

COMPUTING RESEARCH NEWS



Computing Research Association
Uniting Industry, Academia, and Government to
Advance Computing Research and Change the World.

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CRN At-A-Glance

CRA Update: Highlights from the February Board Meeting

To keep you in the know, this month's CRA Update gives you an overview of last month's CRA Board of Directors Meeting, which took place in Washington, DC from February 22-23.

See page 2 for details

Policy Spotlight: Dan Reed, National Science Board

Check out the first edition of a new Computing Research News Q&A series, Policy Spotlight: Conversations with Computing Researchers. This month, we feature Dan Reed, who has been a member of the National Science Board since 2018, and whose term as Chair will be coming to a close at the end of 2024.

See page 14 for details

New BPCnet.org Resource on Supplemental BPC Funding

We're excited to announce the launch of the BPC Supplemental Funding Page on BPCnet.org. This resource has been developed in response to the engaging discussions held at the 2024 BPC Community Forum.

See page 18 for details

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CRA Update: Highlights from the February Board Meeting

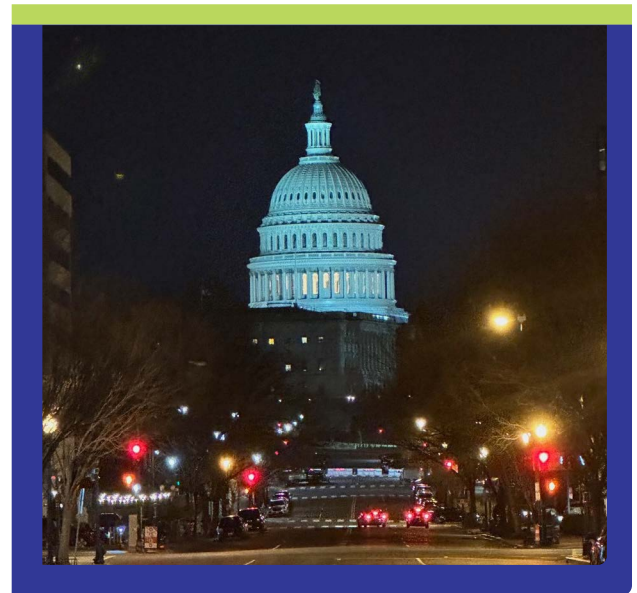
By Matt Hazenbush, Director of Communications

On February 22-23, the Computing Research Association (CRA) hosted its annual February Board of Directors Meeting in Washington, DC.

To keep you in the know, below is a summary of the many discussions that took place amongst the CRA Board members, CRA staff, society leaders, and distinguished guests who attended in person and via Zoom.

Many thanks to Board Secretary, Katie Siek, for capturing the notes that helped provide this summary to the community. Community members can also review the Board Meeting agenda and programmatic committee update executive summaries on the [CRA Committees page](#).

The next CRA Board of Directors Meeting will be July 22-23, 2024, in Snowbird, Utah, just before the [2024 CRA Conference](#). Do you have suggestions for agenda topics? We want to hear them! Please share your thoughts via [this form](#).



The View from NSF

Following the conclusion of a successful [CRA Leadership Summit](#) and the usual call to order by CRA Board Chair Nancy Amato, the Board Meeting began with an NSF update from distinguished guest Dilma Da Silva, the acting Associate Director of the Directorate for Computer and Information Science and Engineering (CISE).

Her wide ranging presentation reviewed how NSF is building on previous initiatives, including funding for AI institutes. Additional initiatives discussed covered the topics of smart sensing, semiconductor fabrication, and programs to diversify investigators, particularly from [EPSCoR jurisdictions](#) and minority serving institutions (MSIs). She also discussed funding to nonprofits, increased REU stipends, and the challenge of rising costs without matching grant sizes.

Chair's Remarks and CEO Update

After a networking session and dinner, CRA Board Chair Amato introduced [new Board member Jeanette Wing](#) of Columbia University, who joined the Board as an ACM representative effective January 1. In her Chair's Remarks, Amato emphasized the widespread demand for all things AI and the need for CRA to consider what role it should take with respect to the varying support of higher education and DEI across the country.

CRA Executive Director and CEO, Tracy Camp, then delivered the CEO Update, which highlighted CRA programmatic committee activities and preparations for the [2024 CRA Conference](#), among other topics.

She also highlighted key findings from the Member Outreach Project, in which 17 board members connected with nearly 50 CRA member primary contacts to get a sense of the things CRA does well, the things CRA should do better, and areas in which they feel CRA should focus its resources. Among the top mentioned CRA strengths were data for the community via the annual [CRA Taulbee Survey](#), the bi-annual [CRA Conference](#), [CRA Career Mentoring Workshops](#), and [CRA's Job Board](#). Among the opportunity areas was improving faculty awareness of CRA opportunities, increasing advocacy activities, and additional programing for mid-career researchers.

CRA Update *(continued)*

Government Affairs Update

Brian Mosley, CRA Associate Director of Government Affairs, concluded the first evening of the Board meeting with the Government Affairs Update.

His informative and engaging presentation covered a variety of timely topics, including the Biden Administration's October [AI Executive Order](#), recent actions by the House Judiciary Committee on misinformation, the challenging budget situation in Congress, and updates on various AI-related initiatives. Also discussed was the House Judiciary Committee's report on the "Weaponization of the NSF," which was highlighted as a point of concern.

He concluded by sharing highlights from last fall's [CRA Congressional Visit Day](#) and a successful [Leadership in Science Policy Institute \(LISPI\)](#), which was attended by 40 members of the community to very positive reviews.

CRA Goals and Discussion Breakouts

Friday morning began with Camp reviewing CRA's quarterly goals, which for the first time follow the [Objectives and Key Results \(OKRs\)](#) framework. Three specific KRs for the Board were highlighted, including getting feedback from CRA members, launching documents related to computing research, and ensuring board participation in activities.

Helen Wright, CRA's Manager for CRA-Industry, discussed with Ben Zorn, CRA-I Co-Chair, how CRA-I is expanding its council, and how they are helping to expand the number of CRA members from industry via a new CRA membership program. They also highlighted the need to identify industry people within the community so we can better connect them to CRA resources and demonstrate the value of industry membership.

Next, Board members took part in a rotation of breakout discussions, covering the topics of Communications, AI Education, and CRA FY25 Goals.

When Should CRA Respond? Discussion

After the breakout discussions, Alex Aiken and Stephanie Forrest of the Government Affairs Committee (GAC) led a discussion of the decision-making process for making statements for the community where the GAC considers CRA/GAC mission alignment, consensus, impact, and risk.

Prior to the session, Board members were encouraged to read an article from Harvard Business Review, [When Should Your Company Speak Up About a Social Issue?](#), which provided a framework that helped focus the conversation. The article highlights three questions recommended to guide the approach on when to engage: Does the issue align with the organization's strategy?; can you meaningfully influence the issue?; and will your constituencies agree with speaking out?

CRA Awards

Following the Treasurer's Report from James Allan and the adoption of the FY25 budget, visitors, staff, and CRA board members self selected into working lunch discussions, covering the topics of AI Governance, New Chairs Workshop, CSGrad4US, CV Database, UR2PhD/DREU, and 2024 CRA Conference.

After lunch, Diana Franklin, Chair of the CRA Committee on Awards - Selection, recommended recipients for the CRA A. Nico Haberman and CRA Distinguished Service Award winners. Mary Ann Leung, Founder and President of the Sustainable Horizons Institute, was approved by the Board as the recipient of the 2024 CRA A. Nico Habermann Award, in recognition of her work developing and leading programs to increase the numbers and successes of computing researchers from groups minoritized in computing. Manish Parashar, Director of the Scientific Computing and Imaging (SCI) Institute, Chair in Computational Science and Engineering, and Presidential

CRA Update (*continued*)

Professor in the School of Computing at the University of Utah, was approved by the Board as the recipient of the 2024 CRA Distinguished Service Award in recognition of his multi-faceted and highly impactful service to the computing research community.

Board of Directors Election Results

CRA Board Chair Amato then announced that CRA members elected four new individuals to its Board of Directors: David Bader (New Jersey Institute of Technology), Bruce Hendrickson (Lawrence Livermore National Lab), Fatma Ozcan (Google), and Manuel Pérez-Quiñones (University of North Carolina at Charlotte).

In addition, five current Board members won reelection: James Allan (University of Massachusetts Amherst), Ran Libeskind-Hadas (Claremont McKenna College), Rachel Pottinger (University of British Columbia), Eve Schooler (Intel, retired and University of Oxford), and Katie Siek (Indiana University Bloomington). Those newly elected and reelected community member will serve on the CRA Board from July 1, 2024 through June 30, 2027.

In addition, it was shared that four elected Board members' terms of service will end June 30, 2024: Stephanie Forrest (Arizona State University), Diana Franklin (University of Chicago), Chris Ramming (VMWare by Broadcom), and Jing Xiao (Worcester Polytechnic Institute). Board members thanked them for their contributions during their time with the Board.

In their parting notes, retiring Board member Forrest underscored to the Board that the computing community is interested in deeper policy conversations, and Ramming encouraged the group not to forget the strategic plan to make CRA a leader in socially responsible computing.

We Want Your Input!

Do you have suggestions for agenda topics for our next Board Meeting? We want to hear them! Please share your thoughts via the [Google Form here](#).

NSF Names Greg Hager Assistant Director for the Computing and Information Science and Engineering (CISE) Directorate

By Matt Hazenbush, Director of Communications

Following a nationwide search, the National Science Foundation (NSF) **announced yesterday** that it has selected long-time CRA contributor **Dr. Greg Hager** as the next Assistant Director for the Computer and Information Science and Engineering (CISE) Directorate.

Hager has been a member of the faculty at Johns Hopkins University for more than 25 years, most recently serving as the Mandell Bellmore Professor of Computer Science and the Founding Director of the Johns Hopkins Malone Center for Engineering in Healthcare.



A highly-respected member of the computing research community, Hager has made significant contributions not only to his research areas of artificial intelligence and machine learning, but also as a leader in the areas of policy, visioning, and how computing research can impact the wider society.

Greg Hager *(continued)*

"NSF has made an excellent selection in Greg to lead the CISE Directorate," said Nancy Amato, Chair of the CRA Board of Directors. "His foundational research contributions in vision-based robotics and its applications for healthcare and manufacturing, combined with his range of experience spanning academia and industry and his commitment to maintaining our country's competitiveness in computing research and education, make him the ideal person to fill this important position."

Service to CRA

Hager has been a long-time contributor to CRA and its subcommittees, including serving on the CRA Board of Directors from 2014-15 and 2016-2018.

He was a Council Member of the [Computing Community Consortium \(CCC\)](#) from 2010-2017, which included time serving as the Chair from 2014-2016 and the Vice Chair from 2013-2014. He organized and participated in numerous CCC visioning activities, and has been a frequent author of CCC whitepapers and responses to requests for information (RFIs).

Hager has also been a significant contributor to the [CRA Government Affairs Committee](#), including speaking at [last fall's Leadership in Science Policy Institute \(LiSPI\)](#), and has recently been involved in the [CRA-Industry](#) working group on dual appointments.

"Greg's long list of contributions to CRA over the years is a testament to his commitment to the community," said Tracy Camp, CRA Executive Director and CEO. "Greg is deeply acquainted with CRA and our impact in the computing research community, and I look forward to continuing to partner with Greg in his new role as CISE AD."

The Position

In his new role, Hager will lead the CISE Directorate, which "aims to help the U.S. uphold a position of world leadership in computing, communications, and information science and engineering."

One of eight NSF directorates, the CISE directorate includes the Division of Computing and Communication Foundations (CCF), the Division of Computer and Network Systems (CNS), and the Division of Information and Intelligent Systems (IIS), as well as investments in advanced cyberinfrastructure through the Office of Advanced Cyberinfrastructure (OAC).

The position has been held with distinction by **Dr. Margaret Martonosi** since February 2020. A former CRA Board Member and CRA-WP Co-chair, Martonosi is a member of the National Academy of Engineering and the American Academy of Arts and Sciences, as well as a Fellow of the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE). Since December, **Dr. Dilma Da Silva** has been serving as the acting Assistant Director.

The search committee was chaired by **Dr. Jim Kurose**, Distinguished University Professor at the University of Massachusetts Amherst. Also a former CRA Board Member, Dr. Kurose held the Assistant Director position for CISE from January 2015 to September 2019.

Hager will assume his new position at NSF beginning June 3, 2024. CRA wishes him all the best as he transitions into this important position within the community, and we look forward to working closely with him and his staff to advance computing research.

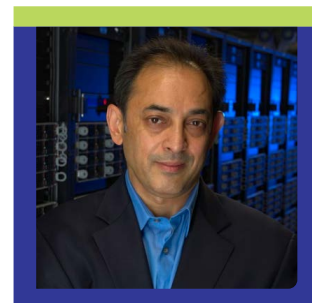
Manish Parashar of NSF Wins the 2024 CRA Distinguished Service Award



By Matt Hazenbush, Director of Communications

The Computing Research Association (CRA) has selected **Dr. Manish Parashar** as the recipient of the 2024 CRA Distinguished Service Award in recognition of his multi-faceted and highly impactful service to the computing research community.

Parashar is the Director of the Scientific Computing and Imaging (SCI) Institute, Chair in Computational Science and Engineering, and Presidential Professor in the School of Computing at the University of Utah. He recently completed an Intergovernmental Personnel Act (IPA) assignment as the Office Director of the National Science Foundation (NSF) Office of Advanced Cyberinfrastructure.



The CRA Distinguished Service Award, now in its 36th year, recognizes service in the areas of government affairs, professional societies, publications or conferences, and leadership that has a major impact on computing research.

"Manish has brought extraordinary advances to computing research, both through his work in academia and in his highly impactful service to NSF" said Tracy Camp, CRA Executive Director and CEO. "His long list of career achievements exemplifies what the CRA Distinguished Service Award is all about, and I'm thrilled that we can present him with this honor."

One of the world's top scientific and technical leaders in computational and data-enabled science and engineering, Parashar's accomplishments, particularly in the field of cyberinfrastructure, have brought about global benefits to computing research and to society as a whole.

"I am extremely honored to receive this recognition from the Computing Research Association," said Parashar. "It's humbling to be singled out by CRA for this award, which, over the years, has recognized the contributions of so many leaders in our community. I deeply appreciate this recognition."

A Leader Across Domains

The number and variety of Parashar's contributions to the computing research community are a testament to his unique blend of technical knowledge, leadership, and ability to find consensus in service of getting big things done.

Parashar received his PhD in computer engineering from Syracuse University and was a postdoctoral researcher in computer sciences at the University of Texas at Austin before joining the faculty at Rutgers University, where he ultimately became a Distinguished Professor in 2015. He joined the faculty of the University of Utah as Presidential Professor of Computer Science in 2021, also becoming the Director of Scientific Computing & Imaging (SCI) Institute and Chair in Computational Science and Engineering.

As a researcher, Parashar has played a vital role in establishing autonomic computing as a discipline within computer science. His work has also made significant contributions to formalizing the concept of translational computer science—the application of theoretical knowledge and research findings from computer science to practical solutions.

"Over the years, I have been privileged to have had the opportunity to actively engage with an amazing group of colleagues and collaborations, at the National Science Foundation, the Office of Science and Technology Policy at the White House, and most recently at the University of Utah. I share this recognition with each one of these individuals," said Parashar. "As we embrace the disruptive power of AI and other technologies, I look forward to continuing my journey towards the democratization of cyberinfrastructure and science."

Parashar has served the community in a variety of leadership roles through his involvement with the Association of Computing Machinery (ACM) and the IEEE Computer Society, serving in numerous leadership positions in technical committees and task forces, editorial boards, and conferences and workshops, and championing diversity and support for early career researchers. He is the

Manish Parashar (*continued*)

Founding Chair of the Technical Consortium on High Performance Computing (TCHPC), Editor-in-Chief of the IEEE Transactions on Parallel and Distributed Systems (TPDS), and Chair of the IEEE Computer Society Committee on Open Science and Reproducibility.

As a public servant, Parashar led NSF's Office of Advanced Cyberinfrastructure (OAC) from 2018 to 2023 as a rotator from the research community, during which time he led a number of significant initiatives. He spearheaded OAC's set of strategic blueprints that translated a 2016 National Academies study on NSF's role in the future of advanced cyberinfrastructure into real-world action. At the onset of the COVID-19 pandemic, Parashar led NSF's rapid response to stand up the COVID-19 High-Performance Computing (HPC) Consortium, which within weeks was offering access to shared computing resources to scientists to advance our understanding of the SARS-CoV2 virus.

Based on the success of the COVID-19 HPC Consortium, Dr. Parashar led US inter-agency discussions to advance the concept of a National Strategic Computing Reserve (NSCR)—a set of cyberinfrastructure resources that can be made available in times of national or global need, which is now in a one-year pilot. He also served as co-chair of the National Artificial Intelligence Research Resource (NAIRR) Task Force, which sought to develop a plan for a national AI research resource to democratize access to the cyberinfrastructure needed for AI research. In his last six months with NSF, Parashar worked tirelessly to make the NAIRR a reality, taking part in many congressional and executive-branch briefings.

Congratulations, Dr. Parashar!

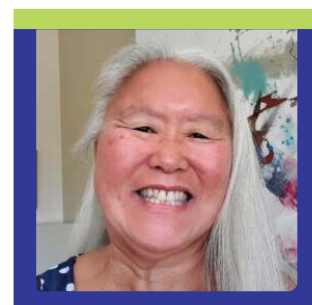
Please join CRA in congratulating Dr. Parashar on winning the 2024 CRA Distinguished Service Award!

Mary Ann Leung Wins the 2024 CRA A. Nico Habermann Award

By Matt Hazenbush, Director of Communications

The Computing Research Association (CRA) has selected **Dr. Mary Ann Leung**, Founder and President of the [Sustainable Horizons Institute](#), as the recipient of the 2024 CRA A. Nico Habermann Award, in recognition of her work developing and leading programs to increase the numbers and successes of computing researchers from groups minoritized in computing.

The award, now in its 30th year, honors the late A. Nico Habermann, who headed the National Science Foundation's Computer and Information Science and Engineering Directorate and was deeply committed to increasing the participation of people from groups that have been minoritized in tech.



"Mary Ann's extraordinary vision, leadership, and service to broadening participation in computing has touched the lives of so many people over the course of her career," said Tracy Camp, CRA Executive Director and CEO. "As her nomination letters attest, her impact in building educational and career pathways for groups minoritized in tech is tremendous. It's our privilege to include her among the distinguished group of past recipients of the CRA A. Nico Habermann Award."

Mary Ann Leung (*continued*)

Well known in the community for her impressive track record for impactful programmatic work, she is also a highly sought-after speaker on diversity, equity and inclusion, and has served on many conference, review, and advisory committees, including the DOE Advanced Scientific Computing Research Advisory Committee (ASCAC), one of the most important federal advisory committees for the US computing sciences community.

"I am truly honored to be the recipient of the CRA A. Nico Habermann Award," said Leung. "I do this work because of my passion for helping others, never expecting to get this kind of recognition."

A Career of Impact

While earning her PhD in theoretical and computational physical chemistry from the University of Washington, in 2001 Leung became a recipient of the US Department of Energy Computational Science Graduate Fellowship (CSGF). She would later go on to serve as a program manager for the CSGF, which under her leadership saw major successes in increasing the number of members of underrepresented communities applying to the program.

Her experience as a previous fellow brought a deep understanding of the perspectives and struggles of students from diverse backgrounds, which would become a theme of her career.

"Working with so many gifted people from marginalized communities over the years has been a true gift to me," said Leung. "When I came up with the idea for Sustainable Horizons Institute, I never imagined we would have the opportunity to open doors and collaborate with such gifted emerging scientists, technologists, and allies."

In 2014, Leung founded the Sustainable Horizons Institute, a non-profit corporation that provides a platform and framework for her to collaborate with others on a variety of impactful broadening participation efforts. Soon thereafter, Leung and her organization began a partnership with the Lawrence Berkeley National Laboratory on [Sustainable Research Pathways](#) (SRP), an innovative program that creates opportunities for a diverse group of university faculty and students to engage with research staff at the Berkeley Lab on science projects during a summer research experience. Under her guidance, the program has blossomed into one of the Lab's principal vehicles for recruitment, and many program alumni have gone on to pursue graduate degrees, be hired full-time at the Berkeley Lab and other noteworthy institutions, and win prestigious national awards.

Leung has also led the organization and operation of the Broader Engagement (BE) Program at several recent SIAM conferences, which have expanded with each iteration since she originated the program in 2015. Based on the success of these programs, the BE Program was added to the 2022 SIAM Conference on Mathematics of Data Science. Anecdotes and data from participants demonstrate how the program helps participants make the most of the conferences, and how its post-conference mentorship activities expose them to professional opportunities and collaborations.

In 2021, the DOE Exascale Computing Project (ECP) tapped Leung to join the ECP Task Force on Broadening Participation, through which she helped to establish the ECP Broadening Participation Initiative, which has the goal of expanding the pipeline and workforce for DOE high-performance computing. In 2023, the program expanded through a partnership with ECP and seven labs from the Computational Research Leadership Council (CRLC), and in summer 2023 the program facilitated nearly 200 faculty and student collaborations at 10 DOE national labs.

Congratulations, Dr. Leung!

Please join CRA in congratulating Dr. Leung on winning the 2024 CRA A. Nico Habermann Award!

Carrie Demmans Epp, Raja Kushalnagar and Mubarak Shah Receive the 2024 CRA-E Undergraduate Research Faculty Mentoring Award



CRA-E

Computing Research Association
Education

By Kayley McDonald, Program Assistant, CRA-E

The **Computing Research Association's Education Committee** (CRA-E) is proud to announce the three recipients of the 2024 **Undergraduate Research Faculty Mentoring Award**. The winners are **Carrie Demmans Epp** from the University of Alberta, Canada, **Raja Kushalnagar** from Gallaudet University, and **Mubarak Shah** from the University of Central Florida.

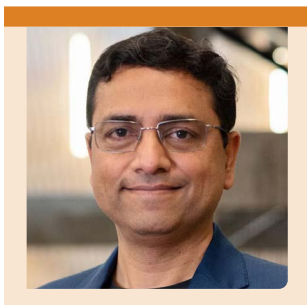
These outstanding individuals are being recognized for providing exceptional mentorship, undergraduate research experiences, and, in parallel, guidance on admission and matriculation of their students to research-focused graduate programs in computing.



Carrie Demmans Epp

Dr. Carrie Demmans Epp is an Assistant Professor of Computing Science at the University of Alberta, Canada. Her research interests include the use of technology for supporting learning and assessment. Dr. Demmans Epp has mentored 69 undergraduate students in the past 10 years. All of the undergraduate students she has mentored have moved into research roles or obtained industry positions where they use the development and analytic skills they learned while working with Demmans Epp: 6 are working as researchers (e.g., modelling user interactions with software, co-designing and evaluating technologies with Indigenous communities), 7 have completed research-based MSc degrees, another 11 have started an MSc, 2 are now pursuing PhDs in human-computer interaction (HCI), and 4 are applying to graduate programs in CS and HCI.

Dr. Demmans Epp's mentees received prestigious awards to pursue their studies and research. Of Demmans Epp's undergraduate mentees, 6 have been awarded large national scholarships (4 NSERC CGS-M, 1 NSERC PGS-D, 1 Facebook Fellowship, 1 Apple AI/ML Scholar, and 1 Google DeepMind Graduate Scholarship) to fund their graduate studies. Two of her mentees have also received large regional scholarships. Another 7 have been awarded the Canadian equivalent of the CRA's CREU (i.e., NSERC USRA). Undergraduate students working with Demmans Epp have co-authored 29 publications, many of which have received prestigious awards.

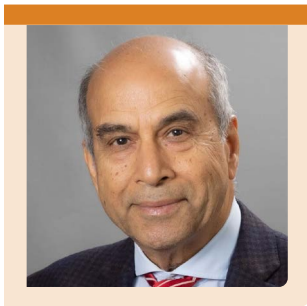


Raja Kushalnagar

Dr. Raja Kushalnagar is a Deaf Professor at Gallaudet University. He directs both the undergraduate Information Technology program, and the graduate master's Accessible Human-Centered Computing program. Gallaudet is a private, federally chartered university that was founded in 1864. It is a bilingual, diverse, multicultural institution of higher education that ensures the intellectual and professional advancement of deaf and hard of hearing individuals through American Sign Language (ASL) and English.

Dr. Kushalnagar has mentored 130 deaf and hard of hearing (DHH) students over 13 years, from 2010-2023. Specifically, of those 130 undergraduate mentees, 85 have identified as DHH, and 45 have identified as hearing. Additionally, about 40 mentees have identified as black, Hispanic, or Asian. He has also mentored 10 deaf and hard of hearing masters' and doctoral students, through service on their dissertation committees. He has collaboratively published 63 refereed papers with his mentees, and some have received best paper awards, or honorary mentions. He provides advice and guidance on applying to graduate school. Three of his mentees have received GRFP awards, and one received a CSGrad4US award. A total of 9 mentees have gone on to pursue PhD degrees.

CRA-E Undergraduate Research Faculty Mentoring Award (continued)



Mubarak Shah

Dr. Mubarak Shah, the UCF Trustee Chair Professor, is the founding director of Center for Research in Computer Visions at University of Central Florida (UCF). Dr. Shah is a fellow of ACM, IEEE, AAAS, NAI, IAPR, AAIA and SPIE. He has published extensively on topics related to human activity and action recognition, visual tracking, geo registration, visual crowd analysis, object detection and categorization, shape from shading, etc. He has served as ACM and IEEE Distinguished Visitor Program speaker. He is a recipient of 2022 PAMI Mark Everingham Prize for pioneering human action recognition datasets; 2019 ACM SIGMM Technical Achievement award; 2020 ACM SIGMM Test of Time Honorable Mention Award for his paper "Visual attention detection in video sequences using spatiotemporal cues"; 2020 International

Conference on Pattern Recognition (ICPR) Best Scientific Paper Award; an honorable mention for the ICCV 2005 Where Am I? Challenge Problem; 2013 NGA Best Research Poster Presentation; 2nd place in Grand Challenge at the ACM Multimedia 2013 conference; and runner up for the best paper award in ACM Multimedia Conference in 2005 and 2010. At UCF he has received Pegasus Professor Award; University Distinguished Research Award; Faculty Excellence in Mentoring Doctoral Students; Scholarship of Teaching and Learning award; Teaching Incentive Program award; Research Incentive Award.

Dr. Shah has been a cornerstone in the development and success of the NSF REU Site on Computer Vision, which is the longest running REU program in the country. His mentorship has been instrumental in providing undergraduate students with immersive research experiences.

Dr. Shah has consistently provided students with high-quality, high-impact research experiences. He has mentored over 100 undergraduate research students over the past ten years, with at least 34 of these undergraduate students who have gone to graduate school. Dr. Shah's passion for undergraduate research mentoring extends beyond his own research program by empowering other faculty to become better undergraduate research mentors. His undergraduate students published in top conference papers and received various research awards.

Emma McDonald Selected as CRA-E Graduate Fellow



By Barrington Davis, Program Associate, CRA-E



CRA's **Education Committee** (CRA-E) has recently selected its 2024 CRA-E Graduate Fellow – Emma McDonald, from the University of Alberta in Edmonton, Alberta, Canada.

Emma (she/her) is a PhD student in Computing Science at the University of Alberta supervised by Carrie Demmans Epp. She earned her master's degree from the University of Alberta in 2019, working on a tool to help students learn introductory Python programming.

As part of the EdTeKLA group that does research at the intersection of education and technology, Emma investigates how aspects like sense of belonging, mental health, and identity impact post-secondary students' experiences and persistence in their CS degree programs. The goal of her work is to increase students' success in CS by addressing both pedagogical and social factors.

Emma McDonald (*continued*)

Emma's interest in CS education began in her undergraduate degree when she taught elementary school students to make Arduino-powered cat ears. Since then, she has been a sessional instructor, a teaching assistant, a MOOC developer, and a junior researcher supervisor. She also serves as the local coordinator at the University of Alberta for the CRA's UR2PhD program.

The CRA-E **Graduate Fellows Program** was established in 2015 to give graduate students the opportunity to contribute to **CRA-E projects** and promote computer science research and undergraduate education at the national level.

2024 CRA Board of Directors Election Results



By Matt Hazenbush, Director of Communications

CRA members have elected four new individuals to its Board of Directors: **David Bader** (New Jersey Institute of Technology), **Bruce Hendrickson** (Lawrence Livermore National Lab), **Fatma Ozcan** (Google), and **Manuel Pérez-Quñones** (University of North Carolina at Charlotte).

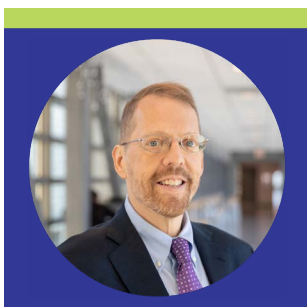
In addition, five current Board members won reelection: **James Allan** (University of Massachusetts Amherst), **Ran Libeskind-Hadas** (Claremont McKenna College), **Rachel Pottinger** (University of British Columbia), **Eve Schooler** (Intel, retired and University of Oxford), and **Katie Siek** (Indiana University Bloomington).

CRA would like to thank all of the candidates who ran for a seat on the Board of Directors this election cycle. Those named above will serve from July 1, 2024 through June 30, 2027.

Four Board members' terms of service will end June 30, 2024: Stephanie Forrest (Arizona State University), Diana Franklin (University of Chicago), Chris Ramming (VMWare by Broadcom), and Jing Xiao (Worcester Polytechnic Institute). CRA thanks them for their contributions during their time with the Board.

New Board Members

CRA is thrilled to welcome the following four new members to its Board of Directors.



David Bader

David Bader is a Distinguished Professor and a founder of the Department of Data Science in the Ying Wu College of Computing at the New Jersey Institute of Technology, where he also serves as the Director of the Institute for Data Science.

Dr. Bader is a Fellow of the IEEE, ACM, AAAS, and SIAM, and a recipient of the IEEE Sidney Fernbach Award in 2021. He was inducted into the Innovation Hall of Fame at the University of Maryland's A. James Clark School of Engineering in 2022, the same institution from which he earned his Ph.D. in electrical engineering.

Through his service on the Board, Dr. Bader aims to strategically position CRA's activities with the AI revolution.

Election Results *(continued)*

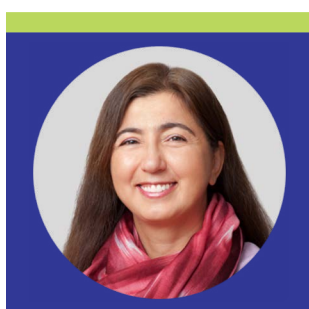


Bruce Hendrickson

Bruce Hendrickson is the Principal Associate Director for Computing at the Lawrence Livermore National Lab. In this role, he leads an organization of around 1,400 computing professionals with responsibility for the full breadth of the Laboratory's computational needs, including research, platforms, and services.

Dr. Hendrickson is a Fellow of SIAM and AAAS, and a winner of the SuperComputing Conference Test of Time Award and the George R. Cotter Award, among many honors received during his distinguished career. He earned his Ph.D. in computer science from Cornell University.

As a CRA Board member, Dr. Hendrickson hopes to build the organization's ties to US national laboratories.



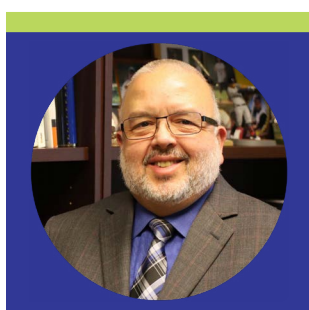
Fatma Ozcan

Fatma Ozcan is a Principal Software Engineer at Google, leading data analysis research in Systems Research@Google. Previously, she was a Distinguished Research Staff Member and a Senior Manager at IBM Almaden Research Center.

Among Dr. Ozcan's many honors are the VLDB Women in Database Research Award (2022), the IBM Corporate Award for PureXML Database Technology (2008) and the IBM Extraordinary Technical Accomplishment Award (2010 & 2009). She is an ACM Distinguished Member and the Vice Chair of ACM SIGMOD. She earned her Ph.D. in computer science from the University of Maryland, College Park.

Dr. Ozcan currently serves on the CRA-Industry Steering Committee, and will become its Co-Chair in July 2024.

She aims to continue to deepen CRA collaboration with industry through her reappointment to the Board.



Manuel Pérez-Quñones

Manuel Pérez-Quñones is a Professor in the Department of Software and Information Systems in the College of Computing and Informatics at the University of North Carolina at Charlotte.

Dr. Pérez-Quñones has received a number of honors and awards over his distinguished career, including being named an ACM Distinguished Member for Outstanding Educational Contributions to Computing (2019), the CRA Nico A. Haberman Award (2018), and the Richard A. Tapia Achievement Award for Scientific Scholarship, Civic Science and Diversifying Computing (2017), among others. He earned a D.Sc. in computer science from The George Washington University.

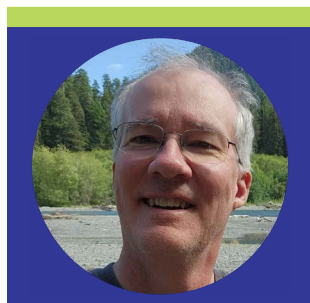
Dr. Pérez-Quñones has been involved with a number of CRA activities, recently including serving on the Organizing Committee for the CRA Leadership Academy (2023), the Search Committee for the CRA Executive Director (2022), and the BPCnet.org Steering Committee (2020-2023).

Through his service on the Board, Dr. Pérez-Quñones seeks to continue his collaboration with CRA on efforts to broaden participation in computing.

Election Results (*continued*)

Reelected Board Members

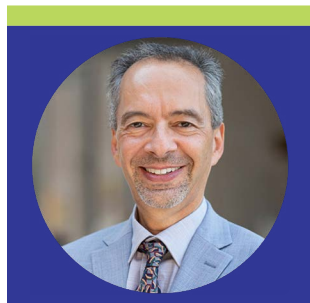
CRA is pleased to share news of the reelection of the following five members of the Board of Directors.



James Allan

James Allan is a Professor and Associate Dean of Research and Engagement at the Manning College of Information and Computer Sciences at the University of Massachusetts Amherst. Dr. Allan is a Fellow of the ACM and was elected to the ACM SIGIR Academy in 2021. He won the ACM SIGIR Test of Time Award in 2016, among other career honors. He earned his Ph.D. in computer science from Cornell University.

Dr. Allan has served as a CRA Board member since 2018, and as the Treasurer and member of the Executive Committee since 2019.



Ran Libeskind-Hadas

Ran Libeskind-Hadas is the Founding Chair of the Kravis Department of Integrated Sciences at Claremont McKenna College. He is the recipient of several honors, including the NCWIT EngageCSEdu Engagement Excellence Award and the Harvey T. Mudd Prize, among others. He earned his Ph.D. in computer science from the University of Illinois Urbana-Champaign, and was honored in 2012 with its CS Distinguished Alumni Educator Award.

Dr. Libeskind-Hadas has served as a CRA Board member since 2018, and as a member of the Executive Committee since 2019, serving as Secretary from 2019 to 2023 and as Vice Chair since 2023. He

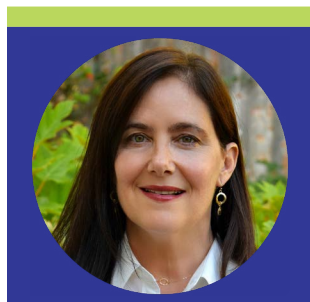
previously served as a member of the CCC and Co-Chair of CRA-E.



Rachel Pottinger

Rachel Pottinger is a Professor of Computer Science at the University of British Columbia. She is a recipient of the Denice Denton Emerging Leader Award from the Anita Borg Institute and is a multi-time winner of the UBC Computer Science Department Faculty Teaching Award. She earned her Ph.D. in computer science from the University of Washington.

Dr. Pottinger has served as a CRA Board member since 2018, and is a Co-Chair of the CRA Committee on Organizing the 2024 CRA Conference at Snowbird.

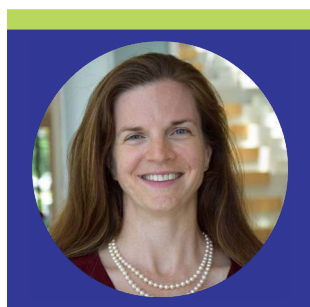


Eve Schooler

Eve Schooler is a RAEng Visiting Professor of Sustainable Computing at University of Oxford. She previously worked for nearly two decades at Intel, where she was a Principal Engineer and Director. She is an IEEE Fellow and co-recipient of the IEEE Internet Award (2020). She earned her Ph.D. in computer science from the California Institute of Technology.

Dr. Schooler has served as a CRA Board member since 2021, and has been a CRA-Industry Council member since 2023.

Election Results (*continued*)



Katie Siek

Katie Siek is a Professor of Informatics at Indiana University Bloomington. She is an ACM Distinguished Member and recipient of several prestigious honors, including the Indiana University Trustees Teaching Award, NCWIT Undergraduate Research Mentoring Award, and the Borg Early Career Award, among others. She earned her Ph.D. in computer science from Indiana University.

Dr. Siek has served as a CRA Board member since 2021, and as Secretary and a member of the Executive Committee since 2023. She also serves on the CCC Council, is Vice Chair of the CRA Committee on Surveys, and is Chair of the CRA Working Group on Misconduct Issues.

Stay Up to Date on CRA Board Activities

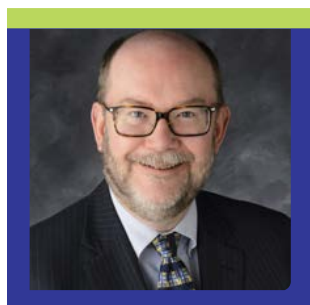
The CRA Board of Directors will convene next from July 22-23 in Snowbird, Utah. For updates on the CRA Board, including agendas [programmatic committee updates](#), as well as Board meeting summaries, follow the [CRA Bulletin](#) and [Computing Research News](#).

Policy Spotlight: Dan Reed, National Science Board



By CRA Government Affairs

As part of CRA's mission to help the computing research community become more aware and engaged in the policymaking that affects our field, Computing Research News' new Q&A series, **Policy Spotlight: Conversations with Computing Researchers**, will highlight the work that community members are doing in governmental roles or who have taken part in CRA Government Affairs activities. This new series will allow you to hear directly from policy-minded members of the community, in their own words, to highlight work that the community should know about and raise awareness of the types of opportunities that are available to those interested in serving.



A natural choice for the first person to feature in this new effort is **Dan Reed**, who has been [a member of the National Science Board since 2018](#), served as the Chair since 2022, and whose term will be coming to a close at the end of 2024.

Dr. Reed's leadership of the NSB coincided with a momentous time period at NSF. Several major issues arose, such as concerns around [research security](#) with the nation's research enterprise; the explosion of interest in Congress and the Federal Government with the [promises and drawbacks with artificial intelligence](#); and the passage of the Chips & Science Act, of which [Dan was a tireless advocate for passage](#). Outside the Beltway, Dr. Reed is the Presidential Professor of Computational Science and

Professor of Computer Science and Electrical & Computer Engineering at the University of Utah, where he previously served as Provost. Dr. Reed also served as the Chair of the CRA Board of Directors from 2004 to 2008, and has been engaged with CRA in a number of other impactful ways over the years.

Policy Spotlight *(continued)*

What do you do in your current position? How would you explain your current role to someone in the community?

The National Science Foundation Act of 1950 charged the National Science Board (NSB) with two roles: to be the governing board of the NSF and to serve as an advisor to Congress and the President on policy matters related to STEM research and STEM education. As Chair of the NSB, I work collaboratively with the NSF Director and the Board to shape NSF policies and priorities; engage with the Congress and the White House on research funding and policies, including workforce development and global competitiveness, research infrastructure; interact with the national science and engineering community; and lead the quarterly NSB meetings.

What has been your biggest accomplishment as chairman of the National Science Board?

The Board works as a team and in collaboration with NSF; I will highlight just a few recent accomplishments. These include the launch of the new **Technology, Innovation, and Partnerships (TIP) Directorate**, the first in over 30 years, and the announcement of the associated **Regional Innovation Engines (RIEs)**; our work emphasizing the importance of expanding and diversifying the STEM workforce (the “Missing Millions”); the passage of the **CHIPS and Science Act**, which authorized higher funding levels for NSF; the ongoing work of the **Merit Review Commission**, which is examining the evaluation criteria for NSF awards, the first such review in over a decade; and the beginning of a process to prioritize investments in **large-scale research infrastructure**.

How can the computing community participate in your work?

First, the NSB welcomes input and ideas on all topics related to research, workforce, and infrastructure; reach out to me or individual members with questions, comments or concerns. NSB meetings (both the plenary meeting and many committee meetings) are public, and the agendas are published in advance on the **NSB website**. Second, engage with CISE leadership so it can communicate opportunities and issues to which the NSB might need to respond.

What issues that are before the NSB do you feel the computing community most needs to be aware of right now?

Because computing now underlies essentially all of science and engineering, the computing community really must be actively engaged. More concretely, there are important technical and policy issues surrounding AI and the **NAIRR pilot**, cybersecurity, privacy, and misinformation; CHIPS and Science Act investments; computational modeling and data analytics; computing talent development and support; and research funding.

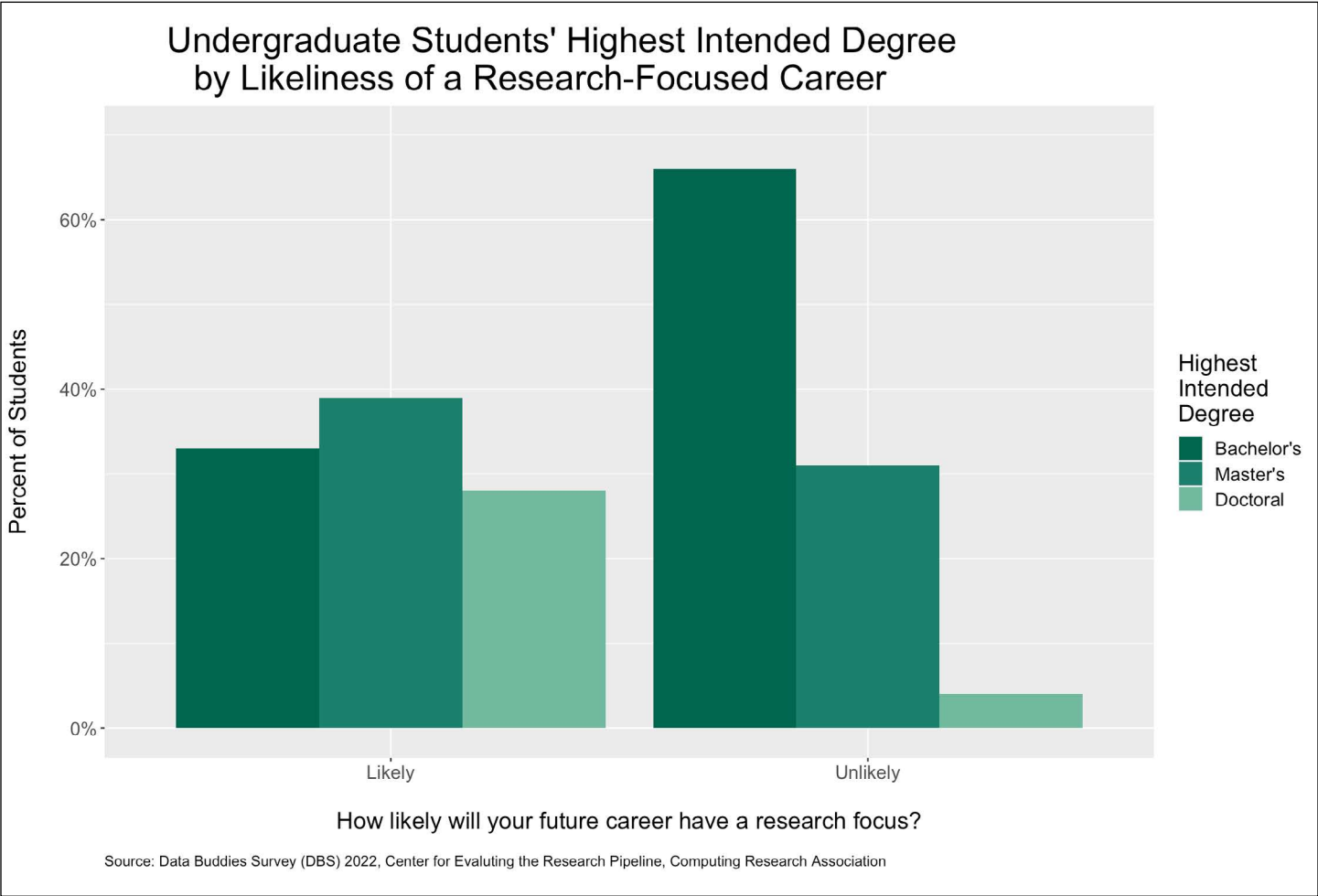
What are you most looking forward to, either personally or professionally, for the remainder of 2024?

The biennial, Congressionally mandated, Science and Engineering Indicators report is being rolled out in March (see <https://ncses.nsf.gov/indicators>); it is the gold standard for the state of the US position in the global STEM enterprise. Beyond that, I am looking forward to the completion of the Merit Review Commission and its final report, expected in December; the coming re-competition of the Antarctic support contract; continued conversations about critical research infrastructure needs and prioritization; creating a broader and more inclusive STEM workforce; and expanding federal investment in research.

As Vannevar Bush noted in his seminal essay, *The Endless Frontier*, “.. without scientific progress no amount of achievement in other directions can insure our health, prosperity, and security as a nation in the modern world.”

Undergraduates’ Likely Interest in a Research-Related Career is Connected to Their Highest Intended Degree

By Evelyn Yarzebinski, Manager, CERP



Students who are enrolled in Bachelor’s degree granting programs are faced with the decision of whether to continue on to graduate school after they have earned their Bachelor’s degree. There are many facets to this decision, such as whether their future career will include a focus on research, as graduate-level studies can provide more specialized research training. To what extent does the prospect of a research-focused career impact undergraduates’ degree-earning plans? CERP summarized the results of the Fall 2022 Data Buddies Survey (DBS) for Undergraduates to understand this relationship.

A total of 4,658 undergraduates responded to the question about their highest intended degree and indicated likeliness or unlikeliness of having a research-focused career in the future. CERP generated a summary of undergraduates’ responses for these two survey questions, displayed in the graphic here. Overall, 66% of undergraduates who indicated they were unlikely to have research-focused career in the future also indicated they planned to earn a Bachelor’s degree as their highest degree. Surprisingly, a small percentage of undergraduates indicated plans to earn a Doctoral degree despite also reporting unlikeliness of having a research-focused career (4%). Among undergraduates indicating likeliness of a research-focused career in the future, the reported highest intended degrees saw a more balanced response across the three degree types, ranging from 28%-39%.



Interest in a Research-Related Career (*continued*)

A chi-square test of independence was conducted to analyze the relationship between likeliness of a research-focused career and highest degree plans. There was a significant relationship between these variables, $\chi^2 (2, N = 4658) = 757, p < 0.001$; there is a connection between undergraduates' likeliness of having a research-focused career and the highest degree they intend to earn. Cramer's V indicated a medium effect size ($V = 0.40$).

Future work may include further analyses of other factors that motivate decisions regarding highest intended degree or likeliness of a research-focused future career.

Notes:

Data included are:

- Undergraduate responses to the question "How likely will your future career have a research focus?" were collected on the 5 point scale of (1) Extremely unlikely to (5) Extremely likely. Responses were collapsed into two categories for this analysis: "likely" if a respondent selected "Somewhat likely" or "Extremely likely" and 2) "unlikely" if a respondent selected "Somewhat unlikely" or "Extremely unlikely." Neutral responses of "Neither unlikely nor likely" were excluded for the purposes of this analysis.
- Undergraduate responses to the question "What is the highest degree you plan to attain?" Responses were filtered to focus this analysis on the choice options of "Bachelor's degree", "Master's degree" and "Doctoral degree".

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 analysis of data from the Data Buddies Project is currently supported through National Science Foundation (NSF) awards CNS-1840724, CNS-2036717, DUE-1821136, sub-awards and contracts, and direct CRA contributions. Previous NSF awards that supported DBS include CNS-1246649 and DUE-1431112. 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.

Resources to Help Encourage Undergraduates to Consider Increasing Their Highest Intended Degree:

Addressing the National Need for Increasing the Domestic PhD Yield in Computer Science

Best Practices for Expanding Pathways to Undergraduate CS Research

Additional reports: <https://cra.org/crae/reports/>

New BPCnet.org Resource on BPC Supplemental Funding

By Andres Purpuro, Program Assistant, CERP

We're excited to announce the launch of the [BPC Supplemental Funding Page](#) on BPCnet.org. This resource has been developed in response to the engaging discussions held at our February 2024 BPC Community Forum, specifically addressing NSF's latest [Dear Colleague Letter](#) for BPC Supplements.

In collaboration with the [Center for Inclusive Computing at Northeastern University](#), the BPC Supplemental Funding Page is designed to offer comprehensive guidance to individuals navigating the submission process for BPC supplemental funding requests. As with all resources on BPCnet.org, the page is continuously updated with new information as we receive feedback from the community including answers to questions received by various stakeholders.



Who can benefit?

This page specifically caters to individuals involved in NSF awards with approved Project BPC Plans, encompassing:

- Medium and Large awards in the Computer and Information Science and Engineering (CISE): Core Programs within its Computer and Network Systems (CNS), Computing and Communication Foundations (CCF), and Information and Intelligent Systems (IIS) divisions.
- Medium and Frontiers awards in Secure and Trustworthy Cyberspace (SaTC).
- Medium and Frontier awards in Cyber-Physical Systems (CPS).

What to expect

Discover step-by-step assistance, tips, and insights that will streamline your supplemental funding request submission process. The page also includes a template awardees can use to prepare the documents they will need to submit the supplemental funding request on research.gov.

How to access

Visit [BPCnet.org](#) now to explore the [BPC Supplemental Funding Page](#). You can also connect with a [BPC Consultant](#) if you need additional support in preparing your supplemental funding request. If you have any questions or feedback about any BPCnet.org resources, please contact the BPCnet team at bpcinfo@cra.org.

This material is based upon work supported by the National Science Foundation under grant numbers CNS-1940460 and CNS-2032231. 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.

UR2PhD Computing Research Engagement and Awareness Series In Full Swing, Next Workshop Held On April 8



CRA-E
Computing Research Association
Education

By Julia Sepúlveda Ávalos, Program Associate, CRA-E

In February, the **UR2PhD** team launched the Computing Engagement and Awareness Series, a virtual workshop series that aims to educate, inspire, and empower undergraduates.

The **first session** “So you’ve done some research, what’s next?” featured a moderated panel discussion with researchers from various backgrounds, including Celeste Bean (Sony PlayStation), Roman Caudillo (Intel / Semiconductor Research Group), Catherine Delcourt (Wellesley College), Sofia Kobayashi (Wellesley College), and Daniel Ji (University of California, San Diego). The panelists discussed their immersion into undergraduate research; how they found opportunities and discovered their interests. The panel reflected on why they decided to pursue this pathway, and what they’ve learned along the way. Despite their varied backgrounds and interests, the panelists shared their passion for computing research, and encouraged participants to consider their own aspirations as it relates to careers and graduate study.

The second session “**What does a career in computing research look like?**” featured an informational presentation, followed by a Q&A with guest speakers. The team was joined by Lexie Yang (Research Scientist in GeoAI Group at Oak Ridge National Laboratory), George Porter (Professor in the Systems and Networking Group in the Department of Computer Science and Engineering at the University of California, San Diego), and Dana Nachmanson (Senior Bioinformatics Scientist at TwinStrand Biosciences). This interactive and inspirational session served to highlight why many research professionals decide to pursue an advanced degree and how their degree has shaped their employment prospects, goals, and decisions.

The spring session of this series will continue through May, and we encourage all students who are interested in computing to consider registering for the **April** and **May** sessions. The third session, “How will my research change the world?” will be held on April 8 at 6pm Eastern Time. The UR2PhD team strongly encourages undergraduates who are interested in computing to attend. Participants will be able to learn more about computing research, the opportunities that exist in the field, and how they can get one step closer to reaching their career goals.

Beyond registering for each session, there are no formal requirements to participate in the program. ALL undergraduates, irrespective of experience level, are welcome to attend. To learn more about the program, please visit cra.org/ur2phd

Computing Research Engagement & Awareness Series

What does a career in computing research look like?



Opportunities to Engage with UR2PhD: Instructor Openings, Institutional Partnerships, and Student Course Applications



By Julia Sepúlveda Ávalos, Program Associate, CRA-E

Did you know that, according to [CRA Taulbee data](#), only 22.9% of computer science PhDs who graduated in the 2021-22 academic year identified as women? And the overall fraction of doctoral students in CS programs who were neither Non-resident Aliens, Asian, nor White was 5.3%.

CRA launched the UR2PhD program with the goal of increasing the number of women and gender-marginalized folks, especially those identifying as Black, Latinx, and/or Native, enrolling in CISE PhD programs. In order to affect change, the UR2PhD program created three virtual activities: an undergraduate research methods course, a graduate student mentor training course, and a series of workshops. Through these activities, the team hopes to:

- Increase the number of mentored research experiences undergraduates have access to
- Improve the quality of mentored research experiences for both the mentees and mentors
- Sustain student interest in research after their first research experience, and encourage them to consider graduate study

Whether you're an undergraduate student, graduate student, faculty member, or department chair, there are plenty of opportunities to get involved in this program.

For department leaders: if you're looking to scale the number of undergraduates participating in undergraduate research, we highly recommend considering [applying](#) to be an [institutional partner](#). By participating in UR2PhD, you can dramatically increase the number of researchers without increasing the training workload. You'll also be able to elevate the quality of mentorship provided by and to students. We'll be accepting applications until the start of the courses, but will give priority to institutions that apply by **March 15, 2024**.

For faculty members: are you interested in serving as a research mentor? If you've been considering creating research opportunities for undergraduates, but you don't have the time to provide the foundational training required to onboard a new researcher, the UR2PhD program can help enhance the research competence and confidence of your mentees. Consider encouraging your students to [apply](#) for our summer or fall undergraduate research methods course. Additionally, our team is also currently hiring instructors for the summer and fall terms of our courses. [Learn more](#) about the positions and [apply](#); positions will remain open until filled, with a preference for applications received by **March 31, 2024**.

For graduate students: is mentorship and service important to you? Are you looking for an opportunity to grow professionally, and develop your own style of mentoring? The UR2PhD program offers the [graduate student mentor training course](#) to mentors of participants in our undergraduate research methods course. We encourage you to speak with your faculty advisor about participating in the UR2PhD program.

For undergraduate students: are you curious about research, but not sure where to begin? Would you benefit from having peer and faculty support when embarking on your first research experience? The UR2PhD program was created to train and encourage students like yourself! We hope you'll positively consider [applying](#) for our undergraduate research methods course; the deadline for the summer term is **March 29, 2024**.

Computer and Information Science and Engineering Graduate Fellowships (CSGrad4US)



CRA-WP

Computing Research Association
Widening Participation

By Margaret Martonosi (Princeton University), Jill Denner (NSF), and Jeff Forbes (NSF)

In 2022, 100,699 students in the U.S. completed bachelor's degrees in computer science, computer engineering and information science at a public or not-for-profit institution. Eighty nine percent of these students were U.S. citizens or permanent residents according to the National Center for Education Statistics. Concurrently, within the same topic area, 1,935 doctoral degrees were completed in the US, yet only 34% of these recipients were US citizens or permanent residents. This trend is also evident in statistics indicating that 75% of Ph.D. applicants and 65% of new Ph.D. enrollees in the 2022-23 year were international students ([2022-Taulbee-Survey-Final.pdf \(cra.org\)](#)). These numbers raise important questions like: What paths are bachelor's degree recipients pursuing? What factors are contributing to the limited number of US and permanent resident applicants to doctoral programs, whether immediately following their undergraduate studies or later in their careers?

The report, [Growing and Diversifying the Domestic Graduate Pipeline \(nsf.gov\)](#), published by the U.S. National Science Foundation (NSF) in 2021, examined research and data, and highlighted the challenges and opportunities observed in these trends. A significant finding is consistent with the data above—despite the large number of undergraduate degrees attained, the number of doctoral students in fields supported by NSF's Computer and Information Science and Engineering (CISE) directorate has not increased. Some factors driving this pattern include the financial incentives from industry jobs and lack of awareness about doctoral pathways. Moreover, once graduates have entered the workforce, the path to a graduate degree becomes less straightforward. Many lose contact with faculty advisors who could encourage, guide, and write letters of recommendation for their application.

NSF is an independent federal agency dedicated to advancing the progress of science. A key part of its mission is to invest in efforts that build a diverse next-generation workforce encompassing scientists, engineers, technicians, and educators. In pursuit of this objective, NSF has funded research and education initiatives that have shown the importance of mentors, cohort models and fellowships for students pursuing and completing doctoral programs. However, while these strategies have led to students transitioning directly from undergraduate to graduate schools, there is a lack of programs designed to assist and incentivize students who work in industry to return to academics and pursue a doctoral degree in a CISE-supported field.

The CSGrad4US Fellowship Program

In 2020, the CISE directorate established the Computer and Information Science and Engineering Graduate (CSGrad4US) Fellowships program. The goal is to increase the number and diversity of domestic graduate students pursuing careers in computer and information science and engineering fields, by facilitating pathways for aspiring doctoral students to return to graduate education after spending time in the workforce. CSGrad4US offers three years of tuition and stipend support, similar to the highly successful NSF Graduate Research Fellowships program (GRFP), but with the added requirement that CSGrad4US applicants must be not currently enrolled in a degree granting program. The program is also unique in its inclusion of a year of mentoring before the fellowship begins, where fellowship recipients are advised on graduate applications and strategies for their success in doctoral schools. The program is part of CISE's efforts to build pathways to the computing workforce and broaden participation in computing [Broadening Participation in Computing - Directorate for Computer and Information Science and Engineering \(CISE\) | NSF - National Science Foundation](#) [Expanding the Pipeline: Roadmap of CISE's Efforts to Broaden Participation in Computing Through the Years - CRN \(cra.org\)](#).

Applications to the program are accepted each spring. To be eligible, applicants must be a U.S. citizen, national or permanent resident, intend to apply for full-time enrollment in a research-based doctoral degree program in a CISE field within two years, have graduated with a bachelor's degree before December 31 of the previous year, and demonstrate CISE core competency [CISE Graduate Fellowships - Directorate for Computer and Information Science and Engineering \(CISE\) | NSF - National Science Foundation](#). Applications include personal statements about their interests and background and are reviewed by a committee. Those who are selected are invited



CSGrad4US (*continued*)

to participate in the cohort-based mentoring program where mentors and coaches help the fellows identify graduate programs, find a research mentor, and apply to graduate programs. Once enrolled in a qualifying program, fellows can receive funding each year for three years at a rate that is equivalent to the GRFP rate.

Who are CSGrad4US Fellows?

Since 2021, 165 fellows have participated in the CSGrad4US mentoring program—153 completed it. There are currently 68 fellows enrolled in a Ph.D. program and 11 who were offered admission and have deferred. Of those who enrolled, 46% identify as women and 50% are from a group that is underrepresented in computing.

Perspectives of Fellows and Mentors

Fellows describe a number of reasons for applying to the CSGrad4US fellowship program. Many of these reasons had to do with the mentoring component. Some found that being away from an academic institution for a while meant they had lost touch with the people who could guide them on how to find and apply for a PhD. Others said they had been thinking about applying to graduate school and saw this fellowship as a way to kickstart the process. Some expressed the belief that getting a prestigious fellowship from NSF would make them more competitive in their applications. The fellows agreed that CSGrad4US provides a unique opportunity for those in the workforce to get the support and guidance they need to return to school. The specific benefits included help with figuring out which programs to apply to, identify who was in the field they were interested in, and how to put together a strong application.

Faculty members who served as coaches have also described the value of the program for the fellows and themselves. They talked about how the program helps to demystify graduate school and reduce disparities in who applies to graduate school. Some have worked in industry and see the benefits of having more industry professionals with advanced degrees and research skills. They viewed the CSGrad4US program as a way to help people move from thinking about returning to graduate school to actually doing it. The coaches talked about being inspired by the fellows and appreciating working within the infrastructure of the program to provide guidance on their education pathway. Overall, they described how much they enjoyed working with the fellows and how much they learned from being a coach.

Takeaways

There are several important takeaways from our experience to date. First, it is clear that new strategies are needed to recruit a diverse set of applicants, and in particular, large pools of possible applicants are in industry workplaces and not currently in school. Most outreach about fellowships and graduate school programs focuses on enrolled students and faculty members. However, reaching potential fellows outside of the university setting requires a different approach. Strategies include leveraging social media to reach professionals who are ready to think about going to graduate school in a CISE field. They also include working with industry to convey the value of allowing their employees to take time off to pursue a Ph.D. ([Addressing the National Need for Increasing the Domestic PhD Yield in Computer Science \(cra.org\)](https://cra.org/crn/publications/addressing-the-national-need-for-increasing-the-domestic-phd-yield-in-computer-science)). Faculty and department chairs can also play a role by encouraging people to apply to CSGrad4US, including their former students and prospective students who are working but have reached out to them about opportunities to join their research lab.

Fellows who enroll in a full time Ph.D. program after returning from the workforce may need additional support. Despite the valuable expertise gained in industry, they may lack familiarity with the latest instructional and assessment systems. Compared to traditional doctoral students, they are more likely to have family responsibilities to balance alongside their studies. Advisors play a critical role in supporting doctoral students to persist in computing fields. Similarly, fostering a sense of community among students through cohort programs and facilitating connections among peers with shared experiences and interests are beneficial practices.



CSGrad4US (*continued*)

In summary, the NSF CSGrad4US fellowship program aims to increase the number of domestic students who pursue a Ph.D. degree in a computing field by encouraging and guiding students employed by industry to return to academia. By providing financial and informational support, the program is filling a critical gap for those who are in the workforce and interested in returning to school. But we need your help to spread the word! Applications are due May 31, 2024. Please forward this article and encourage former students to apply to CSGrad4US. Find out which of the doctoral students in your department are CSGrad4US fellows and ask them about their experience returning from the workforce.

The CSGrad4US Fellowship Program is being managed by CRA. For resources, details about applying, and contact information please visit: [CSGrad4US - CRA](#)

Get to know some of the current CSGrad4US fellows in the following article.

Get To Know CSGrad4US: Highlighting Current Fellows



By Elora Daniels, Communications Associate

In 2023, the Computing Research Association (CRA) was awarded its largest grant to date (\$42.1 million, to be exact) to manage the NSF CSGrad4US Fellowship program. CSGrad4US aims to support individuals returning to school to pursue a PhD in computing after being away from the academic landscape, enabling them to engage in innovative and high-impact projects without the burden of financial constraints. Accepted applicants participate in a year-long preparation program, during which mentors and coaches help them identify which graduate programs are a fit, find a research mentor, and apply. Once enrolled in a qualifying graduate program, fellows receive three years of funding (stipend, tuition, etc.).

Applications for the CSGrad4US Fellowship are open until May 31, 2024.

This unique opportunity is open to anyone who has been out of school since January 2024. To help answer questions from the community and provide general insights into the program, the CSGrad4US team hosted an **informational webinar** to answer questions for those interested in applying this year.

If we haven't hooked you yet, read on! Each participant in the CSGrad4US Fellowship has a wonderfully unique story and inspiring reasons for wanting to return to school - we're highlighting a few of the incredible fellows below:



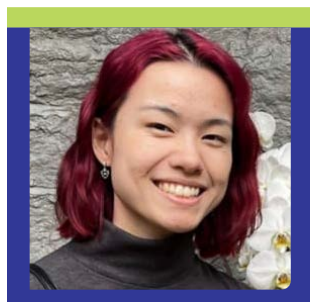
Tonya Davis, Purdue University

Computer Information Technology – Computer Science Education

Tonya earned a BS in Computer Science Engineering and a Master's in Business Administration from Washington University in St. Louis. She started her career in industry as a Marketing Representative for IBM after undergrad and as a Senior Product Manager for Texas Instruments after graduate school before segueing into education. She taught as an adjunct instructor at Wharton County Junior College

CSGrad4US Fellows *(continued)*

and The University of Houston Downtown before teaching secondary math and computer science. She is passionate about broadening participation in computer science and STEM and helping to eliminate barriers to access and engagement for students traditionally left out of tech careers. Her research interests are in computer science education teaching and learning. She is currently a mentor in the MENTORS in CS (Matching Experienced and Novice Teachers for Ongoing Rigorous Support in Computer Science) RPP with the Computer Science Teachers Association, supported by the National Science Foundation.



Yucen Lily Li, NYU

Computer Science – Machine Learning

Lily is a 2nd year CS PhD student at NYU advised by Prof Andrew Wilson. Lily is interested in machine learning generalization, and she has explored and improved the behavior of models in settings such as class imbalance and distribution shifts. She is also interested in probabilistic deep learning and uncertainty estimation, and she has interest in leveraging Bayesian methods to tackle foundational challenges in machine learning. Previously, Lily worked on the Bayesian Modeling team at Meta, where she created probabilistic models and developed and implemented various inference methods. She

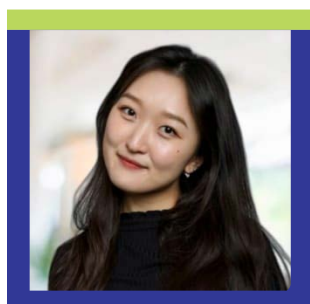
received her BS in CS from CMU, where she worked on projects related to machine translation and interest in open-source communities.



Ian Michael Terry, UC Santa Cruz

Computer Science and Engineering – Computational Ecology

I was born in Miami, FL, and studied computer science at Florida State University. When I was graduating, I had aspirations of continuing my education, but I also wanted to try working a job with my newfound degree. After 5 years of working as a software engineer, the possibility of a return to academia felt entirely out of reach, until I one day received an email from the NSF. Since then, CSGrad4US has helped me navigate the path back to academia; I am now a new PhD student pursuing interdisciplinary research in computer science! It's a new world for me, and I am very excited for what's to come.



Jina Yoon, University of Washington

Computer Science & Engineering – Human-Computer Interaction

Jina Yoon is a PhD student of Computer Science & Engineering at the University of Washington, advised by Professor Amy X. Zhang. As a social computing researcher, her work explores the tension between user agency and platform design in online community moderation, especially for youth and neurodivergent populations. She advocates for online safety approaches that empower teens and augment their social strengths. Her research also examines how social media platforms can both help and harm the neurodiversity movement, especially for intersectional identities. Before starting her

doctoral degree, she worked at Riot Games on the League of Legends Global Player Community team, as well as at Microsoft on device management and security. She earned her BAs in Computer Science and Modern Culture & Media from Brown University.

Learn more about our current [CSGrad4US Fellows](https://cra.org/csgrad4us/), the program, and the application process at <https://cra.org/csgrad4us/>

Want a glimpse into how CSGrad4US has changed the lives of our fellows? Hear directly from some of our fellows about what they've gained (so far) from the mentoring program: <https://www.youtube.com/watch?v=GsnFrpgJaZ0>

Research with Social Impact: Exploring the Intersection of Autism and Social Media



CRA-E

Computing Research Association
Education

By Yasra Chandio (CRA-E Fellow, University of Massachusetts Amherst) and Alejandro Velasco Dimate (CRA-E Fellow, College of William & Mary)

This Q&A highlight features Kirsten Chapman, a Finalist in the 2023 **CRA Outstanding Undergraduate Researchers** award program. Kirsten finished her undergraduate degree at Brigham Young University and is now pursuing a Ph.D. in Computer Science there.

What brought you to computing research?

My journey into computing research was spurred by the encouragement of my university, where engaging in research for class credit was highly encouraged. As a receptionist in the computer science office during my sophomore year, I often browsed the department's website and became familiar with various labs. The human-centric projects in the **Social Technology and Privacy Lab (STaPL)** captured my interest, leading me to choose STaPL for my research endeavors.

How did you find your first research project?

When I first joined the lab, I discussed with **Prof. Xinru Page** (lab PI) about where my interests aligned with her group's research efforts. Specifically, I was interested in working on a project serving a vulnerable or underrepresented population. Prof. Page recommended that I join the ongoing Autism and Social Media project.

What challenges did you encounter when you first started your research?

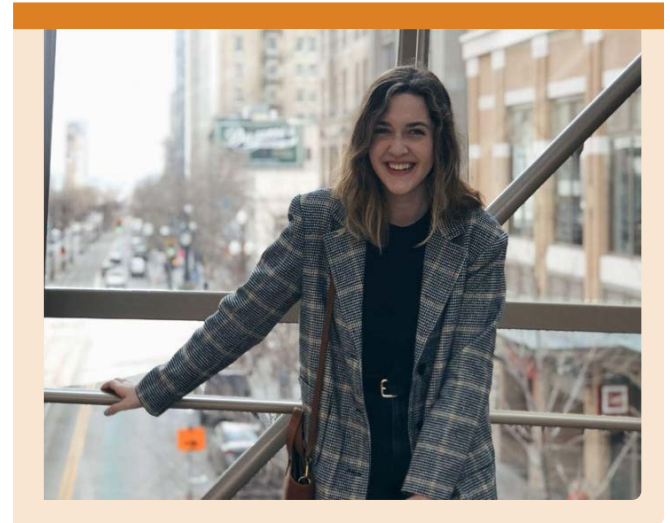
My initial intimidation about doing research was my most significant challenge when initiating my research journey. I overcame this by befriending both undergraduate and graduate students in the lab and learning from their experiences. Asking my advisor numerous questions about human-computer interaction and our specific research helped demystify the research process. Connecting with others and seeking guidance proved essential in navigating the challenges of the early research phase.

Can you tell us about your project?

In our research, we focused on addressing the negative impacts and enhancing the positive aspects of social media for Autistic adults. To do this, we developed new social media features and educational materials specifically designed for their needs. We conducted interactive sessions with Autistic users to test these features and understand their perceptions. Additionally, we carried out a long-term study at a local site, where we taught a course on social media safety for Autism spectrum individuals. The project resulted in validated educational materials, training programs, and prototype features, all aimed at effectively supporting Autistic adults in their social media use. We presented our findings to the **Massachusetts Department of Developmental Services** and demoed prototypes at the **International Society for Autism Research** conference.

What challenges did you face in your research, and how did you overcome them?

Navigating the research process was challenging, particularly in terms of accessing participants on the Autism spectrum and identifying suitable measures and scales for this population. Overcoming these hurdles required proactive steps, such as attending conferences



**Kirsten Chapman, B.S. in Computer Science,
Brigham Young University**

Research with Social Impact *(continued)*

and workshops, where I could engage with other researchers experienced in working with individuals with Autism. Networking and learning from their insights became pivotal in refining my research.

We noticed you still work with Prof. Page; how has your role changed in their lab?

My initial role in the lab was to assist with qualitative analysis. Over time, my role has evolved to graduate student lead of the **Autism and Social Media** project. This includes engaging in study design for a long-term study on social media safety, leading analysis, conducting user sessions with interactive prototypes, and supporting a team of 10-15 undergraduate students.

What were some of your favorite aspects of research, and how has it impacted your overall journey?

I enjoy the exploratory aspect of research. I find it particularly exciting to see themes emerging from the data. Initially not planning to pursue graduate school or a PhD, my involvement in research changed my trajectory. Within a few weeks of joining my lab, I decided to pursue a PhD and a career in academia, driven by my newfound passion for research.

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

If you're considering getting into research, do it! It's one of the best and most impactful decisions I made during my undergraduate career. Overcoming my initial intimidation by connecting with fellow students and asking questions made the research experience less daunting. Enjoy the exploratory aspect of research and attend conferences and workshops to network with other researchers in similar areas.

Visioning Workshop Report Released: Community Driven Approaches to Research in Technology & Society



By Haley Griffin, Program Associate, CCC

The Community Driven Approaches to Research in Technology & Society visioning workshop was held in the Spring of 2023, bringing together a diverse group of 53 civil society representatives, activists, non-profit leaders, and computing researchers together. The workshop was sponsored by CCC and the MacArthur Foundation.

The workshop organizers, Timnit Gebru (Distributed Artificial Intelligence Research Institute), Ufuk Topcu (University of Texas at Austin), and Suresh Venkatasubramanian (Brown University), along with support from Haley Griffin (CCC), Nasim Sonboli (Brown University), and Leah Rosenbloom (Brown University), have written a workshop report that synthesizes the amazing ideas discussed throughout the visioning workshop. This report is a result of the ideas, experiences, recommendations, and visions of the incredible group of workshop participants.



Visioning Workshop (*continued*)

The Community Driven Approaches to Research in Technology & Society visioning workshop report raises concerns voiced by workshop participants, identifies community-based research directions, provides models for effective collaborations with communities, and provides both broad recommendations and recommendations for specific audiences: funding agencies, academic institutions, and individual researchers.

Workshop participants provided clear advice on how researchers can have meaningful and respectful interactions with community partners. These include the following:

- Do not expect free labor
- Make sure there is value alignment between stakeholders
- Prioritize project leadership by community members
- Do not treat any group like a monolith
- Establish common language
- Establish transparency of project goals and expectations
- Have recourse for harm if community collaborators could face any
- Listen first
- Understand that you are an outsider
- Follow up with the community after your research is complete—give them access to your research
- Act respectfully and ethically (research how to conduct yourself)
- Ask for consent early and often
- Ensure confidentiality of those you work with

They also identified several research directions for community-based research:

- Mapping Projects. This could be in the form of players and ecosystems (i.e. government agencies and communities) and/or harm landscapes (i.e. identifying harms in a specific context and conducting research on the extent of the harms).
- Counter-Programming. For instance, building tools to “surveil the surveillers”, finding ways to protect community interests online, and providing effective measurements to aid advocacy work.
- Tools for Empowerment. It is very important for the community to have a structured design process that empowers people to dream of positive technology futures.

Throughout all workshop discussions, there were two recurring themes that everyone involved in funding and conducting community-based work should follow: community partners should be in leadership positions across the life cycle of the research project, and funds need to be allocated directly to community-based collaborators.

Read the full workshop report [here](#).

Visioning Workshop Report Released: Future of Pandemic Prevention and Response

By Haley Griffin, Program Associate, CCC

CCC held a visioning workshop on the Future of Pandemic Response and Prevention in September 2023 in Ann Arbor, Michigan. It was organized by the CCC Council's Computational Challenges in Healthcare Task Force, and a Steering Committee of community members in the healthcare domain:

- David Danks, University of California-San Diego/CCC Council Member
- Rada Mihalcea, University of Michigan/CCC Council Member
- Katie Siek, Indiana University/CCC Council Member
- Mona Singh, Princeton University/CCC Council Member
- Brian Dixon, Regenstrief Institute
- Madhav Marathe, University of Virginia
- Shwetak Patel, University of Washington
- Erica Shenoy, Harvard MGB
- Michael Sjoding, Michigan Medical



The organizers assembled a wide range of experts for a 1.5-day event to see what ideas the health, informatics, epidemiology, **Healthcare Personnel**, and computing communities could collectively generate that may mitigate the harm of a future pandemic. Three major computing research opportunity areas emerged from the workshop discussions:

1. **Computational models.** Models are extremely important across sectors, but especially in the health system during pandemics, from anticipating the supply needs of hospitals, to determining the care capacity of hospital and social service providers, to projecting the spread of the disease.
2. **Data.** Accurate, reliable data is essential to achieve success when applying models. Data and measurement standardization across healthcare organizations would modernize the data infrastructure, and ensure data remains private while it is shared for model development, validation, and application.
3. **Infrastructure.** Increasing the amount of accurate, reliable data, and the resulting improved models, would help elevate healthcare infrastructure. Additionally, in both pandemic times and peace time, identifying the (very large) space of common queries, and then adjusting data structures to facilitate answers to those queries, has great potential for improvement. The public health infrastructure also needs to be updated: data capture, sharing, and bidirectional communication with the healthcare system is needed.

At a broader level, for public health recommendations to have an impact during a pandemic it is essential to build trust with the impacted communities. This requires clear and transparent communication with stakeholders. Research in this area should be prioritized, and this connects to the reliable data theme above since individuals will only supply their data if they trust the organization that they are granting access to their information.

Finally, many healthcare systems lack the data, compute, and communication infrastructures required to build models on their data, use those models in ordinary operations, or even to reliably access their data. It is important to strive for equitable access and provide resources to systems in under-resourced communities.

Read the full workshop report [here](#).

Reminder: Join a Roundtable to Discuss the Next Grand Challenges in Computing



By Catherine Gill, Program Associate, CCC

The Computing Community Consortium's (CCC) Grand Challenges task force is engaging in a new visioning activity to identify the next grand challenges that will shape the future of our field. We're seeking visionary thinkers and researchers to join us in this exciting exploration.

These virtual roundtable discussions will aim to consider the whole of the field of computing in this context and ask what the new fundamentally "computing research" issues might be that could produce a new set of "Grand Challenges" for our field. In the way in which challenges around Health, Climate, Energy, Sustainability, and Agriculture draw those from many disciplines (including computing research) into their grand challenges, what are the fundamentally new computing research questions that could inspire and motivate a similar global, interdisciplinary response? What computing challenges are truly "Grand Challenges"?

CCC expects to host 3-to-5 virtual sessions in spring 2024. For more information, please read the [full Call for Participation on the CCC website](#).

To apply to join one of these virtual roundtables, please [fill out this brief form](#).

Upcoming CRA-Industry GenAI for Research and Science Roundtable



By Helen Wright, Manager, CRA-I

The Computing Research Association-Industry (CRA-I) is hosting a virtual roundtable event on May 1st, from 3-4:30 PM ET, focusing on Generative AI (GenAI) for Research and Science.

Generative Artificial Intelligence (GenAI) is at the forefront of technological advancement and has the potential to transform and accelerate research across diverse fields. The goal of this roundtable is to discuss examples of new frontiers of GenAI in both academia and industry, consider the impact on scientific discovery and the R&D community, and discuss how to ensure responsible use and development. The roundtable will look at use cases from various fields such as biomedical, energy, and materials science. The aim is to inspire and enlighten the broad research community, while emphasizing the importance of caution to ensure that advancements benefit everyone.

Don't miss this opportunity to be part of this transformative conversation! Please register to attend [here](#).



Research Agencies Tell Congress of the Challenges with Implementing Research Security Policies



CRA

Computing Research Association
Government Affairs

By Brian Mosley, Associate Director, Government Affairs

On February 15th, the House Committee on Science, Space, and Technology held a hearing, titled “[Examining Federal Science Agency Actions to Secure the U.S. Science and Technology Enterprise](#)”, to look at how federal science agencies are implementing, “recent guidance and laws to protect proprietary technology and scientific discoveries.” The committee heard from witnesses from the Biden White House and multiple federal research agencies about the status of implementing those policies across the federal government and what challenges there are to preserve the country’s open scientific environment.

The Chairman of the Science Committee, Frank Lucas (R-OK), [in his opening statement](#) wasted no time getting to the crux of the hearing: “Research theft is one of the single greatest threats to our competitiveness as a nation.” He went further, pointing out that “our hard-won innovations...(are) put to work for our adversaries” and specifically called out China for their actions to illicitly extract the findings of federally supported research. Chairman Lucas, after providing an overview of the bipartisan actions the committee has taken over the last several years to improve the government’s approach to research security, pointed out that there is still no, “timely, clear, and uniform guidance on this issue for our agencies and for our researchers.” The chairman was also clear to say that the committee is, “not here to target researchers based on their race but based on the actions they have taken, and that their objective is, “to ensure that all federally funded scientists follow the U.S. principles of scientific fairness and integrity.”

The chairman also entered into the record a letter to the Director of the Office of Science & Technology Policy Director (OSTP), Arati Prabhakar, one of witnesses, [from the Association of American Universities](#). In that letter, the President of AAU pointed out the concerns that universities have with no clear guidance from the federal government on implementation of research security programs, and further emphasized that those eventual requirements need to be harmonized across the federal government to not adversely impact research institutions.

In her [opening statement](#), Science Committee Ranking Member Zoe Lofgren (D-CA) did not stray far from Chairman Lucas’ comments, saying, “as the landscape continues to evolve, what’s most important is that we continue to approach this challenge thoughtfully and clear-eyed about the tradeoffs we are willing and not willing to make.” After highlighting several statistics on the contribution foreign born researchers make to the country’s scientific efforts, Representative Lofgren said that we need to, “choose to preserve the global vision of the United States being the best country in the world to be a researcher.” In closing, Lofgren pointed out that, “the rhetoric around research security itself has been enough to send a chill across our colleges, universities, and start-ups.” She specifically noted the impact on the country’s Asian American communities and said, “we must make every effort possible to avoid profiling based on race, ethnicity, or nationality.”

The witnesses for the hearing represented perspectives from the White House and a number of key federal research agencies. The first witness was Presidential Science Advisor and Director of OSTP, [Arati Prabhakar](#), who represented the perspective of the Biden Administration and the lead office in charge of harmonizing research security policies across the Federal Government. In her remarks, Dr. Prabhakar highlighted several steps OSTP has taken with regard to research security, such as releasing a [memo on the purpose and use of common forms for researchers](#) and [guidelines covering foreign talent recruitment programs](#) (both will be the subject of a future Policy Blog article). Joining Dr. Prabhakar were [Dr. Rebecca Keiser](#), Chief of Research Security Strategy and Policy at the National Science Foundation; [Dr. Geri Richmond](#), Under Secretary for Science and Innovation at the Department of Energy; and [Dr. Michael Lauer](#), Deputy Director for Extramural Research at the National Institutes of Health. Collectively they provide perspectives of how their research agencies are implementing their own research security programs and the response from their communities.

During the question period, it was clear that the committee members wanted to hear how the federal research agencies were guarding against the theft of taxpayer funded research, particularly from the Chinese government. However, the witnesses tried to articulate that there remain considerable challenges to implementing these policies. In response to a question from Chairman Lucas, Dr. Pradhakar said that initial comments that OSTP received from the community gave them “considerable pause” in moving forward, with concerns

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Research Security Policy Challenges *(continued)*

about the administrative burden on universities and researchers being specifically mentioned, as well as not wanting to turn these requirements into a “checklist.” All the witnesses conveyed that they were impressing on their individual research communities that these requirements are a serious matter and should not be dismissed out of hand. But they also conveyed, to the members of the committee, the trepidation that their communities felt about these policies and programs.

There was a particularly telling anecdote that Dr. Richmond voiced about a researcher who is originally from China but had established his career and life in the United States and planned to remain here. According to Dr. Richmond, he was terrified of being punished for a simple mistake and being sent back to China. In an exchange with Rep. Brandon Williams (R-NY), [quoted by Science Magazine in their own coverage of the hearing](#), Dr. Richmond told the researcher to take these policies seriously and:

“the next time you submit a [grant] proposal, you need to be honest and transparent with your university about your current and pending research support...because we don’t know whether to trust you or not.”

This hearing underlines the fact that research security is a matter of great importance to lawmakers in Washington, and it will continue to be a matter of great importance for the foreseeable future as research agencies continue to rollout their policies. American researchers, should they wish to continue to receive taxpayer funded research grants, need to take this matter seriously too and follow closely any new policies that the research agencies release. At the same time, the community needs to be sure that the government’s concerns about research security don’t turn into government overreach. It was clear at the hearing that both the research agencies, and the leaders of the House Science Committee, are grappling with that concern while attempting to secure the nation’s research enterprise. CRA will continue to monitor this matter, representing the concerns and positions of the community with policymakers, and will report out any new developments.

House Leadership Launches Bipartisan Task Force on Artificial Intelligence

**CRA**Computing Research Association
Government Affairs

By Brian Mosley, Associate Director, Government Affairs

In late February, Speaker of the House Mike Johnson (R-LA) and House Minority Leader Hakeem Jeffries [announced the establishment of a bipartisan Task Force on Artificial Intelligence](#). The task force will be co-chairs by Jay Obernolte (R-CA) and Ted Lieu (D-CA) and will have 24 members drawn equally from both sides of the aisle. The group will explore how to, “ensure America continues to lead the world in AI innovation while considering guardrails that may be appropriate to safeguard the nation against current and emerging threats,” and, “will seek to produce a comprehensive report that will include guiding principles, forward-looking recommendations and bipartisan policy proposals.”

This is a welcome development. While the [Senate has a long-established effort looking at AI](#), the House has been less organized, with seemingly every committee looking at the subject in their jurisdiction. This unified effort will allow the House to approach the legislative topic of AI in a more comprehensive way and will help Representatives become better acquainted with the subject. In a positive sign, several members of the Task Force, including Co-Chair Obernolte, are [members of the House Science, Space, and Technology Committee](#), which has been examining the development of AI within the nation’s research ecosystem for several years now (and just had a [hearing on the subject](#)). This should mean that the research community will be well listened to as the group develops their report and recommendations. CRA looks forward to working with the Task Force and will emphasize the importance of research in any national strategy around AI.

House Science Committee Examines How Federal Science Agencies Can Harness Artificial Intelligence to Drive Scientific Discoveries



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Computing Research Association
Government Affairs

By Brian Mosley, Associate Director, Government Affairs

On February 6th the House Committee on Science, Space, and Technology held a hearing, titled **Federal Science Agencies and the Promise of AI in Driving Scientific Discoveries**, to look at, “how federal science agencies can further harness artificial intelligence (AI) to drive discoveries in new scientific domains and pursue leading-edge AI research.” The committee heard from several witnesses from government, academia, and industry about the state of access to AI research resources for researchers in the US and how industry can partner in this effort. It was a chance for the committee to look at the **newly launched National AI Research Resource (NAIRR) pilot program at NSF**, as well as what the Department of Energy’s National Labs are doing with regard to AI.

This hearing was jointly held by the House Science Committee’s subcommittees on Research & Technology and Energy. The Research & Technology Subcommittee Chairman, Rep. Collins (R-GA), called the hearing to order and pointed out the widening, **“gap between Big Tech, academic AI researchers, and entrepreneurs.”** He further made the point that, “facilitating public-private partnerships can help narrow this gap and efficiently maximize the development and use of responsible AI systems.” Energy Subcommittee Chairman Brandon Williams (R-NY) spoke about the untapped potential of AI and the important role that federal government and the research agencies play in helping to develop the field. **Chairman Williams said**, “these AI-enabled discovery could be transformational to Energy, Medicine, and Materials. Similarly, the federal government has tools, like high performance computing resources, that are unique and powerful for creating AI generated algorithms from this remarkable data.” Finally, the full Science Committee Chairman, Frank Lucas (R-OK), spoke about the, **“three critical components in the formula for successful AI innovation: access to a skilled workforce, access to computing power, and access to data,”** and how the federal science agencies play an important role in all three areas.

Following the opening statements from the majority party, the Ranking Members of the minority side delivered their remarks. Research & Technology Ranking Member Rep. Haley Stevens (D-MI) focused on the workforce development side of the question, saying the country needs, **“a skilled workforce that can apply AI technologies responsibly to our national and community needs,”** which will require, “hands-on learning opportunities to all types of students and workers across sectors, including those who want to upskill and apply new uses of AI in their current jobs.” Energy Subcommittee Ranking Member Jamaal Bowman’s (D-NY) opening statement also focused on workforce needs, saying the country needs, **“a skilled and diverse workforce to maintain the vitality of DOE’s scientific computing ecosystem long into the future.”** Rep. Bowman also made the point about the needs to develop AI capabilities, “responsibly and ethically,” making the further point that, “(as AI) becomes more commonplace...we must ensure that its fundamental algorithms are designed to protect people’s privacy and eradicate bias.” Finally, Zoe Lofgren (D-CA), Ranking Member of the full committee, used her **opening remarks** to point out the need of the Federal investment in this space. She said to, “achieve the promise of AI for societal benefit – and develop effective guardrails against harm – talented and passionate researchers, startups, and students from across the nation will need access to the kind of computational and data resources that are currently available to only a few.”

The witnesses represented views from government, industry, and the academic research communities, and demonstrated what their respective areas brought to the table. **Tess DeBlanc Knowles**, Special Assistant to the Director for Artificial Intelligence at NSF, spoke about what the Foundation is doing to provide resources for the AI researcher community and focused heavily on the NSF’s pilot of the NAIRR program. **Dr. Georgia Tourassi**, Associate Laboratory Director for Computing and Computational Sciences at Oak Ridge National Laboratory, spoke about what DOE is doing and the hardware resources it is providing in the AI research space. **Dr. Chaouki Abdallah**, Executive Vice President for Research at Georgia Institute of Technology, and **Dr. Louay Chamra**, Dean of the School of Engineering and Computer Science at Oakland University, provided a research institution perspective but from different sides of the issue; Dr. Abdallah



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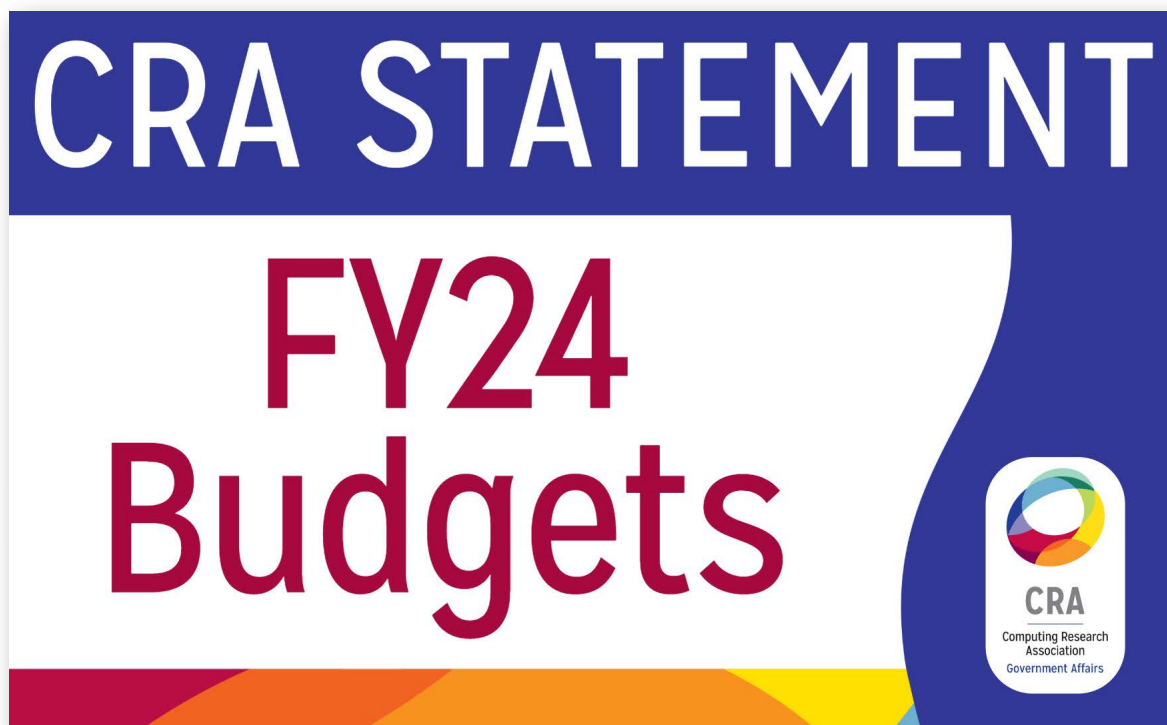
Computing Research Association
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Harnessing Artificial Intelligence (*continued*)

from a RI school, while Dr. Chamra is from a smaller research institution. Finally, **Jack Clark**, co-founder and Head of Policy at Anthropic, provided a viewpoint from industry and why they are interested in the Federal Government's investment in AI infrastructure.

The hearing was well attended by committee members with engaging questions for the witnesses. Generally speaking, the Republican members of the committee focused on understanding why the Federal Government's investment is needed, particularly by industry. They also were concerned about the security of the nation's AI resources and that they do not become compromised by bad actors, such as hackers or foreign agents. On the Democrat side of the committee, many of the questions focused on ensuring the democratization of the nation's AI resources, wanting to ensure that a select few companies will not be the only ones who benefit. However, on both side of the aisle, the committee's membership expressed support for NSF's NAIRR program, viewing it as a vital tool to ensure the nation's competitive position with AI globally.

This was the first hearing in 2024 on the topic of AI by the House Science Committee; it is likely not the last. Artificial intelligence is still a hot topic within Congress, **with many efforts underway in both chambers**. CRA will continue to monitor this subject for developments and will report them out to the research community; please be sure to check back for the latest **updates**.



The Computing Research Association, representing more than 250 computing research organizations in academia and industry, has serious concerns about the significant cuts to Fiscal Year 2024 funding levels for key Federal research agencies, notably the National Science Foundation (NSF). These cuts will have a significant impact on American leadership in key technologies, such as AI, quantum computing, HPC, and cyber security.

Read the full statement here: <https://cra.org/govaffairs/blog/2024/03/cra-statement-concern-fy24-budgets/>

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Soha Hassoun, Tufts University
Patty Lopez, New Mexico State University

Professional Opportunities

Bard College

Assistant Professor (Tenure-Track)- Computer Science

The Bard College Computational Science program invites applications for two tenure-track Assistant Professor positions, to begin Fall 2024. A Ph.D. in computer science or a related field is required. Successful candidates will be committed to innovative undergraduate teaching at a liberal arts college with a diverse student body; maintaining an active research program; contributing to the general education curriculum; and engaging with the life of the College.

Qualifications

We seek candidates who can contribute to the teaching and ongoing curricular development in our Computer Science major. Candidate scholarly pursuits should complement the current faculty specializations in computational biology, computer science education, artificial intelligence, natural language, spoken human/computer interfaces, human-robot interaction, data science, and algebraic and symbolic computation. Candidates should also be excited about interdisciplinary connections and interested in contributing to existing interdisciplinary activities on campus and helping to establish new ones.

The Computational Science program offers a B.A. in computer science, leads the new program in Data Analytics, and contributes to several programs including Experimental Humanities and Mind, Brain, Behavior.

To Apply

To apply, send a cover letter, curriculum vitae, and teaching and research statements which include discussion of working with a diverse student population. Please provide three letters of recommendation (at least one addressing teaching) through Interfolio at: <http://apply.interfolio.com/139613>

Review of applications will begin immediately. For more information on the Computational Science Program at Bard, visit <http://cs.bard.edu>, or contact Valerie Barr at vbarr@bard.edu

Compensation:

\$97,000-\$103,500

This salary range reflects the College's good faith and reasonable estimate of the compensation for the position at the time of the job posting. Salary decisions are dependent on several factors including but not limited to market and organizational considerations, experience, and qualifications of a selected candidate as well as internal and external equity.

Benefits Overview

We are pleased to offer our full-time employees an excellent benefit package which includes; multiple health insurance options; TIAA retirement plans; generous vacation, sick, and personal time; and more. To learn more about employee benefits and eligibility at Bard College, please visit <https://www.bard.edu/humanresources/benefits/>

Equal Employment Opportunity Statement

Bard College is an equal opportunity employer and we welcome applications from those who contribute to our diversity. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, mental, or physical disability, age, sexual orientation, gender identity, national origin, familial status, veteran status, or genetic information.

Bard is committed to providing access, equal opportunity, and reasonable accommodation for all individuals in employment practices, services, programs, and activities.

Boston University

Lecturer

The Department of Computer Science invites applications for a non-tenure track full-time lecturer position beginning in Fall 2024. Qualifications required of all applicants include a Ph.D. (or at least a Master's) degree in Computer Science or a related discipline, and a commitment to teaching excellence. The position requires teaching foundational courses in computer science, mainly at the undergraduate level, in areas such as programming, computer systems, algorithms and data structures, software engineering, data science, and security.

The Department consists of a diverse group of 36 tenured and tenure-track faculty members, and offers programs leading to B.A., M.S., and Ph.D. degrees. The

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Department has research strengths in data mining, databases, graphics, image and video computing, machine learning, natural language processing, networking, distributed systems, operating systems, programming languages, formal methods, real-time systems, security and cryptography, and theory of computation and algorithms. In addition, members of the Department collaborate closely with faculty across the university including mathematics and statistics, computer engineering, mechanical engineering, biology, earth and environment, economics, law, medicine, among others. Candidates are encouraged to demonstrate throughout their application their attention to diversity and inclusion as these topics relate to teaching and engagement within the academic environment. Review of applications will begin immediately and continue on a rolling basis. Additional information about the Department is available at <http://www.bu.edu/cs>. Qualified applicants should apply at <https://academicjobsonline.org/ajol/jobs/2681>

Review of applications will begin on February 1, 2024.

Boston University expects excellence in teaching and in research and is committed to building a culturally, racially, and ethnically diverse scholarly community (<https://www.bu.edu/info/about/diversity>). Boston University is an AAU institution with a rich tradition dedicated to inclusion and social justice. We are proud that we were the first American university to award a Ph.D. to a woman and of our record of inclusiveness. The College of Arts & Sciences includes diversity as one of five strategic goals.

We are dedicated to increasing the participation of all talented students and are committed to the pursuit of Computer Science by underrepresented groups at BU and beyond (<https://www.bu.edu/cs/people/diversity/>). We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law. We are a VEVRAA Federal Contractor.

Colby College

DavisAI Postdoctoral Associate

The Davis Institute for Artificial Intelligence at Colby College invites applications for the third DavisAI postdoctoral associate, a one-year appointment renewable for a second year. The successful candidate for this position will have the opportunity to pursue interdisciplinary AI research in a highly collaborative environment, and to shape the future of AI education within the liberal arts context. Candidates with experience in AI approaches to modeling archives, or in science, technology and society, are especially welcome to apply: <http://apply.interfolio.com/140476>

College of the Holy Cross

Tenure-Track Position in Computer Science at College of the Holy Cross

The Department of Mathematics and Computer Science at the College of the Holy Cross invites applications for a full-time tenure-track Assistant Professor in computer science beginning August 2024. All research specialties will be considered. This position carries a 3-2 teaching load with a full-salary one-semester research leave prior to tenure review, and generous sabbatical and fellowship leaves for tenured faculty. 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 submit all application materials (cover letter, curriculum vitae, three confidential letters of recommendation, transcripts, statements on research, teaching, and the ways you might contribute to and further the College's mission as a Jesuit, undergraduate liberal arts college and its core commitment to diversity and inclusion) to <https://apply.interfolio.com/139014>. 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

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laws concerning equal opportunity and affirmative action in the workplace.

Application review will begin on February 1, 2024 and continue until the position has been filled. Direct questions to Professor Laurie King, lkking@holycross.edu.

Georgia Institute of Technology

School of Computer Science

The School of Computer Science at the Georgia Institute of Technology (Georgia Tech), in Atlanta, Georgia, USA, invites applications for several tenure track faculty positions at all ranks – Assistant Professor, Associate Professor and Professor. We seek candidates in all areas of computer science that complement and enhance our current research strengths, and are especially interested this year in candidates whose research focus is in the broad areas of database systems, foundations of AI, programming languages, software engineering, and theoretical computer science.

About Us: Georgia Tech is a top-ranked public research university situated in the heart of Atlanta, a diverse and vibrant city with numerous economic and cultural strengths. The Institute serves more than 45,000 students through top-ranked undergraduate, graduate, and executive programs in engineering, computing, science, business, design, and liberal arts. Georgia Tech's faculty attracted more than \$1.4 billion in research awards this past year in fields that span artificial intelligence, biomedical technology,

energy, sustainability, semiconductors, neuroscience, and national security. Georgia Tech ranks among the nation's top 20 universities for research and development spending and No. 1 among institutions without a medical school.

Georgia Tech prides itself on its technological resources, collaborations, high-quality student body, and its commitment to building an outstanding and diverse community of learning, discovery, and creation. We strongly encourage applicants whose values align with our institutional values, as outlined in our Strategic Plan (<https://strategicplan.gatech.edu/values>). These values include academic excellence, diversity of thought and experience, inquiry and innovation, collaboration and community, and ethical behavior and stewardship. Georgia Tech has policies to promote a healthy work-life balance and is aware that attracting faculty may require meeting the needs of two careers. The School of Computer Science, one of five schools in the top-ten ranked College of Computing, focuses on research that makes computing and communication smart, fast, reliable, and secure, with research groups in computer architecture, databases, machine learning, networking, programming languages & compilers, software engineering, systems, and theory. Faculty from our school are leaders in a variety of Georgia Tech initiatives, including the Algorithms and Randomness Center (ARC), the Center for Machine Learning (ML@GT), the Center for Research into Novel Computing Hierarchies (CRNCH), and the Institute for Data Engineering and Science (IDEaS).

Job Summary: As a tenure-track faculty member, a successful candidate will engage in substantive research individually and/or with collaborators in the same or other disciplines. In addition, a successful candidate will be expected to teach one graduate or undergraduate course per semester, in Georgia Tech's Atlanta, Georgia campus, as well as contribute service to the School and Institute.

Required Qualifications: Applicants must have a Ph.D. in Computer Science or a related field (including Computer Engineering, Electrical Engineering, Information Science, or Computing) when they start. Applicants must show evidence of outstanding academic research credentials and stellar potential in their field of study, a sincere commitment to teaching, and an interest and ability to promote an inclusive and welcoming educational/work environment.

Application Requirements: A full application should include a cover letter, research statement, teaching statement, curriculum vitae, and the contact information of at least three references. We ask that applicants clearly indicate their research area(s) and focus in their cover letters.

Applications will be considered until open positions are filled. To apply, please follow these instructions:

- Go to <https://careers.gatech.edu>
- Click on "Search Careers at Tech!" (left side of page)
- Under "External Applicants" Click on "Start Your Search"

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- Click “View All jobs”
- In the “Search Jobs” at the top of the page search for position number “267698”.
- You should get the posting titled “School of Computer Science --Tenure-Track Faculty Open Rank Position”. Click on that position.

Equal Employment Opportunity: Georgia Tech provides equal opportunity to all faculty, staff, students, and all other members of the Georgia Tech community, including applicants for admission and/or employment, contractors, volunteers, and participants in institutional programs, activities, or services. Georgia Tech complies with all applicable laws and regulations governing equal opportunity in the workplace and in educational activities. Georgia Tech prohibits discrimination, including discriminatory harassment, on the basis of race, ethnicity, ancestry, color, religion, sex (including pregnancy), sexual orientation, gender identity, national origin, age, disability, genetics, or veteran status in its programs, activities, employment, and admissions. This prohibition applies to faculty, staff, students, and all other members of the Georgia Tech community, including affiliates, invitees, and guests.

Georgia Tech is a member of the University System of Georgia (USG), where every member of the community is required to adhere to the USG Statement of Core Values (<https://www.usg.edu/policymanual/section8/C224/>) – Integrity, Excellence, Accountability, and Respect – that form and guide the daily work of the organization. USG and its institutions foster an environment where

all members of the USG community are free to share ideas and opinions. Learn more about Academic Freedom and Freedom of Expression at <https://provost.gatech.edu/academic-freedom-and-freedom-expression>.

Jane Street

Prefaculty/postdoctoral researcher in type systems

We’re looking for type systems researchers to visit our compilers team. You’ll work on the design, implementation, and formalization of OCaml extensions we’ve been building, including stack-allocated values (avoiding garbage collection), unboxed types (avoiding allocation of any kind), and modes for data-race freedom. We would then collaborate to write up this work and submit for publication in top venues. This is an opportunity to see how programming language concepts can be put into practice in the hands of a large and expert team of functional programmers.

The ideal candidate will have a faculty offer in hand and will delay their start at a top research university in order to work with us for one year. We are also open to evaluating excellent candidates looking for a more typical postdoctoral appointment, for up to two years.

Full details and next steps are at <https://www.janestreet.com/vrp-prefaculty>.

Lehigh University

Postdoctoral Scholar in Computing for Sustainability (with path to a tenure-track position)

Lehigh University’s Department of Computer Science and Engineering (CSE) is seeking to hire a postdoctoral scholar in computing for sustainability and to retain the candidate as a faculty member. The postdoc is expected to contribute to a foundational model for sustainability including resilience to natural disasters and reducing sea-level rise uncertainty. Outstanding scholars with diverse backgrounds and perspectives and expertise in computer vision, signal processing, machine learning, artificial intelligence, remote sensing, science-informed machine learning and computing for sustainability and climate change, or a closely related area are encouraged to apply. The program will provide professional development and support to prepare scholars for faculty roles at Lehigh, or similar institutions. Mentoring and professional development will be provided by multiple faculty, led by Dr. Maryam Rahnemoonfar (Associate Professor of CSE and CEE and Director of Computer Vision and Remote Sensing Laboratory, Bina lab)

Applications are open until March 1st, 2024. The applicants must submit a cover letter, CV, research statement, teaching statement, diversity statement, and names and contact information for three references. For more details and to apply please visit <https://lehigh.infoready4.com/#competitionDetail/I925833>.

Professional Opportunities

Milwaukee School of Engineering

Professor of Computer Science in MS in Machine Learning Program

Who We Are

Milwaukee School of Engineering (MSOE) is an academic institution intrinsically tied to the real world—a confluence of industry knowledge, work ethic and an enduring desire to know more. The university offers bachelor's and master's degrees in engineering, computer science, machine learning, user experience, construction management, actuarial science, business and nursing. With about 3,000 students, faculty and staff, MSOE is large enough for big opportunities and small enough for personal attention.

Position Summary

The Electrical Engineering and Computer Science (EECS) department at the Milwaukee School of Engineering (MSOE) seeks applicants to fill one or more Computer Science Faculty positions at any rank to support a cutting-edge online master's program in Machine Learning. This candidate may also teach courses in our undergraduate Computer Science or Software Engineering programs and advise capstone and research projects.

Candidates with expertise in Applied Machine Learning, Adversarial Machine Learning, Deep Learning, Generative AI, Tiny ML, Data Science, AI Platform Software, Data Engineering, or Cloud Computing are highly encouraged to apply, though expertise in any domain will be considered.

Why Join MSOE?

At MSOE, we invest in our employees' professional and personal growth. MSOE offers very competitive, fully comprehensive benefit plans to all full-time employees. Follow the advertising link below for more info!

How to Apply

To apply, follow this link: <https://jobs.localjobnetwork.com/j/78243188>

The above statements reflect the general details necessary to describe the principle functions of the occupation described and shall not be construed as a detailed description of all the work requirements that may be inherent in the occupation. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

It is the policy of MSOE to provide equal employment opportunity to all individuals regardless of their race, ethnicity, color, creed, religion, sex, age, national origin, physical or mental disability, military and veteran status, sexual orientation, gender identity, genetic characteristics, marital status or any other characteristic protected by local, state or federal law. This policy applies to all jobs at the University and to all the terms, benefits, and conditions of employment/enrollment.

Milwaukee School of Engineering

Professor of Software Engineering or Professor of Computer Science

Who We Are

Milwaukee School of Engineering (MSOE) is an academic institution intrinsically tied to the real world—a confluence of industry knowledge, work ethic and an enduring desire to know more. The university offers bachelor's and master's degrees in engineering, computer science, machine learning, user experience, construction management, actuarial science, business and nursing. With about 3,000 students, faculty and staff, MSOE is large enough for big opportunities and small enough for personal attention.

Position Summary

The Electrical Engineering and Computer Science (EECS) department at the Milwaukee School of Engineering (MSOE) seeks applicants to fill one or more Software Engineering (SE) / Computer Science (CS) Faculty positions at any rank to support growth in established undergraduate computing programs and/or to support a newly developed minor in Cybersecurity.

Candidates with expertise in any field of SE or CS are encouraged to apply, and candidates with relevant expertise in one or more of the following areas are especially desired: software engineering, cybersecurity, networking, design patterns, DevOps, human-machine interfaces, AR/VR, applied machine learning, and databases.

Professional Opportunities

Why Join MSOE?

At MSOE, we invest in our employees' professional and personal growth. MSOE offers very competitive, fully comprehensive benefit plans to all full-time employees. Follow the advertising link below for more info!

How to Apply

To apply, follow this link: <https://jobs.localjobnetwork.com/j/78243182>

The above statements reflect the general details necessary to describe the principle functions of the occupation described and shall not be construed as a detailed description of all the work requirements that may be inherent in the occupation. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

It is the policy of MSOE to provide equal employment opportunity to all individuals regardless of their race, ethnicity, color, creed, religion, sex, age, national origin, physical or mental disability, military and veteran status, sexual orientation, gender identity, genetic characteristics, marital status or any other characteristic protected by local, state or federal law. This policy applies to all jobs at the University and to all the terms, benefits, and conditions of employment/enrollment.

Northern Illinois University

Founding Director of Cybersecurity

Department of Computer Science - College of Liberal Arts & Sciences

The Computer Science Department at Northern Illinois University (NIU) invites applicants for the department's founding Director of Cybersecurity. This Director will be a tenured or tenure-track faculty appointment in Computer Science at the Associate Professor or Professor rank to start in August 2024.

The University: NIU values diversity, equity, and inclusion (DEI). We expect candidates to equally value these principles and to serve as active participants and allies in working toward DEI initiatives.

NIU is a public research university in DeKalb, IL, an affordable and growing community within a commutable distance from Chicago and Rockford metropolitan areas and less than an hour's drive from two of the U.S. Department of Energy's (DOE) national laboratories Argonne National Laboratory and the Fermi National Accelerator Laboratory. Our 16,000+ student body is diverse, with many first-generation, racially, and culturally diverse students and international students from 73 countries. NIU prides itself on student-centered approaches to teaching and research and has social mobility, equity, and inclusion at the heart of its mission. Recently, NIU was nationally recognized as a top college for diversity and LGBTQ+ students and has been named one of the Great Colleges to Work For two years in a row.

NIU is committed to fostering a diverse and inclusive academic global community; as an AA/EEO employer, NIU considers qualified applicants for employment without regard to, and does not discriminate on the basis of, gender, race, color, national origin, sexual orientation, religion, protected veteran status, disability, or any other legally protected status.

The Department: The Department of Computer Science is vibrant and experiencing significant growth. It offers B.S., M.S., and Ph.D. degree programs in Computer Science, with over 750 undergraduate majors and 200 graduate students. Support for faculty research programs comes from industry and prestigious agencies such as the National Science Foundation, National Institutes of Health, and U.S. Departments of Energy and Defense. Our faculty and students benefit from collaborations with research staff from industry and the nearby DOE laboratories, Argonne and Fermilab. The Department values faculty research programs that enlist graduate and undergraduate students and supports such programs with commensurate teaching assignments.

Position Summary:

The Founding Director will provide vision and leadership to the university to create a nationally recognized program in cybersecurity. The Director will report to the Chair of the Computer Science department and is responsible for establishing and leading academic programs and outreach efforts to support cybersecurity workforce development.

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The Director will play a principal role in recruiting the first cohort of faculty expected to be hired in Fall 2025 in this substantial and growing field.

Essential Duties and Responsibilities:

- Lead efforts to create cutting-edge certificate and degree programs, including online programs, that are compliant with and recognized as part of national frameworks.
- Develop a robust vision and sustainable funding model for an agile cybersecurity workforce development program that includes strategies and plans to acquire external funds to support program development and outreach efforts.
- Identify opportunities for private- and public-sector partnerships that seek to develop cybersecurity solutions, particularly as those opportunities apply to employment for students as interns and career opportunities upon their graduation.
- Represent the department's cybersecurity programs by liaising and collaborating within the university and with external private- and public-sector cybersecurity groups.
- Promote the cybersecurity programs and recruit students.
- Recruit personnel in support of the cybersecurity programs.
- Monitor, maintain, and report on the quality and viability of the cybersecurity programs.
- Oversee and contribute to the development of new courses related to cybersecurity.

- Teach cybersecurity courses each academic year.

Minimum Required Qualifications:

- Earned a doctorate in cybersecurity, computer science, or closely related field
- Tenurable at the rank of associate or full professor.
- Five years of experience in cybersecurity in government, industry, or academia.
- Experience in developing cybersecurity courses or programs.
- A proven track record of acquiring external funding.

Additional Requirements:

- Superior communication skills and strong interpersonal skills to work effectively in a collegial, multicultural environment.

Preferred Qualifications:

- Well-established cybersecurity connections in industry or government.
- Success as leader of a department, college, or university-level initiative.
- At least three years of administrative experience in some capacity.
- Experience with NCAE-C CD designation and the CyberCorps SFS and/or Department of Defense Cyber Scholarship programs.
- National recognition as a scholar in cybersecurity.
- Experience with technology transfer and intellectual property protection, including open-source licenses and new venture creation.

- Experience working in settings with students from diverse cultural backgrounds. A commitment to improving their access to higher education and achievement.

Salary:

- Commensurate with experience and qualifications. Position includes a robust benefits package. This is a full-time, twelve-month faculty position.

Application Procedures:

Prospective applicants should visit <https://employment.niu.edu/postings/76108> to apply and submit the following materials:

- Curriculum vitae (no page limit)
 - » Should include links to professional website(s) and profiles on platforms such as Google Scholar, ResearchGate, DBLP, or similar.
- Cover letter (2 page limit)
 - » Should describe the applicant's interest in the position and how the applicant's experience and expertise links to the position. Should also describe the applicant's vision for a cybersecurity center, teaching philosophy and practices, and past, present, and potential experiences that will inform their efforts to advance equity for diverse communities, including populations that are historically underrepresented or marginalized in the field, to provide a welcoming, inclusive learning environment for all students.
- Contributions to diversity statement (2 page limit)

Professional Opportunities

- » Should describe how their past, present or potential teaching, research, and life experiences will inform their efforts to advance equity for diverse communities, including populations that are historically underrepresented or marginalized in the field, to provide a welcoming, inclusive learning environment for all students.
- Name and contact information of at least four references. References will not be contacted without the applicant's foreknowledge.

There is no priority consideration date for this search, which means applications will continue to be accepted until an offer is extended.

Background check/EEO statement:

In compliance with the Illinois Campus Security Act, before an offer of employment is made, the university will conduct a pre-employment background investigation, which includes a criminal background check. In accordance with applicable statutes and regulations, NIU is an Affirmative Action/Equal Employment Opportunity employer and does not discriminate on the basis of race, color, national origin, ancestry, sex, religion, age, physical and mental disability, marital status, veteran status, sexual orientation, gender identity, gender expression, political affiliation, or any other factor unrelated to professional qualifications, and will comply with all applicable federal and state statutes, regulations and orders pertaining to nondiscrimination, equal opportunity and affirmative action. NIU recognizes Dual Career issues. In compliance with federal law, all persons hired will be required to

verify identity and eligibility to work in the United States and to complete the required employment eligibility verification document form upon hire.

St. Olaf College

Visiting Assistant Professor of Computer Science

The MSCS Department at St. Olaf College seeks a full-time, one-year visiting assistant professor in Computer Science beginning August 2024, with potential for additional years. Highest consideration will be given to candidates with demonstrated effectiveness teaching undergraduates and who can contribute broadly to our growing program. Candidates should have a Ph.D. in Computer Science or closely related field (ABD considered) and be interested in advancing the College's goals for diversity, equity and inclusion. Review of applications will begin immediately and continue until the position is filled. See the full description and apply at: <https://wp.stolaf.edu/hr/careers/>

Texas A&M University-School of Performance, Visualization, & Fine Arts

Tenure-Track: Assistant Professor of Multimedia Design

The School of Performance, Visualization & Fine Arts (PVFA) at Texas A&M University invites applications for one (1) full time Assistant Professor in Multimedia Design with a nine-month academic appointment

beginning Fall 2024. The Technical Arts and Interactive Media Section of the School seeks candidates with expertise in one or more of the following areas:

- immersive storytelling
- interactive motion graphics
- AI-integrated multimedia art
- experimental media art
- A strong background in time-based media and multimedia production is also highly desired

The successful candidate will demonstrate an exceptional approach to their own creative work, developing and maintaining a national and international reputation through exhibitions, lectures, research publications, and other creative outlets. Candidates will be expected to gain visibility through juried creative works, peer-reviewed academic research publications, or both. Priority will be given to candidates who demonstrate the ability to pursue external funding to support their work. They will be able to develop and teach a variety of multimedia related courses at the undergraduate and graduate levels, playing fundamental roles in teaching, research, and service in building the future of the multimedia curriculum at Texas A&M University and its relationship to the local/global technical arts community.

The School of Performance, Visualization & Fine Arts is a school within the Texas A&M University System and has a dynamic mission with more than 70 faculty and 30 staff members and a projected exponential growth in the next 5 years. The school



Assistant Professor of Computer Science

Penn State Harrisburg's School of Science, Engineering, and Technology (SSET) is accepting applications for two tenure-track **Assistant Professors in Computer Science** to start in August 2024. The School offers a Bachelor of Science and a Master of Science in Computer Science, in addition to several other undergraduate and graduate degrees in Engineering, Science, and Engineering Technology. SSET launched its first interdisciplinary Ph.D. program in engineering in the fall of 2022.

Job Responsibilities:

- Faculty members of SSET are expected to pursue and sustain scholarly research and publication; recruit and advise students; supervise graduate students and contribute to the department, college, university, and profession through academic and professional service.
- Areas of teaching and/or research may include but are not limited to algorithms, theoretical computer science, bioinformatics, computer security, cyber-physical systems, artificial intelligence, machine learning, or data science.
- Faculty are expected to demonstrate a high level of teaching and research ability and to continue growth in scholarly, artistic, or professional achievement.
- Faculty are also expected to actively promote and advance the school's steadfast commitment to students, academic service, and diversity and inclusion.

Education:

- A Ph.D. degree in Computer Science or a closely related field by the time of appointment is required.
- The assistant professor should possess a terminal degree or its equivalent in organized research or professional practice.

How to Apply:

- Candidates should apply for the position of Assistant Professor of Computer Science, at Penn State Harrisburg by visiting <https://hr.psu.edu/careers>.
- Applicants should submit a cover letter, current curriculum vitae, a list of three professional references, copies of transcripts, as well as a personal statement of research and teaching objectives.

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

Penn State is a multi-campus public land-grant University. Penn State Harrisburg, the Capital College, is the largest among Penn State's Commonwealth Campuses, enrolling nearly 5,000 students and offering more than 75 degree programs. The School of Science, Engineering, and Technology at Penn State Harrisburg is the largest school within the college. For more information about Penn State Harrisburg, please visit the college's website at harrisburg.psu.edu.

CAMPUS SECURITY CRIME STATISTICS:

Pursuant to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act and the Pennsylvania Act of 1988, Penn State publishes a combined Annual Security and Annual Fire Safety Report (ASR). The ASR includes crime statistics and institutional policies concerning campus security, such as those concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. The ASR is available for review <https://police.psu.edu/annual-security-reports>.

Employment with the University will require successful completion of background check(s) in accordance with University policies.

https://www.eeoc.gov/sites/default/files/migrated_files/employers/poster_screen_reader_optimized.pdf

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applications without regards to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability, or protected veteran status. If you are unable to use our online application process due to an impairment or disability, please contact 814-865-1473.

The Pennsylvania State University is committed to and accountable for advancing diversity, equity, inclusion, and sustainability in all of its forms. We embrace individual uniqueness, foster a culture of inclusion that supports both broad and specific diversity initiatives, leverage the educational and institutional benefits of diversity in society and nature, and engage all individuals to help them thrive. We value inclusion as a core strength and an essential element of our public service mission.

Apply Online at: <https://apptkr.com/5005037>

CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to <http://www.police.psu.edu/clery/>, which will also provide you with detail on how to request a hard copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.



Tenure Track Positions in the Department of Computer Science and Engineering, Penn State

JOB DESCRIPTION AND POSITION REQUIREMENTS:

Applications are invited for tenure-track positions at the Assistant, Associate, and/or Full Professor levels across all areas of Computer Science and Engineering at The Pennsylvania State University, University Park campus. The department has hired 20 faculty in the last four years (13 in the last two years) and aims to continue its rapid growth across multiple areas over the coming years. We are particularly looking for candidates in the following two areas:

- **Computer Systems and Architecture:** Candidates working at all layers of the architecture and system stacks (e.g., programming languages, compilers, storage systems, computer architecture, and quantum computing) will be considered. We offer unique collaboration opportunities with faculty spanning both computer science and computer engineering in one unified department, as well as opportunities for collaboration with EE faculty under the School of Electrical Engineering and Computer Science.
- **Computer Security:** All areas of computer security will be considered, including software security, systems and language support, hardware security, network security, applied cryptography, privacy, and secure AI/ML.

Applicants must hold a Ph.D. in computer science or a closely related field by the start date and should be committed to excellence in both research and teaching. The Assistant Professor must have demonstrated the ability as a teacher or research worker and must have shown definite evidence of growth in scholarly or professional achievement. Those considered for the Associate and Full Professor levels must have established a national/international track record of excellence in scholarship and research. The Associate Professor should possess the same qualifications as the Assistant Professor but must also provide evidence of an established reputation for scholarly or professional achievement. The Professor should possess the same qualifications as the Associate Professor but must also provide evidence of a substantial record of advanced research and/or creative work, and of leadership in their field of specialization.

Applicants should submit a detailed curriculum vita listing all publications, research and teaching statements, and the names and email addresses of four references. In addition to submitting the Penn State application, an application must be submitted at <https://academicjobsonline.org/ajo/jobs/26823>. In order to be considered, candidates must apply on both sites. Applications will be reviewed starting January 1, 2024 and continue until the positions are filled.

Our department, and the University as a whole, provides unusually rich collaboration opportunities due to a large, diverse range of colleges and departments, numerous venues for inter-departmental colloquia and the like, and excellent internal support for successful grantsmanship. We expect our hires to establish a strong research program, supervise graduate and undergraduate students, and teach relevant undergraduate and graduate courses.

Penn State is a premier public research, land grant university. The Department of Computer Science and Engineering is a part of the School of Electrical Engineering and Computer Science (EECS) in the College of Engineering. We are looking for candidates who will add to the department's diverse culture and research strengths. Penn State is committed to and accountable for advancing diversity, equity, and inclusion in all of its forms. We value inclusion as a core strength and an essential element of our public service mission. Computer Science and Engineering welcomes diversity in all dimensions among its workforce, and works within the Penn State community to address special considerations, as needed.

The University is located in State College, Pennsylvania, which is ranked as one of the best college towns in the U.S. The area offers a wide variety of cultural and outdoor recreational activities, and outstanding university events, from collegiate sports to fine arts productions. The public school system is excellent, with a nationally ranked high school by U.S. News and World Report.

Apply online at <https://apptrkr.com/4919068>

CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to <http://www.police.psu.edu/clery/>, which will also provide you with detail on how to request a hard copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.



Stony Brook University



Assistant/Associate Professor, Biomedical Informatics (Tenure-Track)

Location: Stony Brook, NY

Open Date: Jan 17, 2024

Deadline: Apr 17, 2024 at 11:59 PM Eastern Time

Description

The Biomedical Informatics Departments at Stony Brook University invites applications for Assistant or Associate Professor rank with a focus on the development of novel computational models for multiscale and multi-omics data analyses, computational drug discovery and drug repurposing pipelines, precision medicine, prediction of clinical outcomes in oncology, metagenomics and metaproteomics. The successful applicant will lead a Bioinformatics research program focused on the development of cutting-edge approaches for analyzing genomic or proteomic data. In addition to establishing an active research program, the role involves teaching and service.

Qualifications

Required Qualifications:

- Ph.D. degree (or foreign equivalent) in Biomedical Informatics, Computer Science, or a related field.
- In lieu of a PhD degree, an M.D. degree (foreign equivalent or higher) with bioinformatics, computational biology, or data sciences training, or with a Masters degree (foreign equivalent or higher) with a focus on bioinformatics and computational biology.
- To be considered at the Associate Professor level, candidates should have:
 - Funded research programs in the areas of bioinformatics, computational and systems biology, or data sciences.
 - Strong publication record.
 - A strong record of interdisciplinary collaborative research with a demonstrated ability to contribute to or lead team science efforts.

Preferred Qualifications:

- Experience with applications of computational models for multiscale and multi-omics data in clinical and translational research.
- Teaching experience at the undergraduate and graduate levels in bioinformatics.

Application Instructions

To apply, visit: <https://apptrkr.com/4945664>

All application materials must be submitted online. Please use the Apply Now button to begin your application. For technical support, please visit Interfolio's Support Site (<https://support.interfolio.com/>) or reach out to their Scholar Service Team at help@interfolio.com or (877) 997-8807.

For questions regarding this position, please contact Joseph Cesaria at 631-560-0643.

Special Notes:

Tenure Track position. FLSA Exempt position, not eligible for the overtime provisions of the FLSA. To qualify for tenure and/or a senior faculty appointment, the candidate must meet the criteria established by the School of Medicine (<https://renaissance.stonybrookmedicine.edu/facultysenate/committees/apt>).

Anticipated Start Date: As soon as possible.

Campus Description

Long Island's premier academic medical center, Stony Brook Medicine, represents Stony Brook University's entire medical enterprise and integrates all of Stony Brook's health-related initiatives: education, research and patient care. It encompasses Stony Brook University Hospital, Stony Brook Children's Hospital, the five Health Sciences schools -- Dental Medicine, Health Technology and Management, Medicine, Nursing and Social Welfare -- as well as the major centers and institutes, programs and more than 50 community-based healthcare settings throughout Suffolk County. With 624 beds, Stony Brook University Hospital serves as Suffolk County's only tertiary care center and Regional Trauma Center. Stony Brook Children's, with more than 180 pediatric specialists in 30 specialties, offers the most advanced pediatric specialty care in the region. In the Medical and Research Translation (MART) building, two floors are occupied by Stony Brook University Cancer Center's outpatient services, and four floors are devoted to cancer research. Diversity, equity and inclusion are essential core values at Stony Brook Medicine. We believe we do our best and most impactful work when we leverage our diverse, equitable and inclusive perspectives. We are proud to recruit and hire talented people from a wide variety of backgrounds and experiences.

The selected candidate must successfully clear a background investigation.

In accordance with the Title II Crime Awareness and Security Act, a copy of our crime statistics is available upon request. It can also be viewed online at the University Police website at <http://www.stonybrook.edu/police>.

Stony Brook University is committed to excellence in diversity and the creation of an inclusive learning, and working environment. All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, pregnancy, familial status, sexual orientation, gender identity or expression, age, disability, genetic information, veteran status and all other protected classes under federal or state laws.

Professional Opportunities

was formed from three departments/ programs spread across the university: the Department of Visualization, the Department of Performance Studies, and the Dance Science Program. The mission of PVFA places a heavy emphasis on faculty and student collaboration and interdisciplinary work in both scholarly and creative research. Texas A&M University leadership has charged the school with developing innovative research and creative works, public performances, and degree offerings at the undergraduate, graduate, and doctoral levels that build upon our strength in merging art and science, as well as the traditional fields of music, dance, art, and theater. Applicants should consult the school's website to review our academic and research programs (<https://pvfa.tamu.edu/>).

Qualifications

Candidates must hold a terminal degree, M.F.A. or Ph.D., in a related field as described above by the appointment start date. Candidates must be credentialed to teach at the graduate and undergraduate levels and must have a well-developed research agenda that will inform and advance current trends in the field. Applicants should consult the school's website to review our academic and research programs (<https://pvfa.tamu.edu/>), paying particular attention to our B.S., M.S., and M.F.A. programs in Visualization.

Application Instructions

Interested individuals should apply through Interfolio: apply.interfolio.com/139241 and submit the following materials (embed links to your work, student work, etc. where appropriate):

Cover letter

- Curriculum vitae (embed links to your work/student work you mentor)
- Personal Statement: Your statement should include your philosophy and plans for research, teaching, and service.
- Portfolio of creative work (link to a website preferred)
- Samples of work in progress (optional)
Names and contact information of five (5) professional references

Review of applications will begin 30 days after posting and will continue until the position is filled.

Questions should be directed to Dr. Donald H. House, Chair of Search Committee (email: d-house@tamu.edu).

Equal Opportunity/Affirmative Action/
Veterans/Disability Employer committed to diversity.

Trinity University

One-Year Visiting Assistant Professor in Computer Science

Trinity University, San Antonio, TX

Trinity University is a top-ranked small private liberal arts and sciences university that values high quality undergraduate teaching and supports high impact undergraduate research. We are seeking candidates for a one-year visiting assistant professor appointment in the Computer Science department. A Ph.D. in Computer Science or a related field is required. ABD will be also considered with clear evidence of PhD completion by May

2024. The position will be selected from candidates with expertise in any area of Computer Science. Candidates should demonstrate a passion for teaching courses in computer science, including courses in their domain of expertise, as well as introductory and upper-level courses required for all of our majors.

How To Apply

[Click here to apply](#)

When starting the application, select "Apply Manually." Only complete fields with a red asterisk, which are required. In the "My Experience" section, you **do not** need to complete the "Work Experience," "Education," "Certifications," or "Languages" fields.

In the "Application Documents" field, upload the following, each as a separate pdf file (note: a maximum of five (5) files can be uploaded):

- Cover letter
- Curriculum vitae including the names and contact information for at least 3 recommendation letter writers
- Diversity statement: responding to the prompt: "Trinity University is committed to the value of intentional inclusion. Please provide a brief statement (250-500 words) describing your past efforts as well as your future plans to advance diversity, equity and inclusion in your teaching."
- Statement of the candidate's teaching philosophy and qualifications;
- Statement of the candidate's scholarship that includes a plan to involve undergraduate students.

Professional Opportunities

Applications should be submitted as soon as possible. The search will remain open until the position has been filled. Applications submitted on or before March 31, 2024, will be given full consideration.

Contact Information

Dr. Yu Zhang, Search Committee Chair,
Department of Computer Science, cs-search@trinity.edu.

Trinity University is an equal opportunity employer and as such provides equal opportunity for employment and advancement of all employees without regard to race, color, religion, sex, age, national origin, disability, military/veteran status, sexual orientation, gender identity, gender expression, or any status protected by Federal, State, or Local Laws.

Tulane University

Professor of Practice Position in Computer Science

The Department of Computer Science at Tulane University invites applications for a Professor of Practice position beginning in Fall 2024. We welcome and encourage applications from members of underrepresented groups.

Tulane brings together bold and creative scholars, scientists and students who are committed to crossing boundaries. Our friendly and collaborative department currently has 12 tenure-track/tenured faculty and 3 Professors of Practice with a commitment to grow over the next few years. In our research and teaching, we take

pride in our equal focus on both computer science and its interdisciplinary applications.

Tulane Professors of Practice are faculty who design, enhance, and teach courses, and provide departmental and university service. The typical teaching load is three sections per semester (two preps). Candidates interested in creating and adopting pedagogical innovations, conducting scholarly activity in computer science education, or developing original elective courses will find many opportunities and support to pursue their interests.

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

For a full description of this position, and to apply, please visit <https://apply.interfolio.com/130831>.

University of Central Florida

Assistant, Associate or Full Professor, Artificial Intelligence Initiative

Multiple Positions for Assistant, Associate or Full Professor, Artificial Intelligence Initiative

The Artificial Intelligence Initiative (Aii) at the University of Central Florida (UCF) is accepting applications from strong candidates for multiple 9-month, full-time faculty positions at the rank of assistant professor (tenure-earning) and associate professor or professor (tenured) in core areas of AI and their applications including: Computer Vision, Natural Language Processing, Robotics,

Machine Learning, Data Analytics, FinTech, Smart Cities, Connected and Automated Vehicles, Cyber Security, Mathematical Aspects of Deep Learning, Theory of AI and Data Science inspired AI, Biomedical Applications, Smart Materials, Smart Mobility, Genomics and Computational Biology, as well as Innovative Computing domains including but not limited to Optical Computing, Neuromorphic Computing and AI in Next generation of Wireless Communication Systems.

Aii is a multi-college initiative at UCF involving the Colleges of Engineering and Computer Science, Sciences, Medicine, Business, and Optics and Photonics. Candidates with publications in the most selective conferences and journals are strongly encouraged to apply. We anticipate that close to thirty new AI faculty members will be hired, with qualified candidates tenured in corresponding colleges.

UCF is one of the nation's largest universities with a diverse student body of more than 70,000 students. UCF is an economic engine, attracting and supporting industries vital to the region's future while providing students with real-world experiences that help succeed after graduation.

Minimum Qualifications: A Ph.D., M.D., or equivalent degree from an accredited institution in an area appropriate to this position at the time of the appointment.

Preferred Qualifications:

- Highly recognized contributions and leadership in the area(s) of expertise.

Professional Opportunities

- Demonstrated strong research publication record in the most selective conferences and journals.
- Effective teaching skills, and ability to effectively communicate with students.
- High potential to initiate and obtain funding.

To apply, refer to <https://www.ucf.edu/jobs/> and search for job announcement R102905. In addition to the online application, interested candidates should upload a cover letter, a current curriculum vitae, and a list with contact information for three (3) professional references. For more information, contact Linda Lockey, Administrative Support, at Linda.Lockey@ucf.edu.

Equal Employment Opportunity Statement: The University of Central Florida is an equal opportunity/affirmative action employer. All qualified applicants will receive consideration for employment without regard to sex, gender identity, sexual orientation, race, color, religion, national origin, disability, protected Veteran status, age, or any other characteristic protected by law. UCF's Equal Opportunity Statement can be viewed at <http://www.oie.ucf.edu/documents/PresidentsStatement.pdf>.

As a Florida public university, UCF makes all application materials and selection procedures available to the public upon request. The UCF's affirmative action plans for qualified individuals with disabilities and protected Veterans are available for inspection in the Office for Institutional Equity, Monday through Friday, from 9:00 a.m. to 5:00 p.m., upon request.

University of Hawaii at Hilo

Instructor of Computer Science

Instructor of Computer Science, position number 84335, UH Hilo, College of Natural and Health Sciences, general funds, full-time, non-tenure-track, nine-month renewable-type appointment, to begin approximately August 2024, pending position clearance and availability of funding.

This position entails teaching lower-division Computer Science (CS) and/or lower-division Data Science (DATA) courses in a small college environment.

For complete description, minimum and desirable qualifications and application instructions, please visit <https://www.schooljobs.com/careers/hawaiaiedu> and search for #84335. Note: If you have not applied for a position before using NEOGOV, you will need to create an account.

University of Hawaii at Hilo is an EEO/AA Employer M/W/Disability/Veterans

University of Oklahoma

Assistant Professor in Computer Science (Computational Biology)

As part of a sustained, multiyear, strategic growth initiative, the School of Computer Science in the Gallogly College of Engineering (GCoE) at the University of Oklahoma (OU) seeks applications for an assistant professor position in the area of computational biology/bioinformatics with a targeted start date of Fall 2024. We seek candidates whose research, teaching, and service have prepared them to be

integral contributors to the advancement of our welcoming community. The candidates who fill this position should look to support OU's strategic research verticals on the Future of Health and Community & Society Transformation; be prepared to engage in multi-college, multi-campus research; and be capable of dealing with large, complex data from areas such as healthcare and medicine, including furthering collaborations between the School of Computer Science and the OU Health Sciences Center and the Oklahoma Medical Research Foundation. We welcome applicants with research interests including structural bioinformatics, molecular phylogenetics and evolution, sequence variations, biological network analysis, and computational modeling.

Required Qualifications

- Ph.D. in Computer Science or a related field.
- Able to effectively conduct and lead research.
- Able to effectively form research collaborations.
- Able to effectively teach computer science courses at all levels.
- Able to effectively advise M.S. and Ph.D. students.

See <https://apply.interfolio.com/118439> for details.

Professional Opportunities

University of Oklahoma

Assistant Professor of Computer Science - Hybrid Modeling

As part of a sustained, multiyear, strategic growth initiative, the School of Computer Science (CS) in the Gallogly College of Engineering (GCoE) at the University of Oklahoma (OU) seeks applications for an assistant professor position in the area of hybrid machine-learning/first-principles modeling with a targeted start date of Fall 2024. We particularly seek candidates whose core expertise will allow OU to synergistically leverage existing first-principles modeling strengths across GCoE as well as existing strengths in machine learning and data mining in CS. We further seek candidates whose research, teaching, and service have prepared them to be integral contributors to the advancement of our welcoming community. Candidates who fill this position should look to support OU's strategic research verticals and GCoE's strategic plan, and be prepared to engage in collaborative research. We also welcome applicants whose research interests support artificial intelligence (AI)+X and computational-X.

Required Qualifications

- Ph.D. in Computer Science or a related field.
- Able to effectively conduct and lead research.
- Able to effectively form research collaborations.
- Able to effectively teach computer science courses at all levels.

- Able to effectively advise M.S. and Ph.D. students.

See <https://apply.interfolio.com/139322> for details.

University of Oklahoma

Assistant/Associate Professor Positions - Software Engineering

As part of a sustained, multiyear, strategic growth initiative, the School of Computer Science (CS) in the Gallogly College of Engineering (GCoE) at the University of Oklahoma (OU) seeks applications for two positions in the area of software engineering with a targeted start date of August 16, 2024. One position is at the rank of assistant professor and the other is at the rank of either assistant or associate professor. We seek candidates whose research, teaching, and service have prepared them to be integral contributors to the advancement of our welcoming community. We particularly seek applicants with software engineering research interests and expertise related to embedded systems, security, and high-performance computing (HPC). Candidates who fill this position should look to support OU's strategic research verticals and GCoE's strategic plan and be prepared to engage in collaborative research.

Required Qualifications

- Ph.D. in Computer Science, Software Engineering, or a related field.
- Able to effectively conduct and lead research.

- Able to effectively form research collaborations.
- Able to effectively teach computer science courses at all levels.
- Able to effectively advise M.S. and Ph.D. students.

See <https://apply.interfolio.com/139331> for details.

University of South Carolina

Bridge to Faculty Program in the Department of Computer Science and Engineering

As part of the new Bridge to Faculty Program at the University of South Carolina, the Department of Computer Science and Engineering seeks a faculty fellow in all related domains with special interest in Cyber Security, Computational Biology, or Robotics to begin in Fall 2024. This two-year program is intended to lead to a tenure-track position in the Department.

In keeping with the University's commitment to "cultivating a more diverse, equitable, and inclusive campus where every individual has the opportunity to flourish and thrive," the Bridge to Faculty Program is designed to attract and retain promising scholars to the University of South Carolina with an emphasis on outreach to underrepresented early-career scholars. Specifically, the program seeks to recruit early-career scholars who, if successful during the program, will have the opportunity to transition to a tenure-track faculty appointment at USC at the start of the 2026-2027 academic

Professional Opportunities

year. As a member of the 2nd cohort of Bridge to Faculty Fellows from across the university, the Fellow will have a home in Computer Science and Engineering alongside a dynamic group of scholars. With the additional support of USC's Office of Access and Opportunity and Provost's Office, Faculty Fellows will have access to institutional resources designed to support their readiness for a tenure-track position.

The Faculty Fellow will be expected to: (1) develop a robust program of research in their area of research focus; (2) meet regularly with faculty mentors; (3) participate in professional development opportunities; (4) gradually assume teaching responsibilities over the course of two years; and (5) participate in the intellectual life of the Department of Computer Science and Engineering and the University of South Carolina.

Qualifications: Applicants must have a PhD in Computer Science, Computer Engineering, or a related field completed between July 1, 2019, and the start date of employment (ABDs considered).

We welcome and encourage applications from scholars who contribute to increasing diversity in their fields, as historically underrepresented persons in higher education, and/or by pursuing scholarship that deepens understanding of diversity, equity, and inclusion issues within the field.

This is a 12-month research faculty appointment. Upon demonstration of academic productivity, it will be renewed for a second year, and with evidence of continued productivity, it can be

converted to a tenure-track faculty position in the third year. Salary is competitive, and the position includes a generous benefits package with access to medical, vision, dental, and life insurance.

Applicants must apply online at USCJobs at <https://uscjobs.sc.edu/postings/161187>. Applications should include: a cover letter; a CV; a writing sample (25 pages maximum); and the names and email addresses of three recommenders, who will be prompted to submit letters of recommendation directly. (If the candidate has not yet defended their dissertation, the letter from the dissertation director should confirm that the PhD will be completed by August 15, 2024). To ensure full consideration, application material must be received by March 15, 2024. If you have any questions about the position or the application process, please contact Dr. Homayoun Valafar, Search Committee Chair, homayoun@cse.sc.edu.

The CSE Department is designated by the National Security Agency and the Department of Homeland Security as a National Center of Academic Excellence in Information Assurance and Cyber Defense Education and Research. In addition, the College of Engineering and Computing (CEC) has recently joined the IBM Quantum Hub, a worldwide community of leading Fortune 500 companies, startups, academic institutions, and national research labs working with IBM to advance quantum computing.

The Department offers B.S. degrees in Computer Science, Computer Information Systems, and Computer Engineering,

M.S. and Ph.D. degrees in Computer Science and Computer Engineering, and a Graduate Certificate in Cyber Security Studies. The Department has 24 full-time faculty members (10 NSF CAREER award recipients), an undergraduate enrollment of approximately 1000 students, a graduate enrollment of 175 students, and over \$3.5 million in annual research expenditures.

At the University of South Carolina, we strive to cultivate an inclusive environment that is open, welcoming, and supportive of individuals of all backgrounds. We recognize diversity in our workforce is essential to providing academic excellence and critical to our sustainability. The University is committed to eliminating barriers created by institutional discrimination through accountability and continuous process improvement. We celebrate the diverse voices, perspectives, and experiences of our employees.

The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of age, ancestry, citizenship status, color, disability, ethnicity, familial status, gender (including transgender), gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (false pregnancy, termination of pregnancy, childbirth, recovery therefrom or related medical conditions, breastfeeding), race, religion (including religious dress and grooming practices), sex, sexual orientation, veteran status, or any other bases under federal, state, local law, or regulations.

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University of South Florida

Computer Science and Engineering invites applications for instructional faculty positions.

The Department of Computer Science and Engineering at USF is seeking to hire instructional faculty positions at the levels of Assistant and Associate Professor of Instruction who can teach a broad range of core and elective courses at the undergraduate and graduate levels in computer science, computer engineering, cybersecurity, and information technology. Special emphasis is on candidates with a strong interest and/or capability in teaching hands-on skills in cybersecurity. Interest or experience in advising student organizations for cybersecurity competitions is a plus. Instructional faculty have the opportunity for professional development and also to pursue research and service. Course releases and buyouts are possible through significant service activities in the department or engagement in sponsored research. Candidates must have completed a PhD in computer science, computer engineering, cybersecurity, information technology, or a related engineering area from an accredited institution. This recruitment is for a non-tenure earning full-time 12-month position. Successful candidates are expected to start in the fall of 2024.

Computer Science and Engineering, at the only metropolitan public AAU university in Florida, has 33 tenure-track/tenured faculty members, 14 full-time instructional faculty, 2 professors of practice, and

7 staff members/advisors, and offers BS, MS, and PhD degrees, serving over 2600 undergraduates, 380 masters, and about 100 PhD students. USF CSE has a strong working relationship with CyberFlorida. The Institute for AI + X is a university-wide research and education center for AI focusing on collaboration across disciplines. Affiliation with the USF Institute for Artificial Intelligence + X is possible for candidates with teaching skills on AI topics. Successful candidates could start in the Fall of 2024. CSE faculty ranks include eleven NSF CAREER awardees, one National Academy of Inventors (NAI) Fellow, three IEEE, three IAPR, three AAAS, and three AIMBE Fellows. USF CSE is in the top 15% of Computer Science departments in US public and private universities. This ranking is according to the most recent Academic Analytics data based on Scholarly Research Index AAD2021 using default weights for grants, articles, conferences, awards, and citations. For the fiscal year 2022-2023, CSE had \$4.5 million in research expenditures with funding from NSF, NIH, IARPA, US Army, and industry.

Established in 1964 and currently led by Dean Robert H. Bishop, the College of Engineering at the University of South Florida is ranked #56 among public institutions (#85 overall) by U.S. News & World Report's 2023-2024 engineering graduate school rankings. The college serves more than 7,500 students, offering 11 bachelor's programs, nine of which are ABET-accredited, as well as 13 master's and eight doctoral degrees. The college is actively engaged in local and global research activities with \$42.9 million in research expenditures

for the fiscal year 2021-2022. The college has 12 major research centers and institutes and is actively engaged in local and global research activities focused on cybersecurity, sustainability, biomedical engineering, artificial intelligence, and transportation.

The University of South Florida, a high-impact research university dedicated to student success and committed to community engagement, generates an annual economic impact of more than \$6 billion. With campuses in Tampa, St. Petersburg and Sarasota-Manatee, USF serves approximately 50,000 students who represent nearly 150 different countries. For four consecutive years, U.S. News & World Report has ranked USF as one of the nation's top 50 public universities, including USF's highest ranking ever in 2023 (No. 42). In 2023, USF became the first public university in Florida in nearly 40 years to be invited to join the Association of American Universities, a prestigious group of the leading universities in the United States and Canada. Through hundreds of millions of dollars in research activity each year and as one of top universities in the world for securing new patents, USF is a leader in solving global problems and improving lives. USF is a member of the American Athletic Conference. Learn more at www.usf.edu.

An application package should include a cover letter, curriculum vitae, statement describing teaching experience and goals, and the names and contact information of at least three references (one of which must be the current immediate supervisor of the applicant). Applicants must electronically submit

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the application packet as one PDF file to: <https://www.usf.edu/work-at-usf/careers>. For consideration, please apply to the appropriate position level (Assistant Professor on Instruction search Job ID #36090, Associate Professor of Instruction search Job ID #36091). Applications will be considered starting immediately until the positions are filled.

USF is an equal opportunity, equal access academic institution that embraces diversity in the workplace. The University of South Florida does not discriminate on the basis of age, disability, genetic information, national origin, pregnancy, race/color, religion, sex, sexual orientation, gender identity, or any other unlawful basis. Dual career couples with questions about opportunities are encouraged to contact the Department chair. To request disability accommodations in the application and interview process, please notify Khoa Dinh, the EOL Coordinator at (813) 974-9272 at least five working days in advance.

Pursuant to Title IX, USF does not discriminate on the basis of sex in education programs or activities that it operates. Such protection extends to students, employees, admission, and employment. Questions or inquiries concerning the application of Title IX may be referred to the Title IX Coordinator or to the U.S. Assistant Secretary for Civil Rights. The most current contact information for the USF Title IX Coordinator and resources can be found on the USF Title IX webpage at www.usf.edu/title-ix.

York University

Sessional Assistant Professor (CLA): Data Science, Human Computer Interaction, Software Development

The Department of Electrical Engineering and Computer Science, Lassonde School of Engineering at York University invites inspiring teachers to apply for the following Sessional Assistant Professor, Teaching Stream positions. These positions are Contractually Limited Appointments (CLA) to the teaching stream for a three-year term to commence July 1, 2024.

- Computer Science - Data Science, Sessional Assistant Professor (Teaching Stream): <http://apply.interfolio.com/139124>
- Computer Science - Human Computer Interaction, Sessional Assistant Professor (Teaching Stream): <http://apply.interfolio.com/139123>
- Computer Science - Software Development, Sessional Assistant Professor (Teaching Stream): <http://apply.interfolio.com/139121>

Please visit the sites above for position-specific details, candidate qualification, and to apply online.

About the Department

The Department of Electrical Engineering and Computer Science at York University is one of the foremost academic and research departments in Canada with more than 80 faculty members and offers a range of undergraduate programs and research-intensive graduate degrees. For

further information please visit <http://lassonde.yorku.ca/eecs>.

About the Lassonde School of Engineering

Established in 2012, the Lassonde School of Engineering, York University offers a broad range of undergraduate and graduate programs to educate multidisciplinary problem solvers, critical thinkers, and entrepreneurs who understand creativity, communications, social responsibility, and cultural diversity. Further information is available at <http://lassonde.yorku.ca/>.

Hiring Policies:

- Salary will be commensurate with qualifications and experience.
- All York University positions are subject to budgetary approval.
- York is an Affirmative Action (AA) employer and strongly values diversity, including gender and sexual diversity, in its community. Details of the AA Program, which applies to women, members of racialized groups, Indigenous peoples, persons with disabilities and those who identify as 2SLGBTQ+, can be found [here](#) or by contacting Christal Chapman, EDI Program Manager (chapman7@yorku.ca; 416-736-5713).
- York welcomes and employs scholars from all over the world. All qualified candidates are encouraged to apply; however, Canadian citizens, permanent residents and Indigenous peoples of Canada will be given priority.
- York has a policy on [Accommodation in Employment for Persons with Disabilities](#) and is committed to working

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towards a barrier-free workplace and expanding the accessibility of the workplace to persons with disabilities. Applicants who require accommodation are invited to contact eeecsjoin@yorku.ca.

Application Process:

- Due date for completed applications: **March 20, 2024.**
- Required materials: 1) current CV; 2) a cover letter; 3) a statement outlining their teaching philosophy and contributions to teaching (and curriculum development, if applicable).
- Candidates selected for further consideration will be asked to provide contact details for three referees.
- Provide required information regarding your Canadian work status and optional self-identification for Affirmative Action purposes as part of the online application.

- Direct questions about the position to eeecsjoin@yorku.ca.
- Submit materials: please submit a **separate online application** at the sites below for any position(s) you are interested in.
- Computer Science - Data Science, Sessional Assistant Professor (Teaching Stream), **apply online at:** <http://apply.interfolio.com/139124>
- Computer Science - Human Computer Interaction, Sessional Assistant Professor (Teaching Stream), **apply online at:** <http://apply.interfolio.com/139123>
- Computer Science - Software Development, Sessional Assistant Professor (Teaching Stream), **apply online at:** <http://apply.interfolio.com/139121>

Learn More About York:

- York University generates and shares knowledge through our research, teaching and engagement with communities around the world. The [2023-2028 Strategic Research Plan](#) showcases the depth, breadth and ambition of research at York.
- York's commitments to social justice are laid out in our [Decolonizing, Equity, Diversity and Inclusion Strategy](#), the [Framework & Action Plan on Black Inclusion](#) and the [Indigenous Framework for York University](#).
- Follow the activities and accomplishments of York's faculty, students and staff on [YFile](#)