruiting* and uploading their curriculum vitae, research papers and publications, and teaching evaluations, if applicable, on that site. Applications will be accepted until November 15, 2024. For an application to be considered complete, the applicant must submit a CV and job market paper and arrange for three letters of recommendation to be submitted before the application deadline of November 15, 2024.

The Stanford Graduate School of Business will not conduct interviews at the INFORMS Annual meeting in Seattle, but some OIT faculty members will attend. Hence candidates who will be presenting at INFORMS are encouraged to submit their CV, a research abstract, and any supporting information before October II, 2024. Any questions regarding the application process should be sent by email to *Faculty Recruiter@gsb.stanford.edu*. The expected base pay range for this position is:

Assistant Professor: \$205,000 - \$225,000

Associate Professor: \$230,000 - \$260,000

Full Professor: \$330,000 - \$395,000

Stanford University has provided a pay range representing its good faith estimate of what the university reasonably expects to pay for the position. The pay offered to the selected candidate will be determined based on factors including (but not limited to) the experience and qualifications of the selected candidate including years since terminal degree, training, and field or discipline; departmental budget availability; internal equity; and external market pay for comparable jobs.

Consistent with its obligations under the law, the University will provide reasonable accommodation to any employee with a disability who requires accommodation to perform the essential functions of his or her job. Stanford is an equal employment opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other characteristic protected by law. Stanford welcomes applications from all who would bring additional dimensions to the University's research, teaching, and clinical missions.



Stanford University

Open Rank Faculty Position Statistics

The Department of Statistics at Stanford University invites applications for a tenure-track or tenured appointment at any rank and in any area of Statistics or Probability, broadly understood. Applicants should have demonstrated strong research abilities and exhibit a commitment to teaching and mentoring. The successful candidate must have a Ph.D. in statistics, data science, computer science, mathematics, or a related discipline at the time of appointment and will be expected to teach and advise students at both the graduate and undergraduate levels. The appointment is expected to begin on September 1, 2025.

Candidates should apply through *Stanford Faculty Positions*

Stony Brook University

Inaugural Director of the AI Innovation Institute and Simons Infinity Professor

Stony Brook University is conducting an international search to identify the inaugural director of its new, University-wide Al Innovation Institute, or Al3. In their capacity as leader of the Institute, the Director will report to the Provost and will hold the inaugural Simons Infinity Professorship, with their faculty appointment(s) in the academic department(s) appropriate to their work. The Director should remain active in research while focusing the greater part of their vision and effort on building and advancing the Institute. For more information, please see *here*.

Swarthmore College

Assistant Professor

The Computer Science Department at Swarthmore College invites applications for a tenure track Assistant Professor position to begin fall 2025. Applicants must have or expect to have a Ph.D. in Computer Science or related field by the position's start date. The position is open to all areas of computer science, including interdisciplinary areas. Ideal candidates will complement current course offerings, particularly in the systems area.

Instructions for applying to the position can be found on Interfolio: *https://apply.interfolio.com/151923*

Applications received by October 15, 2024 will receive full consideration. Applications will be reviewed on a rolling basis until the position is filled.

Toyota Technological Institute at Chicago

Endowed Research Assistant Professor Positions

The Toyota Technological Institute at Chicago (TTIC) invites applications for the position of Research Assistant Professor (RAP) in computer science.

The RAP position is a three-year position, with a salary and a discretionary research budget paid from TTIC's endowment. RAPs pursue independent research agendas, usually (but optionally) in collaboration with other TTIC faculty and students. While we welcome applications from many areas of computer science, we will give preference to candidates working in the following areas:

- machine learning
- computer vision
- natural language processing and speech
- robotics
- computational biology
- algorithms and complexity theory

More details

The RAP position is in some ways similar to a postdoctoral fellowship, in that RAPs are often fresh PhDs and are paid a salary entirely covered by TTIC's endowment. Like a postdoc, an RAP is an excellent stepping stone on the way to a permanent academic or industrial research career. However, unlike traditional postdocs, RAPs:

- Are independent researchers with no assigned supervisor (but with mentoring available from a more senior faculty member)
- Can, if they wish, serve as principal investigators to raise external grant funding, to support collaborations or other research costs
- Can serve as thesis co-advisors for PhD students at TTIC, and can teach if they choose
- Can recruit and supervise their own visiting students (interns)

TTIC research faculty alumni have an excellent employment track record (https://www.ttic.edu/faculty-alumni/).



About TTIC

TTIC (*www.ttic.edu*) is a philanthropically endowed academic institute dedicated to fundamental research and graduate education in computer science. All TTIC faculty positions are supported by the endowment. TTIC has an accredited PhD program.

TTIC produces cutting-edge research and offers world-class graduate education. Our faculty routinely publish their results at top conferences and are recognized with distinctions such as the Sloan Research Fellowships, NSF CAREER Awards, Best Paper Awards, and the NAS Michael and Sheila Held Prize.

TTIC's students have been recognized with fellowships (such as NSF, Google, and Microsoft), and have an excellent career track record, including post-docs and faculty positions at top universities and research positions at major industry labs (https://www.ttic.edu/student-alumni/).

Located on the University of Chicago campus, TTIC has strong ties to the University. In addition to having access to TTIC's excellent computing infrastructure, faculty members benefit from many of the University of Chicago's state-of-the-art facilities, as well as opportunities to collaborate with UChicago faculty and students.

TTIC faculty members frequently collaborate with colleagues from leading academic institutions around the world. Travel and visitor hosting are strongly supported. TTIC also typically hosts several workshops each year. TTIC faculty and students enjoy the close proximity of a vibrant urban environment with flourishing culture, business, and entertainment scenes.

We invite candidates with an outstanding academic record and passion for computer science research to join our world-class team of tenured/tenure-track and research faculty members (*www.ttic.edu/faculty/*).

TTIC/Simons-Berkeley Joint Program

Applicants for research assistant professor (RAP) positions in relevant areas are encouraged to simultaneously apply for the TTIC RAP program and the Simons-Berkeley Research Fellowship.

Applicants selected by both institutions will be able to participate in a program at the Simons Institute before joining TTIC. Please note that applicants interested in the joint program must submit separate applications to TTIC and the Simons Institute.

Benefits

Benefits at TTIC include excellent medical PPO or HMO insurance through Blue Cross Blue Shield of Illinois, and dental and vision insurance through Principal (80% employer paid). TTIC also provides employer-paid short-term and long-term disability and life insurance, as well as Flexible Spending Accounts for healthcare, transit and parking. Retirement benefits include a 401(k) with a gift of 3% of the employee's annual salary and a contributory match of up to 5% of annual salary. Dependent benefits include generous college tuition benefits at any accredited college or university, as well as pre-kindergarten through high school tuition benefits.

Timeline

We will start reviewing applications on December 1, and will continue until the positions are filled.

Application Requirements

- cover letter
- curriculum vitae
- research statement
- teaching statement (optional)
- names and contact information of at least three references

If interested in the joint program with the Simons Institute, please check the Simons Fellowship requirements (*https://simons. berkeley.edu/research-fellowshipcall-applications*). Please note that the Simons Institute has a different deadline.

Where to Apply

Please apply here: *https://ttic.edu/ facultyapplication*

Questions

recruiting@ttic.edu

In keeping with its long-standing traditions and policies, Toyota Technological Institute at Chicago (TTIC) considers students, employees, applicants for admission or employment, and those seeking access to TTIC programs on the basis of individual merit.

In accordance with federal, state, and local law, TTIC does not discriminate on the basis of sex, race, color, religion, national origin, citizenship, ancestry, age, marital status, physical or mental disability, medical condition, genetic



information, pregnancy or perceived pregnancy, gender, gender identity, gender expression, sexual orientation, protected military or veteran status, or any other protected status under the law, including Title IX of the Education Amendments of 1972. TTIC prohibits discrimination based on legally protected status with respect to all employmentrelated decisions, educational and admissions policies, personnel actions, and academic actions.

TTIC is committed to providing a respectful and positive environment for all members of its community, free from all forms of discrimination and harassment.

Toyota Technological Institute at Chicago

Tenure-Track and Research Faculty Positions

The Toyota Technological Institute at Chicago (TTIC) invites applications for the following faculty positions in computer science:

- tenure-track Assistant Professor
- tenured Associate Professor or full Professor
- Research Assistant Professor (for more details, see a separate job ad for this position in the postdoc job type)
- Visiting Professor

While we welcome applications from many areas of computer science, we will give preference to candidates working in the following areas:

- machine learning
- computer vision

- natural language processing and speech
- robotics
- computational biology
- algorithms and complexity theory

About TTIC

TTIC (*www.ttic.edu*) is a philanthropically endowed academic institute dedicated to fundamental research and graduate education in computer science. All TTIC faculty positions are supported by the endowment. TTIC has an accredited PhD program in computer science.

TTIC produces cutting-edge research and offers world-class graduate education. Our faculty routinely publish their results at top conferences and are recognized with distinctions such as the Sloan Research Fellowships, NSF CAREER Awards, Best Paper Awards, and the NAS Michael and Sheila Held Prize. TTIC research faculty alumni have an excellent employment track record (*https://www.ttic.edu/ faculty-alumni/*).

Further, TTIC faculty members enjoy a uniquely light teaching load, which helps them focus on their research. TTIC has only PhD students, so all courses and activities are focused on advanced learning and research.

TTIC's students have been recognized with fellowships (such as NSF, Google, and Microsoft), and have an excellent career track record, including post-docs and faculty positions at top universities and research positions at major industry labs (*https://www.ttic.edu/student-alumni/*).

Located on the University of Chicago campus, TTIC has strong ties to the

University. In addition to having access to TTIC's excellent computing infrastructure, faculty members benefit from many of the University of Chicago's state-of-the-art facilities, as well as opportunities to collaborate with UChicago faculty and students.

TTIC faculty members frequently collaborate with colleagues from leading academic institutions around the world. Travel and visitor hosting are strongly supported. TTIC also typically hosts several workshops each year.

TTIC faculty and students enjoy the close proximity of Chicago's vibrant urban environment with flourishing culture, business, and entertainment scenes.

We invite candidates with an outstanding academic record and passion for computer science research to join our world-class team of tenured/tenure-track and research faculty members (*www.ttic.edu/faculty/*).

Teaching Requirements

Tenured/tenure-track faculty teach one quarter per year. Research faculty have no teaching duties, but have the opportunity to teach and co-advise students.

Benefits

Benefits at TTIC include medical PPO or HMO insurance through Blue Cross Blue Shield of Illinois, and dental and vision insurance through Principal (80% employer paid). TTIC also provides employer-paid short-term and long-term disability and life insurance, as well as Flexible Spending Accounts for healthcare, transit and parking. Retirement benefits include a 401(k) with a gift of 3% of the employee's



annual salary and a contributory match of up to 5% of annual salary. Dependent benefits include generous college tuition benefits at any accredited college or university, as well as pre-kindergarten through high school tuition benefits.

Timeline

We will start reviewing applications on December 1, and will continue until the positions are filled.

Application Requirements

- cover letter
- curriculum vitae
- research statement
- teaching statement (optional for Research Assistant Professor applicants)
- names and contact information of at least three references

For the position of Research Assistant Professor (RAP), an option exists to apply for a joint program with the Simons Institute at Berkeley. For the joint program, please check the Simons Fellowship requirements (*https://simons. berkeley.edu/research-fellowshipcall-applications*). Please note that the Simons Institute has a different deadline.

Where to Apply

Please apply here: *https://ttic.edu/ facultyapplication*

Senior applicants may directly contact the Chief Academic Officer (*avrim@ttic.edu*) or faculty members in their areas.

Questions

recruiting@ttic.edu

In keeping with its long-standing traditions and policies, Toyota Technological Institute at Chicago (TTIC) considers students, employees, applicants for admission or employment, and those seeking access to TTIC programs on the basis of individual merit.

In accordance with federal state and local law. TTIC does not discriminate on the basis of sex, race, color, religion, national origin, citizenship, ancestry, age, marital status, physical or mental disability, medical condition, genetic information, pregnancy or perceived pregnancy, gender, gender identity, gender expression, sexual orientation, protected military or veteran status, or any other protected status under the law, including Title IX of the Education Amendments of 1972. TTIC prohibits discrimination based on legally protected status with respect to all employment-related decisions, educational and admissions policies, personnel actions, and academic actions.

TTIC is committed to providing a respectful and positive environment for all members of its community, free from all forms of discrimination and harassment.

Tulane University

The Mark D. Wheeler Endowed Chair in Artificial Intelligence Position in Computer Science at Tulane

The Department of Computer Science at Tulane University invites distinguished applicants for the Mark D. Wheeler Endowed Chair in Artificial Intelligence. Our collaborative department boasts globally recognized faculty in machine learning, computer vision, natural language processing, and data science. In addition to significant support from NSF, NIH, and DoD, AI research at Tulane is further enriched by interdisciplinary centers and institutes that foster innovation across the university, including collaborations with the Schools of Medicine and Public Health. For more information, please visit our *department website*.

We seek a senior scholar conducting pioneering, interdisciplinary research in artificial intelligence and its applications. This pivotal role calls for an established leader who will enhance existing research collaborations and forge new ones across the university. The ideal candidate will have exceptional international research credentials in artificial intelligence, a strong track record of securing substantial research funding, and experience leading multidisciplinary research initiatives. Excellence in teaching at both the undergraduate and graduate levels is essential, as is a demonstrated commitment to diversity, equity, and inclusion. We welcome and encourage applications from members of underrepresented groups.

Review of applications will begin January 1, 2025, and will continue until the position is filled.

For a full description and to apply, please visit *https://apply.interfolio.com/133007*.



United States Naval Academy

Tenure-Track Professor

The U.S. Naval Academy invites applications for a tenure-track position, with preference for those applying for Assistant Professor ranks, beginning in the Fall semester of 2025 or Spring semester of 2026 in the Department of Cyber Science. U.S. citizenship is required. For this position, technical skills and expertise are required in computer programming and should be, at a minimum, familiar with Python and C languages. Additionally, the applicant should have teaching or research experience in at least one or more of the following areas: Computer Architecture, Embedded Systems, Operating Systems, Web and Database Security, Networking, Cryptography, and Artificial Intelligence. In joining the USNA Cyber Science Department, faculty support growing cybersecurity education initiatives in a highly interdisciplinary department. These initiatives include a rapidly growing Cyber Operations major that is both accredited and designated as a Center of Academic Excellence in Cyber Operations (CAE-CO) and Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency - and a brand new, state-of-the-art building to support multi-disciplinary cybersecurity education and research. Because of our position as a service academy and our collaborative activities within the military and government cybersecurity and intelligence

Professional Opportunities

communities, we provide a unique opportunity for our civilian faculty to work with cybersecurity thought leaders from all over the world, and to impact an important program with a substantial global impact. In 2019, an overview of our program was published in IEEE Computer: *https://ieeexplore. ieee.org/document/867734* Those who are interested can view the official job announcement, and information on how to apply, at *https://www. usna.edu/HRO/jobinfo/Tenure-track-CyberScience-AY25.php*

University of Arkansas -Fayetteville

Assistant Professor - Engineering

As an Assistant Professor, responsibilities include teaching, research, and service in the Department of Electrical Engineering and Computer Science. This position is a 100% appointed, 9-month, tenure-track position.

Specifically, this position will conduct research leading to scholarly publications in the appropriate area, write proposals to obtain external funding, establish an independent research program supported by external funding, develop graduate and undergraduate courses, provide curriculum material, construct syllabi, provide classroom instruction, write and administer exams, prepare and evaluate students, mentor students, serve on various faculty and student-oriented committees, exhibit participation and leadership in related professional societies and participate in the faculty decision-making for the Department of Electrical Engineering and Computer Science.

For this position, the Department of Electrical Engineering and Computer Science is seeking candidates with expertise in the broad area of electronics, including, but not limited to, digital design, VLSI design, microprocessor system design, embedded systems, etc.

Regular, reliable, and non-disruptive attendance is an essential job duty, as is the ability to create and maintain collegial, harmonious working relationships with others.

For more information and to apply for this position: Applications should be submitted via the University of Arkansas Career Site:

https://uasys.wd5.myworkdayjobs. com/UASYS/job/Fayetteville/Assistant-Professor---Engineering_R0060445

University of British Columbia

CS Assistant Professor of Teaching

The University of British Columbia

(UBC), Vancouver invites applications for multiple tenure-track Assistant Professor of Teaching positions in the *Department of Computer Science*, with an anticipated start date of January 1, 2025 or July 1, 2025. Appointment at a higher rank will be considered for an applicant of exceptional qualifications. Salary will be within the range of \$140,000 - \$215,000 CAD.

These positions provide the opportunity, with strong institutional support, to pursue a career based on excellence in teaching and educational leadership,



while participating in the intellectually exciting atmosphere of a top-tier department. Successful candidates will have an opportunity to make an impact on education both within and beyond the classroom, as well as both within and beyond UBC. Assistant Professor of Teaching is the first rank in UBC's Educational Leadership Stream,

followed by Associate Professor of Teaching (with tenure), and then Professor of Teaching. This path is analogous to the Research stream faculty progression of tenure-track Assistant Professor, tenured Associate Professor, and Full Professor. Educational leadership faculty also engage in self-directed service, scholarly activity, and other initiatives at the department, faculty, university, national, or international level.

For the full job description, please see: https://www.cs.ubc.ca/our-department/ employment/multiple-tenure-trackassistant-professor-teaching-positions Applications must be submitted through Academic Jobs Online:

https://academicjobsonline.org/ajo/ jobs/28410

The closing date for applications is October 15, 2023

University of California, San Diego

Assistant Teaching Professor - CSE

The University of California San Diego Computer Science and Engineering Department seeks applications for an Assistant Teaching Professor (formal title Lecturer with Potential Security of Employment). Teaching Professors are full members of the academic senate and are eligible for Security of Employment, analogous to tenure.

The responsibilities of Teaching Professors are (1) teaching, (2) professional and/or



Assistant Professor - Immunology and Molecular Medicine - Department of Molecular and Cell Biology

The Department of Molecular and Cell Biology (MCB) and Division of Immunology and Molecular Medicine at the University of California, Berkeley (UCB) invite applications for a tenure-track faculty position at the Assistant Professor level.

We seek applicants studying fundamental aspects of immune system function. Areas of interest include (but are not limited to), innate immunity, inflammation, B cell biology, T cell biology, mucosal immunity, type 2 immunity, immunometabolism, neuroimmunology, cancer immunology, host-microbe interactions, microbial pathogenesis, autoimmunity, and comparative and systems immunology.

The expected start date is July 1, 2025.

For more information about the position, including required qualifications and application materials, go to: https://apptrkr.com/5524752 (link is external).

The deadline to apply is November 1, 2024.

For questions, please contact: mcb_ap_assist@berkeley.edu.

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or protected veteran status.

scholarly achievement and activity, and (3) university and public service. The teaching load is two courses per quarter at the undergraduate and/or graduate level over three quarters of the academic year. The CSE course catalog is available *https:// catalog.ucsd.edu/courses/CSE.html*.

Candidates who have engaged in activities or efforts to educate a broad and diverse group of students and worked to increase the participation and success of students from groups underrepresented in computer science are preferred.

Applicants must have an expectation of completing a Ph.D. in computer science and/or electrical or computer engineering and/or computing education and/or mathematics and/or bioinformatics or computational biology and/or computational social science. Applicants must have at least one course of teaching experience as a TA, lead instructor, or other comparable teaching experience.

More information about the CSE department and its Teaching Faculty can be found at *http://www.cse.ucsd.edu/* and *https://csed.ucsd.edu/*.

We encourage candidates to send applications as soon as possible. Applications submitted by October 13, 2024 will receive full consideration; review will continue until the position is filled.

To apply and/or more information, please visit: *https://apol-recruit.ucsd.edu/JPF04041*

UC San Diego is an Equal Opportunity/ Affirmative Action Employer with a strong institutional commitment to



excellence through diversity. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran.

University of Chicago

Computer Science Phoenix STEM Instructional Professor

The Department of Computer Science in the Physical Sciences Division at the University of Chicago invites applications for the position of Instructional Professor (open rank). The selected candidate will be appointed as Assistant Instructional Professor, Associate Instructional Professor, or Instructional Professor, depending on qualifications. The appointment will be for a term of up to five years, renewable. This is a careertrack position with potential progression, competitive salary, and benefits, with time allocated for professional development. This position is expected to begin in academic year 2025-2026.

The terms and conditions of employment for this position are covered by a collective bargaining agreement between the Service Employees International Union (SEIU) and the University.

The selected candidate will be expected to contribute to the goals of the Phoenix STEM program, which includes increased persistence in STEM for all students, including first-generation and other historically under-represented student groups at the University of Chicago. The Phoenix STEM program will train the selected candidate to incorporate innovative pedagogical techniques, such as collaborative learning in their teaching, to help students succeed in courses in the computer science major. The selected candidate is anticipated to teach courses in introductory programming, as well as discrete mathematics, algorithms, machine learning, or systems depending on the candidate's gualifications and the department's needs. Responsibilities include teaching (average teaching load is two courses per guarter in the fall, winter and spring guarters) and non-classroom instructional or service duties as needed. such as participation in collaborative learning workshops each September.

Qualifications

Candidates must have:

- A doctorate in computer science or a related field at the time of appointment.
- At least one year of prior university-level teaching experience, such as, but not limited to, serving as an instructor of record or teaching assistant.

Application Instructions

Applications must be submitted online through the University of Chicago's Academic Jobs website: *http://apply. interfolio.com/151364*. Review of applications will begin on October 1, 2024 and will continue until all positions are filled.

The following materials are required:

- Cover letter;
- Curriculum vitae;

- Teaching statement including a description of teaching philosophy and experience. Must include a list of courses that the candidate is qualified to teach. This statement may also include the candidate's experience in teaching diverse students. (The University's Diversity Statement can be found at *https://provost. uchicago.edu/statements-diversity*);
- Syllabi of courses previously taught and/ or designed by the candidate, or sample syllabi of proposed courses;
- Applicants are required to request at least three confidential letters of recommendation via Interfolio. At least one of these letters should address the candidate's teaching effectiveness.

Optional: Candidates may submit teaching evaluations.

Equal Employment Opportunity Statement

All University departments and institutes are charged with building a faculty from a diversity of backgrounds and with diverse viewpoints; with cultivating an inclusive community that values freedom of expression; and with welcoming and supporting all their members.

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's Statements on Diversity are at https://provost.uchicago.edu/ statements-diversity.



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, gender identity, national or ethnic origin, age, status as an individual with a disability, military or 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 773-834-3988 or email *equalopportunity@ uchicago.edu* with their request.

University of Cincinnati

Assistant Professor

The School of Information Technology (SoIT) at the University of Cincinnati (UC) seeks to hire one (I) Assistant Professor-Tenure Track to teach undergraduate or graduate courses in the areas of Cybersecurity, Software, Application Development, Data Technologies, Networking/Systems, and Game Development, as they relate to Information Technology. For full job description and details on how to apply online, please visit *https://jobs.uc.edu* and search keyword: 96933



Professor - Department of Computer Science and Engineering

The Department of Computer Science and Engineering at the University of Colorado Denver invites applications for an open rank tenure track faculty position to develop and teach CSE courses at all levels. The faculty is also expected to establish an active and externally funded research program that conducts high quality research, advises MS and PhD students, and leads to sponsored research and refereed publications. The search is open to all fields in computer science, but we particularly encourage applications in cyber-physical systems, IoT, HCI, computer graphics, AR/VR, and AI. Salary is commensurate with skills and experience.

For full details and to apply, visit: https://apptrkr.com/5623956

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

University of Cincinnati

Assistant Professor-Educator

The School of Information Technology (SoIT) at the University of Cincinnati (UC) seeks to hire two (2) Assistant Professor-Educators to teach undergraduate or graduate courses in the areas of Cybersecurity, Software, Application Development, Data Technologies, Networking/Systems, and Game Development, as they relate to Information Technology. For full job description and details on how to apply online, please visit *https://jobs.uc.edu* and search keyword: 96935

The University of Massachusetts Dartmouth

Assistant/Associate Professor Position in Computer and Information Science

The University of Massachusetts Dartmouth is seeking applications for tenure-track faculty positions at the Assistant or Associate Professor level in the Department of Computer and Information Science, Positions are available starting in either January 2025 or September 2025. We are particularly interested in candidates specializing in artificial intelligence (AI) and software engineering. The department has growing expertise and a strong interdisciplinary focus on various aspects of robust and secure AI, mission-critical software, and distributed software engineering. Areas of interest include, but are not limited to, natural language processing,



cybersecurity, computer vision, robotic process automation, multi-agent systems, formal methods, automated software testing, knowledge-based software engineering, and blockchain technologies. More information about the CIS Department can be found at *https://www. umassd.edu/engineering/cis/*

Candidates must have a doctorate in Computer Science, or a closely related field, at the time of appointment, and demonstrate a strong commitment to teaching excellence and scholarly research as well as diversity, equity and inclusion. Candidates must be authorized to work in the US on a full-time basis.

Screening of complete applications will begin September 13 and will continue until the position is filled. Further information and application instructions are available at https://careers.umassd.edu/ dartmouth/en-us/job/524154/

University of Massachusetts Dartmouth

Teaching Professor Position in Computer and Information Science

The University of Massachusetts Dartmouth is seeking applications for Teaching Professor positions in the areas of artificial intelligence, software engineering, computer game design or related field in computer science starting in either January 2025 or September 2025. The appointment level will be made commensurate with experience. This is a 9-month, non-tenure-track position with primary responsibilities for undergraduate and graduate classroom and online instruction, undergraduate advising, and university service. More information about the Computer and Information Science Department can be found at

https://www.umassd.edu/engineering/cis/

Candidates must have earned a master's degree in computer science or closelyrelated field at the time of employment, have experience with teaching at the college level, possess excellent communication skills, demonstrate a strong commitment to teaching excellence as well as diversity and inclusion, and be authorized to work in the U.S. on a full-time basis.

Screening of complete applications will begin September 23 and continue until the positions are filled. Further information and application instructions are available at *https://careers. umassd.edu/en-us/job/524459/*

University of Michigan

Computer Science and Engineering Faculty Positions

Computer Science and Engineering (CSE) at the University of Michigan College of Engineering invites applications for multiple tenure-track and teaching faculty (lecturer) positions, as part of its aggressive long-term growth plan. We seek exceptional candidates in all areas across computer science and computer engineering, across all ranks. Qualifications include an outstanding academic record; an awarded or expected doctorate (or equivalent) in computer science, computer engineering, or a related area. We seek faculty members who commit to excellence in graduate and undergraduate education, will develop impactful, productive and novel research programs, and will contribute towards advancing a culture of diversity, equity and inclusion.

We will begin reviewing applications as soon as they are received, starting October 1, 2024 and continuing throughout the academic year. For more details on these positions and to apply, please visit *https://cse.engin.umich.edu/about/ faculty-hiring/*.

The University of Michigan is one of the world's leading research universities, consisting of highly ranked departments and colleges across engineering, sciences, medicine, law, business, and the arts, with a commitment to interdisciplinary collaboration. CSE is a vibrant and innovative community, with more than 90 world-class faculty members, more than 500 graduate and 3000 undergraduate students, and a large and illustrious network of alumni. Ann Arbor is consistently rated one of the *best small* cities in the nation. More area information is available at https://cse.engin.umich. edu/about/visit/area-information/.

As part of the nation's number one public research institution, Michigan Engineering's mission is to provide scientific and technological leadership to the people of the world, develop intellectually curious and socially conscious minds, create collaborative solutions to societal problems, and promote an inclusive and innovative community of service for the common good.



As Michigan Engineers, we strive to apply excellent engineering fundamentals, integrated expertise and equity-centered values to reimagine what engineering can be, close critical gaps, and elevate all people. Information about our vision, mission and values can be found at: *http://strategicvision.engin.umich.edu/*.

The University of Michigan has a storied legacy of commitment to Diversity, Equity and Inclusion (DEI). Michigan Engineering models that commitment in our research, teaching, culture and collaborations. We seek to recruit and retain a diverse workforce as a reflection of that commitment. Learn more about DEI at Michigan Engineering: *https://www. engin.umich.edu/culture/diversityequity-inclusion/*

CSE is firmly committed to DEI and improving our climate through transparent communication and effective action, as shown in our annual report: *https:// cse-climate.engin.umich.edu/reports/ climate-dei-reports/cse-climate-anddei-report-2023-2024/*

Employment will require a criminal background check and may require an institutional reference check regarding any misconduct. If an institutional reference check is necessary, candidates will be required to submit a self-disclosure form as well as an authorization to release information form.

The University of Michigan is an equal opportunity/affirmative action employer, and is responsive to the needs of dual career families.

University of Michigan -Dearborn

Assistant Professor in Computer and Information Science

Description:

The Department of Computer and Information Science at the University of Michigan-Dearborn invites applications for a tenure-track Assistant Professor position in the area of software engineering. Strong applicants in other areas of computer science will also be considered. The expected starting date is January 1, 2025. Although candidates at the Assistant Professor rank are preferred, exceptional candidates may be considered for the rank of Associate Professor depending upon experience and qualifications. We offer competitive salaries and start-up packages.

The CIS Department offers several B.S. and M.S. degrees, and a Ph.D. degree. The current research areas in the department include artificial intelligence, computational game theory, computer graphics, cybersecurity, data privacy, data science/management, energyefficient systems, game design, graphical models, machine learning, multimedia, natural language processing, networking, service and cloud computing, software engineering, and health informatics. These areas of research are supported by several established labs and many of these areas are currently funded by federal agencies and industries.

The department and College of Engineering of Computer Science value a culture of diversity, equity, and inclusion. We are committed to the development of diverse and culturally intelligent faculty who thrive and contribute to a positive and inclusive environment.

Qualifications:

Qualified candidates must have earned a Ph.D. degree in computer science or a closely related discipline by January 1, 2025. Candidates will be expected to do scholarly and sponsored research, as well as teaching at both the undergraduate and graduate levels.

Applications:

Applicants should send a cover letter; curriculum vitae; statements of teaching, research interests, and diversity; evidence of teaching performance (if any); and a list of three references through Interfolio at: http://apply.interfolio.com/152068

Review of applications will start on September 16, 2024, but applications will be accepted until the position is filled.

The University of Michigan-Dearborn is an equal opportunity/affirmative action employer.

University of Mississippi

Tenure-Track Assistant/Associate Professor Openings, University of Mississippi

The Department of Computer and Information Science at the University of Mississippi invites applications for two tenure-track faculty positions at the Assistant or Associate Professor level. Applicants must have a Ph.D. in Computer



Science or a related field by the time of appointment. Responsibilities include teaching, researching computer security or related areas, and supervising graduate students. Exceptional candidates in other research areas are also welcome. Dualcareer couples are encouraged to apply. Apply online at *https://careers.olemiss. edu* with the required documents in a single PDF. The review begins immediately. Contact Dr. Feng Wang at *fwang@ olemiss.edu* for more information.

The University of Mississippi has been rated a "Great College to Work For" by the Chronicle of Higher Education.

University of Nebraska at Omaha

Assistant Professor - Cybersecurity

The School of Interdisciplinary Informatics in the College of Information Science and Technology invites applicants for a tenuretrack assistant professor in Cybersecurity, starting Fall 2025.

Qualifications:

Ph.D. in Cybersecurity, Computer Science, Information Technology, or a similar field with a Cybersecurity research area

Responsibilities Include:

- Teaching courses that align with the program's goals and objectives.
- Engaging in cybersecurity research
- Supervising and mentoring graduate students at both master's and doctoral levels.

Why choose CYBR at UNO?

- Accreditation: The Cybersecurity program (or CYBR for short) at UNO is an NSA designated Center of Academic Excellence (CAE) in Cyber Defense (CD) and Cyber Operations (CO), a combination held by only a handful of universities nationwide.
- Impact and growth: The CYBR program at UNO is growing and increasing its impact. Highlights include:
- Over \$10M in federal grant funding secured in the past 5 years.
- A vibrant academic community of 6 tenure-track faculty, 3 dedicated fulltime instructors, 282 undergraduates, 54 master's candidates, and a diverse group of students in minors, multidisciplinary studies, and graduate certificates.
 This represents a 20% average year-overyear growth rate since our inception, from 30 students in 2009 to 336 now.
- A groundbreaking curriculum offering both traditional and fully online degree options, catering to a wide array of students, including active-duty military and working professionals.

Visit *https://unomaha.peopleadmin. com/postings/21159* to apply. Review of applications will begin on November 1, 2024, and will continue until the position is filled. For questions about the position, please contact Dr. Matt Hale, Director, School of Interdisciplinary Informatics at mIhale@ unomaha.edu or Dr. Bill Mahoney, Professor of Cybersecurity and hiring committee chair, at *wmahoney@unomaha.edu*. The University and the College of Information Science & Technology have a strong commitment to achieving diversity among faculty and staff. The University of Nebraska does not discriminate based on race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation in its programs, activities, or employment. UNO is a VEVRAA Federal Contractor and an E-Verify employer.

University of Oregon

Assistant Professor of Computer Science

The University of Oregon's Department of Computer Science is hiring two tenure-track Assistant Professors in Cybersecurity and Programming Languages for Fall 2025. Submit materials (cover letter, CV, research, teaching, and DEI statements, and three references) via *https://academicjobsonline.org/ajo/ jobs/27877/apply*

Review starts November 1, 2024. Join our growing department committed to inclusive excellence and interdisciplinary innovation!





OF TAMPA

Assistant Professor, Computer Science

The Department of Computer Science in the College of Social Sciences, Mathematics, and Education at The University of Tampa invites applications for two full-time tenure track positions at the rank of assistant professor beginning in August 2025.

The Department of Computer Science and B.S. in Computer Science are quickly growing. The program enrolled its inaugural class in the 2021-22 academic year, and this is an ideal opportunity to participate in the growth of a relatively new degree program and its unique curriculum.

The ideal candidate will have earned a Ph.D. in computer science or a closely related field and have a broad background in computer science. ABD will be considered; however, the terminal degree must be earned by July 2025 as a condition of employment.

The Department of Computer Science values faculty who balance excellent teaching with active scholarship. Responsibilities include teaching courses at the undergraduate level, advising students, conducting research, and participating in academic and professional service activities. Prior experience teaching undergraduate students is strongly preferred. The normal teaching load is three four-credit hour courses per semester. The successful candidate is expected to teach a wide variety of undergraduate courses in computer science as well as develop new courses in relevant areas of expertise. Strong candidates from all areas within computer science will be considered; however, applicants with teaching experience and active research in software engineering and DevOps, data mining and data management, machine learning and artificial intelligence, computer graphics and visualization, and human-computer interaction are especially encouraged to apply.

Highly effective, engaging teaching is a top priority, and innovative approaches to teaching are welcome. Professional achievement and service to the Department, College, University, and the broader community are also required. Candidates should be committed to excellence in teaching, research, and service.

The faculty and administrators in the College of Social Sciences, Mathematics, and Education, along with professional staff across the University, will provide meaningful support for your teaching and scholarship as elements of your personal and career development. We encourage you to grow professionally, and we support a healthy work-life integration to nurture that growth. The vision of the College of Social Sciences, Mathematics, and Education is "Empowering learners to make a difference." All candidates are expected to contribute to the diversity of our curriculum and community. We are searching for teacher-scholars who will serve as mentors for our diverse student body, and who have a demonstrated commitment to the academic success of all students.

Please visit our website at: https://apptrkr.com/5621738 for further information/requirements, and to apply.

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

Upon request, applicants may be required to submit a brief video sample of their teaching.

The University of Tampa is an equal opportunity/affirmative action employer dedicated to excellence through diversity and does not discriminate based on age, race, sex, disability, sexual orientation, national origin, religion, marital status, gender identity, veteran status, or any other non-job-related criteria. The University of Tampa recognizes the importance of a multicultural community of students, faculty, and staff who seek to advance our commitment to diversity. The University invites applications from underrepresented groups and those who have academic experiences with diverse populations.





Assistant Professor of Computer Science, Tenure Track

Department: Computer Science Department Posting Number: F120P

For full consideration applicants should apply by: 10/13/2024

About Vassar College

Vassar is a highly selective, coeducational liberal arts college of about 2400 undergraduate students, located in the Hudson Valley, seventy-five miles north of New York City. Vassar stands upon the homelands of the Munsee Lenape. The College is located in Poughkeepsie, home to a culturally diverse community, and benefits from convenient commuter rail access to New York City. Vassar faculty are committed teachers/scholars who bring research and creative discovery to life for students in classrooms, labs, and studios and in individually-mentored projects. They teach broadly in the curricula of their departments, advise students, and serve on college-wide and departmental committees. The College maintains a generous leave policy, provides strong support for research, and encourages multidisciplinary approaches to teaching.

Position Introduction:

The Department of Computer Science at Vassar College invites applications for a tenure-track position at the rank of Assistant Professor starting in August 2025.

AA Statement

Vassar College is deeply committed to increasing the diversity of the campus community and the curriculum, and to promoting an environment of equality, inclusion, and respect for difference. Candidates who can contribute to this goal through their teaching, research, advising, and other activities are encouraged to identify their strengths and experiences in this area. The College is an Equal Opportunity and Affirmative Action employer, and especially welcomes applications from veterans, women, individuals with disabilities, and members of racial, ethnic, and other groups whose underrepresentation in the American professoriate has been severe and longstanding.

Position Description:

We seek creative individuals who are able to teach undergraduate courses in the department, maintain an active research program, engage undergraduates in their research, and foster a diverse and inclusive community. The ideal candidate would have expertise in theoretical computer science or a related area, including potential interest in multidisciplinary collaboration. Candidates from other areas are also encouraged to apply. In addition to offering upper-level courses in their area of expertise, candidates should also be able to develop and teach core courses at all levels of our curriculum. A PhD in Computer Science or related field is expected by the start of the Fall 2025 semester. A typical teaching load is one lab course and one non-lab course each semester. Vassar College has built a strong undergraduate program in computer science, with a long, rich history in computing. Through the efforts of Profs. Grace Hopper and Winifred Asprey, Vassar was one of the first liberal arts colleges to offer courses in computer science. Currently, Vassar is home to a vibrant and growing Computer Science Department, with 8 tenure-track faculty and 150 majors. The department independently maintains its own computer systems and Linux laboratories. In addition, faculty and students have access to the Hopper high-performance computing cluster. For more information see https://www.vassar.edu/computerscience.

Salary Wage Range

Pay Transparency Disclosure: The annual base starting salary range for this position is \$102,000 to \$112,000 (USD). This range includes new faculty appointments beginning the first year of a standard tenure clock as well as Assistant Professors with previous tenure-line experience who will be on an accelerated tenure clock. When extending an offer of employment, Vassar College considers factors such as (but not limited to) candidate's education/training, work experience, internal peer equity, as well as market and organizational considerations. This salary range represents the College's good faith and reasonable estimate at the time of posting. The starting salary for an Assistant Professor in this position with a PhD beginning the first year of a standard tenure clock in Computer Science in Fall 2025 is \$106,000.

How to Apply

Candidates should submit:

- Cover letter
- CV
- Undergraduate and graduate transcripts (unofficial copies are acceptable for initial application)
- Statement of teaching philosophy and pedagogical approaches
- Statement of research including plans for involving undergraduates
- Statement of teaching philosophy and pedagogical approaches to engage a diverse student population
- Diversity statement (additional information can be found athttps://offices.vassar.edu/dean-of-the-faculty/positions/candidate-diversity-statement/)
- Three letters of recommendation (with at least one letter specifically addressing teaching ability).

Applications should be addressed to Luke Hunsberger, chair of the search committee, and submitted online at: https://apptrkr.com/5589253. For all inquiries, please reach out to hunsberger@vassar.edu. Review of applications will begin on October 13th, 2024, and continue until the position is filled. For the initial review of applications, unofficial undergraduate and graduate school transcripts and two letters of reference (one teaching, one research) will suffice. There is no guarantee that applications received after October 13th, 2024, will be reviewed.

All applicants must apply online at: https://apptrkr.com/5589253



Washington and Lee University

Tenure-Track Assistant Professor of Computer Science

The Department of Computer Science at Washington and Lee University invites applications for a tenure-track position at the rank of Assistant Professor of Computer Science beginning July 1, 2025. We seek candidates who demonstrate potential to be excellent teacher/scholars, are dedicated to effective teaching, and can mentor and collaborate with undergraduates. Review begins October 15. For more information and to apply, see our position in Interfolio *http://apply. interfolio.com/153279*.

William & Mary

Assistant Professor and Assistant Teaching Professor

The Data Science Program at William & Mary invites applications for three faculty positions: one tenure-track Assistant Professor and two non-tenure track, renewable Assistant Teaching Professors. The Assistant Professor position requires expertise in areas like natural language processing, data visualization, or generative AI. The successful candidate will teach one course per semester, conduct research, and mentor Ph.D. students. The Assistant Teaching Professor positions involve a 3-3 teaching load with expertise in Al, machine learning, or big data technologies. For details and to apply, visit: Assistant Professor and Assistant Teaching Professor.

Williams College

Assistant Professor and Open-Rank Positions in Computer Science

The Department of Computer Science at Williams College invites applications for two tenure-track faculty positions, one at the assistant professor level and one open-rank, beginning July 1, 2025. The Assistant Professor position is a tenuretrack position. The rank and initial term of the open-rank position will be determined by the qualifications of the successful candidate. We welcome candidates from all areas of computer science who can contribute to the vibrancy of our academic community through their research, teaching, and service for both positions. Williams College is committed to fostering a diverse and inclusive academic community. We strongly encourage candidates from underrepresented identities, including women, people of color, LGBTQ+ individuals, and others who will contribute to the diversification and enrichment of ideas and perspectives, to apply.

Successful candidates will join the department's thirteen current faculty in supporting a thriving undergraduate computer science major at a top-tier liberal arts college. Candidates should have a commitment to excellence in teaching and research, and should, by September 2025, possess a Ph.D. in computer science or a closely related discipline. The teaching load typically consists of three semester-long courses per year, with associated labs, spread over the fall and spring semesters.

cra.org/crn

The Department of Computer Science offers a congenial working environment, an excellent and diverse student body, and state-of-the-art facilities supporting both teaching and research. Many opportunities exist for collaboration both within computer science and across disciplines. For more information about the department and faculty, please visit *http://www.cs.williams.edu*. Williams offers faculty participation in the college's professional development

program First3 and in various programs offered by NCFDD, and support through the Rice Center for Teaching.

Applications should include a cover letter, curriculum vitae, and teaching and research statements. The application materials should also address how the candidate's teaching, scholarship, mentorship and/or service activities would support a student population that is broadly diverse with regard to gender, race, ethnicity, nationality, sexual orientation, and religion. Candidates who advance in the pool will be asked to provide three letters of reference. Application materials must be submitted electronically through Interfolio at https://apply.interfolio. com/148956. Materials may be addressed to Professor Jeannie Albrecht, Chair. Department of Computer Science.

Completed applications received by November 8, 2024, will receive full consideration, and review of applications will continue until the position is filled. The search committee plans to conduct video conference interviews with semifinalists in November and December, followed by on-campus interviews with



finalists in December and January. Please direct all correspondence to *cshiring@ williams.edu*. All offers of employment are contingent upon completion of a background check as described here: *https://faculty.williams.edu/prospectivefaculty/background-check-policy/*.

Williams College is a liberal arts institution located in the Berkshire Hills of western Massachusetts. The college has built its reputation on outstanding teaching and scholarship and on the academic excellence of its approximately 2,000 students. Please visit the Williams College website (*http://www.williams.edu*). Beyond meeting fully its legal obligations for non-discrimination, Williams College is committed to building a diverse and inclusive community where members from all backgrounds can live, learn, and thrive.