COMPUTING RESEARCH NEWS

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

MARCH 2025 Vol. 37 / No. 3

CRN At-A-Glance

CRA Update: February 2025 Board Meeting Highlights

The CRA Board of Directors Meeting and Leadership Summit, held February 20-21, 2025, in Washington, D.C., brought together computing research leaders to address key issues facing the field. Discussions covered federal policy shifts, research funding concerns, enrollment trends, and more.

Read more on page 2

Navigating Teaching Careers in Computing: CRA-E Career Landscape Workshop Series

As demand for teaching-focused faculty grows, CRA's Education Committee (CRA-E) is hosting its annual Career Landscape Workshop Series in May 2025. This free webinar series will guide graduate students, postdocs, and industry professionals through career paths, preparation strategies, and the hiring process. Learn more and register today!

Read more on page 25

Unlocking Innovation: CRA-Industry's "Research in a Box" Virtual Roundtable on Building Successful Research Programs

On April 30, CRA-Industry (CRA-I) will host its "Research in a Box" virtual roundtable, featuring industry experts sharing strategies for establishing and sustaining computing research programs. Attendees will explore collaboration best practices, legal considerations, and stakeholder alignment. Register now to join the discussion.

Read more on page 45

In This Issue

CRA Update: February 2025 Board Meeting Highlights

By Matt Hazenbush, Director of Communications

On February 20-21, 2025, the Computing Research Association (CRA) held its semiannual Board of Directors Meeting at the Westin Washington, D.C. City Center. The meeting provided an important opportunity for Board members, CRA staff, society leaders, and distinguished guests to discuss key issues facing the computing research community and CRA's strategic response.

CRA Leadership Summit

Preceding the board meeting, CRA held its annual CRA Leadership Summit, gathering senior leaders from five of CRA's six affiliate societies (AAAI, ACM, IEEE-CS, SIAM, and USENIX), as well as the NRC's Computer Science and Telecommunications Board. Summit discussions focused on pressing topics such as federal policy shifts, publication ethics, and the evolving identity of computing as a discipline. Many of the Leadership Summit attendees remained for the duration of the board meeting as well, enriching discussions and collaboration.

An opening reception provided Board attendees the opportunity to network with participants from the CRA Leadership Academy, fostering connections with emerging academic leaders in computing.

Chair's Welcome and CEO Update

Board Chair **Nancy Amato** opened the meeting by welcoming attendees and introducing new CRA Board members: new society representatives from AAAI and ACM and recently elected CRA Deans Chair. In her remarks, Amato highlighted the evolving landscape for computing research, particularly given recent federal policy shifts.

CRA Executive Director and CEO **Tracy Camp** then provided updates on ongoing initiatives, including progress with CRA's new Career Center, fundraising for the CRA-WP Grad Cohort Workshops, CCC collaboration with IEEE-CS, and the continued success of the UR2PhD program. Camp also emphasized ongoing efforts to enhance CRA's communications and operational effectiveness.

To begin Board business, the Board approved the consent agenda, which included the July 2024 Board Meeting minutes and updates to the CRA Code of Conduct and Whistleblower Policy.

Government Affairs Update

Brian Mosley, Associate Director of Government Affairs, summarized recent developments from the **first month of the Trump Administration's return to office**. Key points included major shifts in AI policy, federal budget uncertainty, and sweeping federal executive orders impacting funding, federal staffing, and diversity programs.

Mosley highlighted CRA's commitment to keeping the computing research community informed and engaged during this period.

Breakout Sessions: Critical Discussions

On Thursday evening, topics for Friday's breakout sessions were introduced, providing context and key questions for Board discussion. Friday's breakout sessions allowed Board members to discuss and provide input on three critical topics:

- **Enrollment Pressures**: **Keith Marzullo** (University of Maryland) and **Samir Khuller** (Northwestern University) led discussions on changing student enrollment dynamics, the demographic cliff, international student trends, changes in federal priorities, and potential impacts on graduate programs and faculty.
- **Diversity, Equity, Inclusion, and Accessibility (DEIA)**: **Nancy Amato** (UIUC) and **Susan Rodger** (Duke University) explored new directions for CRA's programs with DEIA components, particularly in consideration of recent federal executive orders.
- **Federal Funding Concerns**: **Alex Aiken** (Stanford) and **James Allan** (UMass Amherst) facilitated a dialogue on advocacy priorities, specifically addressing potential reductions in research funding and F&A (facilities and administration) rates.

The breakout sessions generated valuable insights and strategic guidance for CRA's future actions.

Governance Updates

Tracy Camp and **Gene Spafford** summarized recommendations from the CRA Working Group on Governance, highlighting proposed updates to CRA bylaws and governance processes. The Board agreed to provide feedback after the Board meeting, with final decisions expected in future meetings.

CRA Taulbee Survey and Data Collection

Katie Siek (Indiana University) shared the Survey Committee's goals for improving the CRA Taulbee Survey. Plans include enhancing report formats, iterating survey content, and increasing survey participation. Board members contributed ideas for additional data to better inform community planning.

CRA Awards: Recognizing Community Leaders

The CRA Board selected recipients for its two most prestigious awards:

- **CRA Distinguished Service Award**: Carl Landwehr was recognized for his foundational contributions to cybersecurity research and national cybersecurity initiatives.
- **CRA A. Nico Habermann Award**: Lori Pollock was honored for her sustained commitment to broadening participation in computing research.

Additionally, CRA staff member **Lauren Lashlee** received the **CRA Above and Beyond Award** for exceptional fundraising efforts, particularly supporting the 2025 CRA-WP Grad Cohort Workshops.

Board and Officer Elections

Results of the 2025 CRA Board of Directors election were announced, with terms beginning July 1, 2025:

Newly Elected Board Members:

- **Carla Brodley**, Northeastern University
- **Mona Diab**, Carnegie Mellon University
- **Mark Hill**, formerly Microsoft and University of Wisconsin-Madison

Reelected Board Members:

- **Maria Gini**, University of Minnesota
- **Divesh Srivastava**, AT&T
- **Ben Zorn**, Microsoft Research

The Board also elected new officers, who will begin their terms on July 1, 2025:

- **Chair**: James Allan, University of Massachusetts Amherst
- **Vice Chair**: Mary Hall, University of Utah
- **Secretary**: Ran Libeskind-Hadas, Claremont McKenna College
- **Treasurer**: Ming Lin, University of Maryland

CRA's newly elected officers: Ran Libeskind-Hadas, Mary Hall, James Allan, and Ming Lin.

Acknowledging Exiting Board Members

Board members whose terms conclude at the end of June — **Nancy Amato** (UIUC), **Lorrie Cranor** (Carnegie Mellon), **Gillian Hayes** (UC Irvine), and **Jaime Teevan** (Microsoft) — shared reflections on their tenure, emphasizing CRA's critical role in the computing community.

CRA extended special thanks to outgoing Board Chair **Nancy Amato** for her exceptional leadership, vision, and contributions. Amato's tenure as Board Chair concludes June 30, 2025.

Looking Forward

The next CRA Board of Directors meeting will be held virtually in late May or early June 2025. Community members are encouraged to suggest agenda topics to continue shaping CRA's future direction.

Nancy Amato, outgoing CRA Board President

CRA Leadership Academy Cultivates Academic Leaders in Computing

By Matt Hazenbush, Director of Communications

On February 20-21, 2025, the Computing Research Association (CRA) hosted the 2025 CRA Leadership Academy at the Westin City Center in Washington, D.C. The event gathered a cohort of newly promoted or soon-to-be-promoted full professors from computing programs across North America for an intensive workshop designed to cultivate essential leadership skills and foster peer connections.

CRA Leadership Academy co-chairs, Dennis Livesay and Manuel Pérez-Quiñones

Exploring Leadership Opportunities

The workshop opened with a welcoming session led by program co-chairs **Dennis Livesay** (Michigan Technological University) and **Manuel Pérez-Quiñones** (University of North Carolina at Charlotte), who set the stage by encouraging participants to reflect on their personal leadership goals and the broader impact leaders have within academia and beyond.

A fireside chat featuring **Jamie Payton** (New Jersey Institute of Technology) explored the motivations behind pursuing leadership roles. This engaging dialogue emphasized leadership as both a responsibility and an opportunity for positive change in academia and research communities.

Essential Qualities and Paths to Leadership

Alex Wolf (University of California, Santa Cruz) and **Divesh Srivastava** (AT&T) headlined a panel discussion examining the many attributes that characterize effective leaders in academia, industry, and professional societies. Moderated by **Rachel Pottinger** (University of British Columbia), the conversation provided participants with practical insights into various leadership roles, allowing attendees to consider paths that align with their individual strengths and aspirations.

Inclusive Leadership Perspectives

An interactive session, organized by **Stephanie Ludi** (University of North Texas) and moderated by **Bruce Childers** (University of Pittsburgh), emphasized the multitude of leadership paths and roles, challenging participants to recognize their leadership potential regardless of formal titles or positions.

Through small group discussions and guided exercises, attendees reflected on their personal leadership styles, identifying both strengths and areas for growth.

Navigating the Leadership Search Process

A special session featuring **Karen McPhedran** and **Vijay Saraswat** from the search firm Isaacson, Miller, alongside CRA Executive Director and CEO **Tracy Camp**, provided attendees with an inside look at the leadership recruitment process.

Moderated by **Dennis Livesay**, this session demystified how search firms operate, the roles and expectations of search committees, and provided valuable strategies for participants preparing for leadership roles within academia or research-focused nonprofits.

Building Empathy and Managing Conflict

Nigamanth Sridhar (Cleveland State University) shared insights in a powerful session on empathetic leadership. Drawing from his experiences managing institutional change, Sridhar highlighted strategies for approaching conflicts and difficult situations with empathy and thoughtful communication, reinforcing the critical role empathy plays in effective leadership.

360-Degree Leadership and Management

A fireside chat with **Dennis Livesay** emphasized the multi-dimensional nature of leadership, highlighting techniques for managing relationships and expectations vertically (with supervisors), horizontally (with peers), and downward (with team members).

Participants learned the importance of adapting their leadership style based on organizational context and relationship dynamics.

2025 CRA Leadership Academy participants

Closing Reflections

The **CRA Leadership Academy** concluded with a final fireside chat featuring **Bruce Childers**, which synthesized key insights from the workshop sessions. This reflective session encouraged participants to apply their newly acquired skills and perspectives to their ongoing professional development and future leadership roles.

Recognizing Participants and Continuing Development

Participants who completed the CRA Leadership Academy received a certificate of participation and a digital badge recognizing their commitment to advancing their leadership skills. Participants are encouraged to add their digital badge to their online presence (e.g., LinkedIn profile).

To build on the momentum from the in-person event, CRA will host virtual cohort webinars for Leadership Academy participants throughout spring and early summer 2025, providing ongoing opportunities for discussion, collaboration, and peer support.

The 2025 CRA Leadership Academy was organized by a dedicated program committee including co-chairs **Dennis Livesay** and **Manuel Pérez-Quiñones**, as well as **Bruce Childers**, **Kinnis Gosha**, **Jim Kurose**, **Stephanie Ludi**, **Dimitrios Nikolopoulos**, and **Rachel Pottinger**.

CRA extends its gratitude to all participants, speakers, and organizers for contributing to a successful and inspiring event designed to empower the next generation of academic leaders in computing.

Carl Landwehr Wins the 2025 CRA Distinguished Service Award

By Matt Hazenbush, Director of Communications

The Computing Research Association (CRA) Board of Directors has selected **Carl Landwehr** – an independent consultant who has held positions at the U.S. Naval Research Laboratory (NRL), the National Science Foundation (NSF), the University of Michigan, and the Cyber Security & Privacy Research Institute at The George Washington University – as the recipient of the 2025 CRA Distinguished Service Award. This honor recognizes his pioneering contributions to cybersecurity research and his leadership in shaping national research programs.

Through decades of dedicated service in academia, government, and professional societies, Landwehr has been instrumental in establishing cybersecurity as a scientific discipline and advancing computing research. His vision and leadership have left a lasting mark on the field, helping to secure vital national infrastructure and guiding the evolution of security-focused research initiatives.

> "From the vantage point of 2025, it is hard to believe that NSF did not have a dedicated program in security in the early 2000s – yet it did not. Carl created it. The vision of trustworthy computing, which lies at the foundation of NSF's support of cybersecurity, is Carl Landwehr's."
> *- Susan Landau, Professor of Cyber Security and Policy, Tufts University*

> "Before Carl appeared on this scene, computer security research was receiving only sporadic funding, and it was from DoD. The need for civilian-focused cybersecurity research and to have work done outside of the classified community was not widely accepted. Carl gets a big share of the credit for orchestrating that change – providing vision, making the arguments for resources, and implementing those visions at several stages of the community's evolution."
> *- Fred B. Schneider, Samuel B. Eckert Professor of Computer Science, Cornell University*

> "Carl's leadership in creating and growing the cybersecurity field has largely created the academic field of today. He has consistently been ahead of his peers in identifying things that needed attention, be they creation of the NSF interdisciplinary research programs, the 'building code' workshops, IEEE Security & Privacy Magazine, and cybersecurity for future presidents."
> *- Jeremy Epstein, Co-Director, Institute for Cybersecurity and Resilient Infrastructure Studies (ICARIS), Georgia Tech Research Institute and Adjunct Professor of Cybersecurity, Georgia Tech*

Reflecting on the honor, Landwehr shared:

> "I am surprised and humbled by this recognition. Contributing to the growth of cybersecurity and computing research has been a deeply rewarding journey, and I'm grateful for the chance to have played a role in shaping programs and initiatives that have had a lasting impact."

A Career of Transformative Service

Landwehr has dedicated his career to strengthening cybersecurity research and policy, leading initiatives that have established cybersecurity as a core discipline within computing research.

Landwehr *(continued)*

His contributions include:

- **Helped Establish NSF's First Cybersecurity Research Program:** As the architect of what is now Security, Privacy, and Trust in Cyberspace (SaTC 2.0), Landwehr created a lasting infrastructure for cybersecurity research, supporting thousands of faculty and students over the years.
- **Shaping U.S. Cybersecurity Research Strategy:** Through his leadership at NRL, NSF, and IARPA — as well as his work as a consultant with DARPA and NSA — he played a crucial role in advancing accountable information flows, software security, and secure networking infrastructure.
- **Promoting Cybersecurity as a Science:** Landwehr championed a methodological approach to security research, ensuring that cybersecurity evolved into a rigorous scientific field.
- **Advancing Cybersecurity Education:** His "Cybersecurity for Future Presidents" course has influenced cybersecurity education, making security concepts accessible to policymakers and industry leaders.
- **Expanding Cybersecurity Discourse:** As Editor-in-Chief of *IEEE Security & Privacy* magazine, he helped build the publication into a leading resource in the field, ensuring broad dissemination of security research. More recently, he served as a contributing editor for the Communications of the ACM (CACM) Security and Privacy Viewpoints section.

About the Award

The CRA Distinguished Service Award recognizes individuals who have made outstanding service contributions to the computing research community in government affairs, professional societies, publications, conferences, and leadership.

The CRA Committee on Awards – Selection is responsible for reviewing nominations and recommending recipients for the CRA Distinguished Service Award. Final recommendations are presented to the CRA Board of Directors, which votes on the awardees at its February Board meeting.

Lori Pollock Wins the 2025 CRA A. Nico Habermann Award

By Matt Hazenbush, Director of Communications

The Computing Research Association (CRA) Board of Directors has selected **Lori Pollock**, Alumni Distinguished Professor Emeritus of Computer and Information Sciences at the University of Delaware, as the recipient of the 2025 CRA A. Nico Habermann Award. One of CRA's most prestigious honors, this award recognizes her outstanding efforts to expand participation and enhance the success of groups minoritized in computing research.

Through her leadership, mentorship, and programmatic initiatives, Pollock has played a pivotal role in broadening access to computing, helping to create and sustain programs that have transformed pathways for students and professionals from underrepresented backgrounds. Her contributions span K-12 education,

undergraduate and graduate mentorship, and early-career professional development, strengthening the research pipeline and making computing a more inclusive discipline.

> "Over three decades, Lori has been working on a wide range of diversity-focused programs and has been incredibly effective in identifying key challenges, proposing improvements or new solutions, and executing those changes through to success. UR2PhD, CSGrad4US, Grad Cohort, Partner4CS — these programs exist, thrive, and continue to change lives because of Lori's enthusiastic leadership."
> *- Kelly A. Shaw, Professor of Computer Science, Williams College*

> "Lori has demonstrated an unwavering commitment to broadening participation in computing by working across K-12 and higher education. Her tireless efforts pioneered new programs and initiatives that resulted in policy changes, garnered recognition from the Governor [of Delaware], and even drew praise from former President Barack Obama. She is not only a brilliant scholar but also a brilliant and generous mentor to others, especially those underrepresented in computing."
> *- Chrystalla Mouza, Dean, College of Education, University of Illinois Urbana-Champaign*

> "Lori is one of the most inclusive, kind leaders with whom I have had the pleasure to engage. She listens deeply, ensures all voices are heard, and makes everyone feel valued. She is not afraid to make large changes, but even when she does, she brings everyone along. She does not seek the spotlight — she creates opportunities for others. Her decades of work have fundamentally changed how we approach broadening participation in computing."
> *- Carla E. Brodley, Professor, Dean of Inclusive Computing, Khoury College of Computer Sciences, Northeastern University*

Reflecting on the honor, Pollock shared:

> "I am deeply honored to receive this recognition. Throughout my career, I have been passionate about fostering an inclusive computing research community, and I have been fortunate to collaborate with incredible colleagues who share this mission. It's inspiring to see the impact that collective efforts can have in expanding access and opportunity."

A Career of Expanding Opportunities

Pollock has dedicated her career to increasing participation in computing research, leading national efforts that create stronger pathways into the field. Her work spans undergraduate research, graduate mentorship, faculty development, and K-12 education, strengthening the research pipeline at multiple levels.

- **Expanding Undergraduate Research Participation:** As a Principal Investigator (PI) of CRA's UR2PhD program, Pollock helped develop a new initiative to improve the quality and accessibility of undergraduate research experiences, particularly for students from historically excluded backgrounds. Additionally, through CRA-WP's NSF DREU (Distributed Research Experiences for Undergraduates) program, she has mentored students and supported research opportunities that have encouraged many to pursue graduate study.
- **Supporting Non-Traditional PhD Pathways:** As a PI for the NSF CSGrad4US Graduate Fellowship Program, Pollock has played a key role in establishing the program and mentoring professionals returning to academia to earn PhDs in computing. By reducing barriers and providing structured support, she has helped expand access to computing research careers for individuals from non-traditional backgrounds.
- **Fostering Graduate Student Success:** In its early years, Pollock was a leading contributor to CRA-WP's Grad Cohort Workshops, which provide mentoring, professional development, and networking opportunities for graduate students from underrepresented groups. Her leadership helped strengthen retention and advancement in computing PhD programs.
- **Advancing K-12 Computing Education:** Through Partner4CS, a University of Delaware initiative that equips K-12 teachers with computer science training and curriculum resources, Pollock has expanded early access to computing education. Her efforts have led to policy

changes and increased state-level support, ensuring that more students — especially those from marginalized communities — have opportunities to explore computing.

About the Award

The CRA A. Nico Habermann Award honors the late A. Nico Habermann, who led NSF's Computer and Information Science and Engineering (CISE) Directorate and was deeply committed to increasing the participation of people from groups historically excluded in computing. The award recognizes individuals, organizations, or initiatives that have made significant, lasting contributions to increasing the numbers and/or successes of minoritized groups in the computing research community.

The CRA Committee on Awards – Selection is responsible for reviewing nominations and recommending recipients for the CRA A. Nico Habermann Award. Final recommendations are presented to the CRA Board of Directors, which votes on the awardees at its February Board meeting.

Leading Computing Organizations Urge Congress to Protect U.S. Research Investments

By Matt Hazenbush, Director of Communications

This announcement was originally featured on the CRA Bulletin on March 3, 2025.

In response to recent federal actions that threaten critical research funding, six leading organizations — including the Computing Research Association (CRA) — representing over 305,000 individuals in computing, information technology, and technical innovation have issued a joint statement urging Congress to protect the U.S. research enterprise.

Recent funding freezes, proposed budget cuts, and layoffs at key federal science agencies — including the National Science Foundation (NSF), Department of Energy (DOE), National Institute of Standards & Technology (NIST), National Aeronautics and Space Administration (NASA), and National Institutes of Health (NIH) — have introduced severe disruption and uncertainty into the research ecosystem. These actions put the United States' leadership in artificial intelligence, quantum computing, and other critical fields at serious risk.

The joint statement calls on Congress to reject major cuts to science and research funding, citing the long-term economic and national security consequences of weakening the nation's research infrastructure. The signatories emphasize that America's leadership in emerging technologies is built upon a robust, federally supported research ecosystem — one that has historically delivered substantial returns on investment, fueled new industries, and driven economic growth.

Signatory Organizations:

- Academic Data Science Alliance (ADSA)
- Association for Computing Machinery (ACM)
- Coalition for Academic Scientific Computation (CASC)
- Computing Research Association (CRA)
- Society for Industrial and Applied Mathematics (SIAM)
- USENIX – The Advanced Computing Systems Association

Read the Full Statement

As a convening voice for the computing research community, CRA remains committed to advocating for strong federal investments in science and technology. We encourage computing researchers and institutions to engage with policymakers and reinforce the importance of protecting research funding.

For more updates on CRA's policy efforts, visit the Computing Research Policy Blog.

CRA Congratulates New AAAI, ACM, and IEEE Fellows and ACM Distinguished Members

By Matt Hazenbush, Director of Communications

The Computing Research Association (CRA) proudly congratulates members of the computing research community who have recently been recognized as Fellows of the Association for the Advancement of Artificial Intelligence (AAAI), the Association for Computing Machinery (ACM), and the IEEE Computer Society (IEEE-CS), as well as ACM Distinguished Members. As Affiliated Professional Societies of CRA, AAAI, ACM, and IEEE-CS play a vital role in supporting the computing research community, advancing innovation, and fostering collaboration across the computing research ecosystem.

These prestigious honors highlight their exceptional contributions to computing research, advancing innovation, scholarship, and technological progress that will shape the future of the field.

CRA is deeply grateful for the computing researchers who contribute their time and expertise to advance our mission. Many of this year's honorees have played an integral role in CRA's programs, initiatives, and events, helping to strengthen and support the research community. We extend our sincere appreciation and congratulations to them on this well-earned recognition!

Are you passionate about computing research and eager to make a broader impact?

CRA is looking for dedicated volunteers to help shape the future of the computing research community! Our committees and working groups rely on the expertise and energy of researchers like you to drive key initiatives, from expanding access to computing education to influencing policy and strengthening industry-academia connections.

If you're interested in getting involved, fill out our CRA Volunteer Form to explore opportunities that align with your interests. Help us build a stronger, more connected research community!

CRA Volunteer Form

As a North American-based organization, CRA primarily serves institutions and researchers across North America. At the same time, computing research is a global endeavor, and so we recognize the significant contributions of those advancing the field worldwide. Below, we celebrate honorees affiliated with North American institutions, followed by a section recognizing those based outside North America, all of whom have affirmed their willingness to be acknowledged by CRA.

Honorees Based in North America

AAAI Fellows – 2025 Class

AAAI is a nonprofit organization dedicated to advancing research in artificial intelligence (AI) and promoting its responsible use for societal benefit.

The AAAI Fellows program honors individuals who have made significant, sustained contributions to the field of AI through research, innovation, and leadership. Each year, a select group of researchers is recognized for their impact on the advancement of AI. Below, we acknowledge the individuals named as 2025 AAAI Fellows who have affirmed their willingness to be recognized by CRA.

Maria Florina Balcan

Maria Florina Balcan, Cadence Design Systems Professor of Computer Science at Carnegie Mellon University, was elected as an AAAI Fellow for significant contributions to the foundations of machine learning and its applications to multiagent systems and modern algorithm design.

Mohit Bansal

Mohit Bansal, John R. & Louise S. Parker Distinguished Professor of Computer Science at the University of North Carolina at Chapel Hill, was elected as an AAAI Fellow for significant contributions to multimodal AI foundations as well as faithful language generation and summarization.

Emma Brunskill

Emma Brunskill, Associate Professor of Computer Science at Stanford University, was elected as an AAAI Fellow for significant contributions to the field of reinforcement learning and applications for societal benefit, in particular AI for education.

Yixin Chen

Yixin Chen, Professor of Computer Science and Engineering at Washington University in St. Louis, was elected as an AAAI Fellow for significant contributions to machine learning, pioneering widely used architectures and algorithms for graph neural networks and lightweight deep neural networks.

Ernest Davis

Ernest Davis, Professor of Computer Science at the Courant Institute of Mathematical Sciences, New York University, was elected as an AAAI Fellow for significant contributions to automated commonsense reasoning, particularly spatial and physical reasoning, and for writings explaining AI to a general audience.

Emilio Ferrara

Emilio Ferrara, Professor in the Thomas Lord Department of Computer Science at the University of Southern California, was elected as an AAAI Fellow for pioneering contributions to computational social science and the study of online information diffusion and manipulation.

Yun Raymond Fu

Yun Raymond Fu, Professor at Northeastern University, was elected as an AAAI Fellow for significant contributions to transformative technology innovation in computer vision, augmented human-machine interaction, and leadership in AI technology commercialization.

CRA Congrats New Fellows and Members *(continued)*

Kate Larson

Kate Larson, Associate Director of Undergraduate Studies and Professor at the Cheriton School of Computer Science at the University of Waterloo, was elected an AAAI Fellow for significant contributions to the foundations of multiagent systems and for service to the broader AI community. She is also a Research Scientist at Google DeepMind, where she contributes to cutting-edge advancements in artificial intelligence.

Larson is an active leader in the computing research community and currently serves on the CRA Board of Directors since 2018 as the representative for CS-Can|Info-Can, supporting CRA's engagement with the Canadian computing research community. Through her research and leadership, she has helped advance the study of multiagent systems while fostering collaboration within the broader AI and computing research fields.

Sriraam Natarajan

Sriraam Natarajan, Professor of Computer Science at the University of Texas at Dallas, was elected as an AAAI Fellow for significant contributions to statistical relational AI, healthcare adaptations, and service to the AAAI community.

Ming-Hsuan Yang

Ming-Hsuan Yang, Professor of Electrical Engineering and Computer Science at the University of California, Merced, and Research Scientist at Google DeepMind, was elected as an AAAI Fellow for significant contributions to visual tracking, low-level vision, and visual learning with widely used benchmark datasets and source code.

ACM Fellows – 2024 Class

ACM is a leading professional organization committed to advancing the field of computing through research, education, and innovation. The ACM Fellows program honors the top 1 percent of ACM members whose outstanding contributions have significantly shaped the computing field. Below, we recognize the individuals named as 2024 ACM Fellows who have affirmed their willingness to be acknowledged by CRA.

Clark Barrett

Clark Barrett, Professor (Research) of Computer Science at Stanford University, was named an ACM Fellow for contributions to the theory, implementation, and application of SMT solving.

Satish Chandra

Satish Chandra, Software Engineer at Google, was named an ACM Fellow for contributions to the foundations and practice of software development tools.

Marsha Chechik

Marsha Chechik, Professor and former Chair of Computer Science at the University of Toronto, was named an ACM Fellow for contributions to formal reasoning for quality software development at scale.

CRA Congrats New Fellows and Members *(continued)*

Fred Chong

Fred Chong, Seymour Goodman Professor of Computer Science at the University of Chicago, was named an ACM Fellow for contributions to quantum computer architecture, compilation, and optimization.

Chong has played a leadership role in advancing quantum computing research within the broader computing community. He co-chaired the 5-Year Update to the Next Steps in Quantum Computing workshop, organized by the Computing Community Consortium (CCC), and co-authored the resulting workshop report. The workshop convened experts from both within and outside the quantum computing field to explore interdisciplinary approaches that can accelerate progress toward practical quantum systems.

Diane Cook

Diane Cook, Professor at Washington State University, was named an ACM Fellow for contributions to machine learning and digital health.

Edward Delp

Edward Delp, Charles William Harrison Distinguished Professor of Electrical and Computer Engineering at Purdue University, was named an ACM Fellow for contributions to multimedia security, image and video compression, and image-based dietary assessment.

Nate Foster

Nate Foster, Professor of Computer Science at Cornell University and Visiting Researcher at Jane Street, was named an ACM Fellow for contributions to applications of programming languages to networking.

Scott Hudson

Scott Hudson, Professor of Human-Computer Interaction in the Human-Computer Interaction Institute at Carnegie Mellon University, was named an ACM Fellow for contributions in user interface software, interactive devices, and computational fabrication applied to HCI.

Cliff Lampe

Cliff Lampe, Professor and Associate Dean for Academic Affairs in the School of Information at the University of Michigan, was named an ACM Fellow for contributions to social network systems and outstanding leadership in the ACM SIGCHI community. He has worked with CRA in the past in educating congressional delegations on the importance of computer science education.

Fatma Ozcan

Fatma Ozcan, a Principal Engineer at Systems Research@Google, was named an ACM Fellow for contributions to the field of scalable data management systems. She has been an active leader in CRA, serving on the CRA Board of Directors since 2020 and playing a pivotal role in CRA-Industry initiatives. As a founding member of the CRA-Industry Steering Committee, she has helped shape CRA's efforts to strengthen industry-academia collaboration and currently serves as its co-chair (2024–present).

She has also co-organized key CRA-Industry events, including the Best Practices on Using the Cloud for Computing Research Workshop (March 2022) and multiple CRA-Industry roundtables, such as Best Practices on Using the Cloud for Computing Research (September 2021) and Computing Research in Industry (November 2022).

CRA Congrats New Fellows and Members *(continued)*

Through these efforts, she has advanced discussions on industry best practices and fostered stronger connections between computing researchers in academia and industry.

Dhabaleswar K (DK) Panda

Dhabaleswar K. (DK) Panda, Professor and University Distinguished Scholar in the Department of Computer Science & Engineering at The Ohio State University, was named an ACM Fellow for contributions to high-performance and scalable communication in parallel and high-end computing systems.

Naren Ramakrishnan

Naren Ramakrishnan, Thomas L. Phillips Professor in the Department of Computer Science at Virginia Tech, was named an ACM Fellow for contributions to algorithms and systems for modeling and forecasting significant societal events. He was a member of CRA's Leadership in Science Policy Institute (LiSPI) cohort in Fall 2011.

Dana Randall

Dana Randall, Associate Dean for Access and Advancement, Professor of Computer Science, and Adjunct Professor of Mathematics at the Georgia Institute of Technology, was named an ACM Fellow for contributions to the theory of Markov chains and programmable active matter.

Claudio T. Silva

Claudio T. Silva, Professor of Computer Science and Data Science at New York University and a member of the Visualization, Imaging, and Data Analysis (VIDA) Center, was named an ACM Fellow for contributions to scientific and information visualization and to geometric computing.

Thad Starner

Thad Starner, Professor of Computing in the School of Interactive Computing at Georgia Institute of Technology, was named an ACM Fellow for contributions to and leadership in the wearable computing research community.

He demonstrated Telesign: Mobile Sign Language Recognition to members of the U.S. Congress at the Coalition for National Science Funding (CNSF) Capitol Hill Science Exhibition in 2002, as part of CRA's government affairs efforts to showcase the impact of federally funded computing research.

Anwar Walid

Anwar Walid, Director of AI Research at Defense Unicorns and Adjunct Professor at Columbia University, was named an ACM Fellow for contributions to the theory of multipath congestion control, its practical realization, and its deployment.

Haixun Wang

Haixun Wang, VP of Engineering and Head of AI at EvenUp Law, was named an ACM Fellow for contributions to graph-based systems and their application to text understanding.

Benjamin Zorn

Benjamin Zorn, a Partner Researcher at Microsoft Research, was named an ACM Fellow for contributions to programming language systems, including run-time performance, security, and usability in programming. He has been an active leader in CRA, serving on the CRA Board of Directors since 2022 and playing a pivotal role in CRA-Industry initiatives. As co-founder and co-chair of the CRA-Industry Committee (2021–2024), he helped establish it as a key forum for strengthening collaboration between academia and industry.

Zorn played a central role in launching major CRA-Industry initiatives, including the inaugural CRA-Industry Meeting at Snowbird (2022) and the CRA Workshop on Computing Research in Industry (2023). His leadership has contributed to expanding industry engagement within the computing research community.

In addition to his work with CRA-Industry, Zorn has supported CRA's strategic efforts through service on the CRA Strategic Planning Committee (2019–2020) and the Industry Working Group (2019–2020). As a member of the Computing Community Consortium (CCC) Council (2014–2020), he participated in task forces that shaped key research directions in computing.

His contributions have strengthened connections between academia and industry, advancing CRA's mission to support and sustain the computing research community.

IEEE Computer Society Fellows – 2025 Class

IEEE-CS is a leading professional organization dedicated to advancing computing technology and its applications for the benefit of society. The IEEE-CS Fellows program recognizes individuals with outstanding and extraordinary qualifications who have made significant contributions to computing research, education, and practice. Below, we celebrate the individuals named as 2025 IEEE-CS Fellows who have affirmed their willingness to be acknowledged by CRA.

Raheem Beyah

Raheem Beyah, Dean and Southern Company Chair in the College of Engineering at Georgia Tech, was named an IEEE Fellow for contributions in rogue device detection in the field of cybersecurity.

Yuriy Brun

Yuriy Brun, Professor at the University of Massachusetts Amherst, was named an IEEE Fellow for contributions to software bias mitigation and to software engineering automation.

Pin-Yu Chen

Pin-Yu Chen, Principal Research Scientist at IBM Research, was named an IEEE Fellow for contributions to machine learning robustness and AI safety.

Trent Jaeger

Trent Jaeger, Professor in the Department of Computer Science and Engineering and the Center for Research in Security and Privacy at the University of California, Riverside, was named an IEEE Fellow for contributions to research and education for operating systems and software security.

Aamer Jaleel

Aamer Jaleel, Principal Research Scientist at NVIDIA Research, was named an IEEE Fellow for contributions to high-performance cache design and memory-aware scheduling.

Charles A. Kamhoua

Charles A. Kamhoua, Team Leader at DEVCOM Army Research Laboratory, was named an IEEE Fellow for contributions to blockchain and game theory applied to cybersecurity.

Christopher Kruegel

Christopher Kruegel, Professor at UC Santa Barbara, was named an IEEE Fellow for contributions to security, malware detection, and vulnerability analysis.

Yiorgos Makris

Yiorgos Makris, Professor of Electrical and Computer Engineering at the University of Texas at Dallas and Director of the TRELA Lab, was named an IEEE Fellow for contributions to machine-learning-based design of trusted and reliable integrated circuits.

Stuart Oberman

Stuart Oberman, Vice President of GPU Engineering at NVIDIA, was named an IEEE Fellow for contributions to GPU computing for artificial intelligence.

Patrick Schaumont

Patrick Schaumont, Professor in the Electrical and Computer Engineering Department at Worcester Polytechnic Institute, was named an IEEE Fellow for contributions to the implementation and evaluation of hardware security. He has attended and contributed to CRA workshops in the past, such as the Computing Community Consortium (CCC) workshop on Mechanism Design for Improving Hardware Security in 2022.

Noah Snavely

Noah Snavely, Professor of Computer Science at Cornell Tech and Research Scientist at Google, was named an IEEE Fellow for contributions to computer vision and computer graphics.

Peilin Song

Peilin Song, Principal Research Scientist at the IBM T. J. Watson Research Center, was named an IEEE Fellow for contributions to imaging-based integrated-circuit diagnostics and detection.

Dong Tian

Dong Tian, Senior Director at InterDigital, Inc., was named an IEEE Fellow for contributions to 3D video compression, processing, and analysis.

Nalini Venkatasubramanian

Nalini Venkatasubramanian, Professor of Computer Science at the University of California, Irvine, was named an IEEE Fellow for contributions to the foundations of adaptive software and its application in enhancing community safety.

She is a recipient of the N²Women: Stars in Computer Networking and Communications award in 2020, and she co-authored the Computing Community Consortium (CCC) whitepaper on community resilience and public safety, titled Research Agenda in Intelligent Infrastructure to Enhance Disaster Management, Community Resilience, and Public Safety.

Brent Waters

Brent Waters, Professor of Computer Science at the University of Texas at Austin and NTT Research, was named an IEEE Fellow for contributions to cryptography and attribute-based encryption.

Steve Wilton

Steve Wilton, Professor in the Department of Electrical and Computer Engineering at the University of British Columbia, was named an IEEE Fellow for contributions to debugging methodologies and low-power FPGAs.

ChunSheng Xin

ChunSheng Xin, Dr. in the Department of Electrical and Computer Engineering at Old Dominion University, was named an IEEE Fellow for contributions to secure resource sharing and core network control for resilient computing.

Hongtu Zhu

Hongtu Zhu, Professor at The University of North Carolina at Chapel Hill, was named an IEEE Fellow for contributions to data integration in medical imaging and genetics, and applying learning in ridesharing.

ACM Distinguished Members – 2024 Class

The Association for Computing Machinery (ACM) is a leading professional organization dedicated to advancing the field of computing through research, education, and innovation. The ACM Distinguished Member program honors up to 10 percent of ACM's worldwide membership, recognizing individuals who have made significant accomplishments and lasting impacts in computing. To receive this distinction, nominees must have at least 15 years of professional experience and five years of ACM Professional Membership within the past decade. Below, we recognize the individuals named as 2024 ACM Distinguished Members who have affirmed their willingness to be acknowledged by CRA.

- *Pavan Aduri*, Professor and Interim Chair, Department of Computer Science, Iowa State University
- *Maria Florina Balcan*, Cadence Design Systems Professor of Computer Science, School of Computer Science, Carnegie Mellon University
- *Marina Blanton*, Associate Professor, Computer Science and Engineering, University at Buffalo

Yunan Chen

Yunan Chen, Professor of Informatics at the University of California Irvine, was named an ACM Distinguished Member.

She has participated in multiple CRA workshops related to computing and health, including the Computing Community Consortium (CCC) workshop on Research Opportunities in Sociotechnical Interventions for Health Disparity Reduction.

- *Emiliano De Cristofaro*, Professor, Department of Computer Science and Engineering, University of California Riverside, RAISE Institute

Magy Seif El-Nasr

Magy Seif El-Nasr, UC Presidential Chair and Professor in the Department of Computational Media at the University of California, Santa Cruz, was named an ACM Distinguished Member.

She serves as the Department Chair for Computational Media at UCSC's Silicon Valley campus, part of the Jack Baskin School of Engineering, and directs the Game User Interaction and Intelligence (GUII) Lab. She was a participant in the 2023 CRA Leadership in Science Policy Institute (LiSPI), where she contributed to discussions on advancing computing research and its policy implications.

Song Fu

Song Fu, Professor and Associate Chair for Research in the Department of Computer Science and Engineering at the University of North Texas, was named an ACM Distinguished Member.

He was a participant in the 2023 CRA Leadership Academy.

- *Shahram Ghandeharizadeh*, Associate Professor, Thomas Lord Computer Science Department, University of Southern California
- *Mohamed Hefeeda*, Professor, School of Computing Science, Simon Fraser University

Stephanie Ludi

Stephanie Ludi, Associate Dean for Academic Affairs and Professor in the Department of Computer Science and Engineering at the University of North Texas, was named an ACM Distinguished Member.

She participated in the 2023 CRA Leadership Academy and served on the 2025 CRA Leadership Academy Program Committee, which organized the February 2025 workshop. She was a featured speaker at the 2023 CRA-WP Grad Cohort for IDEALS workshop.

CRA Congrats New Fellows and Members *(continued)*

- *Prateek Mittal*, Professor of Electrical and Computer Engineering, Princeton University
- *Hung Q. Ngo*, VP of Research, RelationalAI
- Chunyi Peng, Associate Professor, Department of Computer Science, Purdue University
- *Andrew Petersen*, Professor, Teaching Stream, Mathematical and Computational Sciences, University of Toronto Mississauga

Florian Schaub

Florian Schaub, Associate Professor of Information and of Electrical Engineering and Computer Science at the University of Michigan, was named an ACM Distinguished Member.

He has actively participated in CRA workshops, including the Computing Community Consortium (CCC) workshop Supporting At-Risk Users through Responsible Computing in December 2024, and served as a mentor to a CRA Computing Innovation Fellow (CI Fellow). He also participated in Congressional Visit Day, advocating for computing research and policy issues in 2019.

Kelly Shaw

Kelly Shaw, Professor of Computer Science at Williams College, was named an ACM Distinguished Member.

She has been an active leader in CRA, serving on the CRA Board of Directors since 2024 as the representative of CRA's Education Committee (CRA-E). She has been a CRA-E Board member since 2020 and has served as CRA-E Co-Chair since 2022, playing a key role in advancing initiatives that support computing education and undergraduate research.

Shaw has contributed to several major CRA programs, including the NSF CSGrad4US Graduate Fellowship and Mentoring Program, UR2PhD, the CRA Outstanding Undergraduate Research Award, and the Career Landscape Workshop. Through these efforts, she has helped create opportunities for students and early-career researchers while strengthening pathways to graduate education in computing.

In addition to her work with CRA, Shaw is a Fellow of the ELATES Women in STEM Leadership program and a dedicated educator and mentor in the computing research community.

Gang (Gary) Tan

Gang (Gary) Tan, Professor, Department of Computer Science and Engineering, the Pennsylvania State University, was named an ACM Distinguished Member.

He is currently a member of the CRA Committee on Communications, which is responsible for developing and refining CRA's overall communications strategy.

Jeffrey Voas

Jeffrey Voas, Computer Scientist, Computer Security Division, National Institute of Standards and Technology (NIST), was named an ACM Distinguished Member.

He is the Editor-in-Chief of Computer magazine, the flagship publication of the IEEE Computer Society. Voas is a leading researcher in software and systems assurance, with significant contributions to the fields of cybersecurity, software reliability, and the trustworthiness of emerging technologies.

- *Shouhuai Xu*, Gallogly Chair Professor in Cybersecurity and Founding Director of the Laboratory for Cybersecurity Dynamics, University of Colorado Colorado Springs
- *Minlan Yu*, Gordon McKay Professor, Harvard School of Engineering and Applied Science
- *Lingming Zhang*, Associate Professor, Department of Computer Science, University of Illinois Urbana-Champaign

Honorees Based Outside of North America

AAAI Fellows – 2025 Class

Gal A. Kaminka

Gal A. Kaminka, Professor in the Department of Computer Science at Bar Ilan University, was elected as an AAAI Fellow for significant contributions to plan- and goal-recognition, collaborative multi-robot systems, and multi-agent systems exhibiting social intelligence.

Roberto Navigli

Roberto Navigli, Professor in the Department of Computer, Control, and Management Engineering at Sapienza University of Rome and Scientific Director at Babelscape, was elected as an AAAI Fellow for significant contributions to multilingual Natural Language Understanding and the development of widely recognized methods for knowledge resource construction, text disambiguation, and semantic parsing.

Hui Xiong

Hui Xiong, Chair Professor in the AI Thrust at The Hong Kong University of Science and Technology (Guangzhou), was elected as an AAAI Fellow for significant contributions to the field of artificial intelligence and mobile computing, and the development of the widely used Informer algorithm.

ACM Fellows – 2025 Class

Marcelo Arenas

Marcelo Arenas, Professor in the Department of Computer Science, School of Engineering at Pontificia Universidad Católica de Chile, was named an ACM Fellow for contributions to the foundations of data management.

Wei Chen

Wei Chen, Principal Researcher at the Theory Center, Microsoft Research Asia, was named an ACM Fellow for contributions to network influence maximization and combinatorial online learning.

Carla Fabiana Chiasserini

Carla Fabiana Chiasserini, Full Professor in the Department of Electronics and Telecommunications at Politecnico di Torino, was named an ACM Fellow for contributions to the design of high-performance mobile networks and services.

Falko Dressler

Falko Dressler, Professor in the Telecommunication Networks Group at Technische Universität Berlin, was named an ACM Fellow for contributions to the foundations of self-organization in wireless communication protocols in IoT and vehicular applications.

Niklas Elmqvist

Niklas Elmqvist, Professor in the Department of Computer Science at Aarhus University, was named an ACM Fellow for contributions to ubiquitous, immersive, and human-centered AI technologies for data visualization.

Michal Feldman

Michal Feldman, Professor of Computer Science at Tel Aviv University, was named an ACM Fellow for contributions to algorithmic game theory and the interface between computer science and economics.

Mohan Kankanhalli

Mohan Kankanhalli, Provost's Chair Professor of Computer Science in the School of Computing at the National University of Singapore, was named an ACM Fellow for contributions to multimedia content processing and multimedia security.

Irwin King

Irwin King, Professor of Computer Science and Engineering at The Chinese University of Hong Kong, was named an ACM Fellow for contributions to the theory and applications of machine learning in social computing.

Stefano Leonardi

Stefano Leonardi, Professor in the Department of Computer, Control, and Management Engineering Antonio Ruberti at Sapienza University of Rome, was named an ACM Fellow for contributions to the theory of algorithms, approximation algorithms, algorithmic mechanism design, and community service.

Sudip Misra

Sudip Misra, Professor of Computer Science and Engineering at the Indian Institute of Technology Kharagpur, was named an ACM Fellow for contributions to intelligent service-centric sensing and sustainable data processing in large-scale IoT networks.

Bashar Nuseibeh

Bashar Nuseibeh, Professor at The Open University, UK, was named an ACM Fellow for contributions to requirements engineering, improving software development practices, and user experiences.

Rasmus Pagh

Rasmus Pagh, Professor at the University of Copenhagen, was named an ACM Fellow for contributions to the theory and practice of randomized algorithms.

Abhik Roychoudhury

Abhik Roychoudhury, Provost's Chair Professor at the National University of Singapore, was named an ACM Fellow for contributions to software testing and analysis, including automated program repair and fuzz testing.

Guoliang Xing

Guoliang Xing, Professor in the Department of Information Engineering at The Chinese University of Hong Kong, was named an ACM Fellow for contributions to embedded AI and mobile computing systems.

Feng Zhao

Feng Zhao, Distinguished Visiting Professor at Tsinghua University, was named an ACM Fellow for contributions to the theories and practices of networked embedded sensing and the Internet of Things.

Justin Zobel

Justin Zobel, Redmond Barry Distinguished Professor in the School of Computing and Information Systems at the University of Melbourne, was named an ACM Fellow for contributions to data structures and algorithms for efficient search and storage.

IEEE Computer Society Fellows – 2025 Class

Battista Biggio

Battista Biggio, Professor in the Department of Electrical and Electronic Engineering at the University of Cagliari, Italy, was named an IEEE Fellow for contributions to the security of machine learning.

Tsong Yuen Chen

Tsong Yuen Chen, Professor of Software Engineering at Swinburne University of Technology, was named an IEEE Fellow for contributions to software testing through the invention of metamorphic testing and adaptive random testing.

John Grundy

John Grundy, ARC Laureate Professor of Software Systems and Cybersecurity at Monash University, was named an IEEE Fellow for contributions to automated software engineering. He is also an Australian Laureate Fellow and a past President of Computing Research and Education (CORE) Australasia.

Timothy Hospedales

Timothy Hospedales, Head of AI Research Europe at Samsung Research and Professor at the University of Edinburgh, was named an IEEE Fellow for contributions to data-efficient machine learning and meta-learning.

Jiankun Hu

Jiankun Hu, Professor in the School of Systems and Computing at The University of New South Wales (UNSW), was named an IEEE Fellow for contributions to biometrics security and anomaly intrusion detection.

Zi Helen Huang

Zi Helen Huang, Professor in the School of Electrical Engineering and Computer Science at The University of Queensland, was named an IEEE Fellow for contributions to multi-modal data management.

Jimmy Xiangji Huang

Jimmy Xiangji Huang, Tier 1 York Research Chair Professor and Director of the Information Retrieval and Knowledge Management Research Lab at York University, Toronto, Canada, was named an IEEE Fellow for contributions to information retrieval, web search, natural language processing, conversational systems, and their applications.

Joaquim Jorge

Joaquim Jorge, Professor of Computer Science and Engineering at Universidade de Lisboa, was named an IEEE Fellow for contributions to sketch-based interfaces, modeling, and virtual reality.

Andreas Krause

Andreas Krause, Professor of Computer Science and Chair of the ETH AI Center at ETH Zurich, was named an IEEE Fellow for contributions to active sensing, Bayesian optimization, and learning-based control.

Debdeep Mukhopadhyay

Debdeep Mukhopadhyay, Professor in the Department of Computer Science and Engineering at the Indian Institute of Technology Kharagpur and Director of the Secured Embedded Architecture Lab (SEAL), was named an IEEE Fellow for contributions to the design and analysis of hardware security primitives.

Wenjian Yu

Wenjian Yu, Professor in the Department of Computer Science and Technology at Tsinghua University, was named an IEEE Fellow for contributions to parasitic extraction, circuit simulation, and related numerical methods.

Wanlei Zhou

Wanlei Zhou, Vice Rector in the Faculty of Data Science at City University of Macau, was named an IEEE Fellow for contributions to cybersecurity and privacy.

Haibin Zhu

Haibin Zhu, Professor of Computer Science and Mathematics at Nipissing University, was named an IEEE Fellow for contributions to collaboration theory, models, and systems.

ACM Distinguished Members – 2025 Class

- *Ali C. Begen*, Professor of Computer Science, Özyeğin University
- *Constantine Dovrolis*, Director of the Center for Computational Science and Technology (CaSToRC) at The Cyprus Institute, Professor, School of Computer Science, Georgia Institute of Technology
- *Zhouchen Lin*, *Professor*, School of Intelligence Science and Technology, Peking University
- *Xiapu Luo*, Professor, Department of Computing, The Hong Kong Polytechnic University
- *Kim Marriott*, Professor, Department of Human-Centred Computing, Monash University
- *Cecilia Mascolo*, Professor, Department of Computer Science and Technology, University of Cambridge
- *Md Saidur Rahman*, Professor, Graph Drawing and Information Visualization Lab, Department of Computer Science and Engineering, Bangladesh University of Engineering and Technology
- *Johannes Schöning*, Professor of Computer Science, Institute for Computer Science, University of St. Gallen
- *Elena Simperl*, Professor of Computer Science, Department of Informatics, King's College London
- *Richa Singh*, Professor, Computer Science and Engineering, IIT Jodhpur

- *R. Venkatesh Babu*, Professor, Department of Computational and Data Sciences, Indian Institute of Science
- *Yu Wang*, Associate Professor, Department of Electrical Engineering, Tsinghua University
- *Xin Xia*, Chief Expert of Software Engineering Application Technology, Huawei Technologies, China
- *Yingfei Xiong*, Associate Professor with Tenure, Institute of Software, Peking University
- *Min Zhang*, Professor, Department of Computer Science and Technology, Tsinghua University

Celebrating Impact and Engaging the Community

CRA extends its heartfelt congratulations to this year's ACM, IEEE, and AAAI Fellows and ACM Distinguished Members. Their groundbreaking contributions continue to advance the frontiers of computing research, shaping the future of technology and society. We are especially grateful to those honorees who have dedicated their time and expertise to CRA's mission through service on committees, mentoring programs, and leadership initiatives.

If you are passionate about computing research and looking for ways to contribute to the community, we invite you to get involved with CRA. Volunteers play a critical role in strengthening and supporting the research ecosystem. Learn more about opportunities to engage by filling out our CRA Volunteer Form today!

CRA Volunteer Form

Navigating Teaching Careers in Computing: CRA-E Career Landscape Workshop Series

By Matt Hazenbush, Director of Communications

With the rapid expansion of computing programs across academic institutions, demand for teaching-focused faculty has never been higher. Many PhD-granting departments now offer dedicated teaching faculty tracks, while master's-granting and primarily undergraduate institutions continue to grow their faculty rosters. However, navigating the wide range of opportunities and understanding how to successfully enter this career path can be challenging.

To support those exploring teaching-focused careers, the CRA's Education committee (CRA-E) will be hosting its annual CRA-E Career Landscape Workshop Series in **May 2025**. This free webinar series will introduce attendees to the different types of teaching-oriented positions, discuss how to prepare for a teaching-focused career, and provide guidance on the application and hiring process.

CRA-E Career Landscape Workshop Series

Building on the success of past workshops, the **CRA-E Career Landscape Workshop Series** provides valuable insights from experienced faculty across a variety of institutions. Each 80-minute session includes panel presentations, Q&A with panelists, and small-group discussions for networking and mentoring.

This virtual workshop series is intended for **graduate students, postdocs, and industry professionals** who want to learn about academic career options with an emphasis on teaching. Attendees from all computing disciplines are welcome.

Workshop Series *(continued)*

Session Schedule:

- **Tuesday, May 6: What is the landscape of teaching-oriented careers?**
  - » Panelists: Nery Chapeton-Lamas (MiraCosta College), Drew Hilton (Duke University), Varsha Koushik (Colorado College), Suzanne Riviore (Sonoma State)
- **Tuesday, May 13: How can I prepare myself for a teaching-oriented career?**
  - » Panelists: Alan Jamieson (Northeastern University), Jeremiah Blanchard (University of Florida), Dietrich Geisler (Northwestern University), Lynn Kirabo (Harvey Mudd College)
- **Tuesday, May 20: How do I apply for teaching-oriented positions?**
  - » Panelists: Cynthia Taylor (Oberlin College), Kevin Lin (University of Washington), Victoria Dean (Olin College), Susanne Hambrusch (Purdue University)

All live sessions will be on Zoom at 6:30 PM ET / 5:30 PM CT / 4:30 PM MT / 3:30 PM PT.

Register Now

Each session is designed to provide attendees with both broad insights and personalized advice from experienced faculty. The combination of panel discussions, Q&A, and networking opportunities will help participants make informed career decisions and succeed in the hiring process.

Participants may attend all three sessions or choose the ones most relevant to their interests. In addition, organizers and panelists will host online office hours later in the summer to provide further guidance on application materials.

Preparing for the Workshop

Before attending, participants are encouraged to watch Teaching Faculty 101, a recorded session featuring Drew Hilton, Professor of the Practice in Electrical and Computing Engineering at Duke University. This video provides foundational insights into teaching-oriented careers and will help attendees get the most out of the live discussions.

If you are considering a teaching-focused faculty career, don't miss this opportunity to learn from experienced educators and gain valuable guidance on how to navigate this growing field.

Learn more and register today!

CCC Announces a Research Symposium on Computing Futures in May and Requests Nominations for Early-Career Researcher Poster Presentations

CCC
Computing Community Consortium
Catalyst

By Cat Gill, Communications Associate, CCC

The Computing Community Consortium (CCC) is very pleased to announce we will be hosting a Computing Futures Symposium in **Washington, D.C., May 15-16, 2025**.

Over the course of this two-day symposium, we will bring together researchers from federal agencies, civil society, academia, and industry to discuss the challenges and opportunities arising in today's AI-enhanced society.

CCC has a strong track record of envisioning the future of computing through workshops, roundtables, and white papers. Through this event we aim to inform members of federal and civil society about emerging computing research and inspire collaborations that will drive innovation and shape the next era of technological discovery. From foundational computing, to digital twins, to national security — we have an integral role to ensure everyone can prosper in a future shaped by AI.

The Symposium will feature poster presentations from early career researchers covering a broad range of computing research topics.

Nominate an Early Career Faculty Member

We would like to invite community members from CRA academic member units to nominate an early career faculty member from your unit to attend and present a poster at the symposium.

Please use this form to nominate a colleague.

Nominate a Colleague

Enhancing REU Programs: Kari George Joins CRA to Lead NSF CISE REU Evaluation

CERP
Computing Research Association
Evaluation

By Matt Hazenbush, Director of Communications

One of the key ways the Computing Research Association (CRA) supports undergraduate research experiences is through the NSF Research Experiences for Undergraduates (REU) Evaluation Project, managed by CRA's Center for Evaluating the Research Pipeline (CERP). This initiative provides valuable insights into how participation in REU programs influences students' educational and career trajectories in computing.

As part of this ongoing effort, CRA is excited to welcome **Kari George** as the new lead for the evaluation, bringing fresh perspectives and leadership to ensure the continued success and impact of the program.

NSF CISE REU Evaluation: A Critical Resource for PIs

The NSF CISE REU Evaluation, managed by CERP, provides no-cost comparative data to REU Site and Supplement Principal Investigators (PIs), helping them measure program effectiveness and refine their offerings. The project, which began in 2021 under an NSF contract, transitioned into a cooperative agreement with NSF CISE in 2025, integrating with CERP's broader research portfolio.

The evaluation process includes pre- and post-program surveys, longitudinal follow-ups, and comprehensive reports that allow PIs to compare their site's outcomes with national trends.

For the **2025 cycle, PIs must sign up by April 25** to participate. The process is simple — PIs can complete the online interest form, and in the coming weeks, the CERP team will reach out with details on next steps.

Sign Up for Free Evaluation Services

Insights from REU PIs & Community Impact

To improve the evaluation's effectiveness, CERP recently surveyed REU PIs who participated in 2022, 2023, or 2024. Here's what they had to say about how they use their evaluation reports:

- **Understanding Student Needs & Experience**
  "I use these reports to understand student feedback and improve our program for future iterations." – PI from 2024 Cohort
  "We noticed strong technical knowledge outcomes but weaker community and belonging measures. As a result, we launched a 1-credit Well-Being Strategies course, which is now in its first semester with 17 students." – PI from 2022 Cohort
- **Enhancing the REU Experience**
  "By analyzing CERP data, our REU team can identify areas where students need more support and refine the program for better student outcomes." – PI from 2024 Cohort
  "We use these reports to pinpoint program improvements. Adjustments made from last year's data are already proving beneficial." – PI from 2024 Cohort
- **Annual Reporting & NSF Grant Justification**
  "These reports are essential for our NSF annual reports, helping us demonstrate our REU's impact and plan future improvements." – PI from Worcester Polytechnic Institute (2023 Cohort)

For a deeper look at how PIs are using the evaluation to improve their programs, view the full NSF CISE REU Evaluation Community Feedback Report.

Welcoming Kari George

Kari George brings a strong background in computing research and program evaluation to CRA. Prior to joining CRA, she was a Computing Innovation (CI) Postdoctoral Fellow at the University of Illinois Urbana-Champaign and served as the Senior Data Manager of the BRAID Research Project at UCLA, where she earned a PhD in Higher Education and Organizational Change. Her research agenda has examined the educational and career trajectories of computing students and organizational change efforts within computing departments. Her expertise in computing education and research will help advance CERP's work in supporting computing research experiences for undergraduates.

We recently sat down with Kari to discuss her vision for the NSF CISE REU Evaluation.

Welcome to CRA, Kari! What drew you to this role?

KG: Having studied computing student experiences in higher education for many years, I know the critical importance of interactions with faculty and research experiences in supporting pathways to graduate degrees. I was drawn to this role because it allows me to use my research skills to generate insights that are directly and practically relevant to key stakeholders who shape student experiences. I'm excited to join the wonderful staff at CRA and CERP in engaging with the computing community to support programs and research that improves student experiences in computing.

What do you see as the key priorities for the NSF CISE REU Evaluation moving forward?

KG: With this project, we aim to assess and understand the short and long-term impacts of students' participation in REUs, including how it influences students' interest and graduate school and research careers, as well as the tangible skills students gain throughout the experience. Evaluating these and other measures during the REU and afterward is critical to understanding how students learn and can provide valuable insights to PIs to enable project improvements that support computing research pathways.

How can PIs best take advantage of the NSF CISE REU Evaluation?

KG: Certainly by signing up to do their REU evaluations with CERP! We look forward to providing PIs with valuable information about their own sites as well as comparative evaluation of REU across NSF CISE. Additionally, we would like to hear from PIs about the information that is most important to them and how they manage their REU programs so we can provide relevant analysis and insights for them.

How to Participate: Sign Up by April 25

New and existing NSF CISE REU PIs are encouraged to participate in this free evaluation.

Benefits include:

- Access to comparative reports benchmarking student outcomes against national REU data
- Insights into student experiences, career trajectories, and program effectiveness
- Data-driven support for future REU proposals and funding renewals

To enroll in the 2025 NSF CISE REU Evaluation, PIs must complete the online interest form by **April 25**. For more information, visit our website or contact cerpreu@cra.org.

The NSF CISE REU Evaluation project is currently supported through U.S. National Science Foundation cooperative agreement #2335072. Previous support came from the U.S. National Science Foundation contract (49100421C0010) and the data collection was approved by the Office of Management and Budget (OMB control number 3145-0265).

Solving the "Junior-Year Problem": CRA Quad Paper Proposes New Fellowship to Strengthen Domestic PhD Pathways

CRA-E
Computing Research Association
Education

By Erik Russell, Director of Educational Initiatives, CRA-E and Matt Hazenbush, Director of Communications

The Computing Research Association's Education Committee (CRA-E) led the development of a new CRA Quadrennial Paper, Reversing the Computing Research Workforce Shortfall: Bolstering Domestic Student Pathways to PhDs, which highlights the urgent need for increased funding and support to strengthen domestic pathways to computing PhDs.

The paper, authored by **Susanne Hambrusch** (Purdue University), **Lori Pollock** (University of Delaware), **Mary Hall** (University of Utah), and **Nancy M. Amato** (University of Illinois Urbana-Champaign), proposes establishing a new **National Computing Research Workforce Fellowship** to directly address a critical shortfall in domestic PhD production.


2024-2025 CRA Quadrennial Paper

Reversing the Computing Research Workforce Shortfall: Bolstering Domestic Student Pathways to PhDs

Susanne Hambrusch (Purdue University), Lori Pollock (University of Delaware), Mary Hall (University of Utah), Nancy M. Amato (University of Illinois Urbana-Champaign)

To sustain innovation and safeguard national security, the U.S. must strengthen domestic pathways to computing PhDs by engaging talented undergraduates early — before they are committed to industry — with research experiences, mentorship, and financial support for graduate studies.

The U.S. has long relied on advancements fueled by computing research to drive innovation and sustain its global leadership in technology. However, we are facing a challenge that poses a significant threat to national security and undermines America's ability to sustain its competitive edge and innovate in key areas like artificial intelligence, cybersecurity, nanotechnology, quantum computing, and defense technologies. While the demand for computing talent is skyrocketing, the number of PhD degrees in computing among domestic students has seen only modest growth.

Between 2010 and 2023, the number of domestic computing bachelor's graduates increased by over 65,000 annually (almost a threefold increase), reflecting both a surge in student interest and computing's central role in shaping the modern world and driving innovation across industries. However, this growth has not extended to the doctoral level, where the number of domestic PhD graduates increased by only 433 students (a 0.5x increase). This loss of domestic talent from our research training pipeline threatens technological progress and limits the U.S.'s ability to cultivate the advanced expertise needed to remain competitive in critical research fields.

Strengthening domestic PhD talent is not only important for sustaining innovation but is also critical for national security. Domestic PhD graduates are better positioned to obtain security clearances, which are essential for working on sensitive government projects, especially in areas like defense, cybersecurity, and intelligence. Continuing on our current path leaves the U.S. vulnerable to disruptions that could compromise the workforce needed to maintain leadership in key research areas.

2024-2025 CRA Quadrennial Paper 1

Read the Paper

Addressing an Urgent Workforce Crisis

Computing research drives innovation, national security, and global competitiveness. However, the United States faces a growing crisis: while student interest in computing at the undergraduate level has surged dramatically, growth in domestic PhD graduates has remained stagnant. From 2010 to 2023, annual domestic computing bachelor's degrees grew by over 65,000 — nearly tripling — but PhDs among domestic students increased by only 433 graduates. This disparity weakens the nation's ability to sustain technological advancement, especially in critical fields like artificial intelligence, cybersecurity, and quantum computing.

This shortfall is not just an academic concern; it directly impacts national security. Domestic PhD graduates are crucial for sensitive positions requiring security clearances in defense, cybersecurity, and intelligence sectors. Continued loss of talent from the PhD pipeline risks undermining U.S. technological leadership and security interests.

A Critical Gap in Current Efforts

Current programs funded by the U.S. National Science Foundation (NSF) and private sectors, such as Research Experiences for Undergraduates (REUs), NSF Graduate Research Fellowships (GRFP), and the CRA managed NSF Distributed REU (DREU) and NSF CSGrad4US Fellowship programs, provide essential, but limited support.

These programs typically reach students already inclined toward research careers. However, a significant number of talented undergraduates opt for lucrative industry internships during their junior year, often committing to industry employment before seriously considering graduate study.

The CRA-E-led Quadrennial Paper identifies this crucial moment — the junior year — as the optimal point for intervention, before industry recruitment leads students away from potential research careers.

National Computing Research Workforce Fellowship

To address this pivotal gap, the authors propose a comprehensive new initiative: the **National Computing Research Workforce Fellowship**. The program would engage students beginning in their junior year, offering an extended undergraduate research experience, mentorship, and robust financial support for those who continue to PhD programs.

Key components of the proposed fellowship include:

- **Extended Undergraduate Research Experiences:** Students begin research in their junior year and continue through their senior year, gaining direct exposure to research careers.
- **Mentorship and Career Guidance:** Personalized guidance helps fellows navigate graduate applications, clarify career pathways, and build connections.
- **Graduate Fellowship Support:** Fellows admitted to PhD programs receive funding covering tuition, stipends, and research expenses, alleviating financial pressures.
- **Internship Opportunities:** Graduate fellows gain access to internships in government labs, federal agencies, and industry, further expanding career opportunities.

The Urgent Need for Funding and Action

The authors stress that immediate funding and policy support are essential to implementing this fellowship. Without urgent investment, the U.S. risks falling further behind, jeopardizing its technological leadership and national security.

By intervening at the junior year, the proposed fellowship can retain and nurture talent, significantly increasing domestic PhD production and strengthening the research workforce.

A Strategic Investment in America's Future

The National Computing Research Workforce Fellowship represents a strategic investment in sustaining America's competitive edge. By actively supporting talented students who might otherwise turn to industry careers, this program would bolster U.S. research capabilities, safeguard national security, and foster a more sustainable computing research community.

To learn more about the proposed **National Computing Research Workforce Fellowship** and how it could significantly strengthen domestic PhD pathways in computing, read the full quadrennial paper, Reversing the Computing Research Workforce Shortfall: Bolstering Domestic Student Pathways to PhDs. You can also explore the full CRA Quadrennial Paper series, which highlights key challenges and research opportunities across computing fields, to understand how the computing research community is shaping strategies to address national priorities.

Read the Paper

Expanding the Pipeline - From Industry to Academia: How the NSF CSGrad4US Mentoring Program Is Transforming Pathways to Graduate School

CRA-WP
Computing Research Association
Widening Participation

By Eniola Idowu, Research Associate, CERP

For professionals working in computing, the decision to return to graduate school can be daunting. Many aspiring researchers find the transition challenging due to uncertainties around the application process, financial considerations, and balancing academic expectations with prior industry experience.

The NSF CSGrad4US Mentoring Program, led by the Computing Research Association's Committees on Education (CRA-E) and Widening Participation (CRA-WP), addresses these barriers head-on. Designed specifically to support and mentor recipients of the NSF CSGrad4US Graduate Fellowships who are returning to graduate school after time in the workforce to pursue doctoral degrees in computing, the program provides structured mentorship, professional coaching, and a strong support network to ensure professionals successfully navigate the path back to academia.

To assess the program's impact, CRA's Center for Evaluating the Research Pipeline (CERP) conducted evaluations of the first two NSF CSGrad4US cohorts. The findings show that the program is effectively preparing professionals for graduate school, strengthening mentorship networks, and identifying areas for continued improvement.

These insights not only validate the program's success but also provide a roadmap for refining future iterations of NSF CSGrad4US. For more details on NSF CSGrad4US's Evaluation, see the **March CERP infographic**.

NSF CSGrad4US Increases Graduate School Readiness

One of the most significant takeaways from the evaluation is that NSF CSGrad4US is equipping participants with the knowledge and confidence needed to apply to doctoral programs successfully. Many career changers enter the application process feeling uncertain about how to select the right program, craft a competitive application, and secure funding. Through group information and sessions and one-on-one mentorship, NSF CSGrad4US has helped program participants gain clarity on these critical steps.

Findings from the first two cohorts show that participants reported a greater understanding of the graduate school application process, improved confidence in preparing strong applications, and the likelihood of securing admission. By the end of their first year in the NSF CSGrad4US mentoring program, a significant number of program participants had been accepted into doctoral graduate programs, demonstrating that the program's support mechanisms are effectively guiding professionals through this transition.

Beyond application assistance, the NSF CSGrad4US Mentoring Program also helps mentees consider their long-term academic and career goals. Many mentees entered the program unsure of how their industry experience would translate to research environments. Through discussions with their coaches, they developed a clearer understanding of how to align their professional expertise with academic research expectations. This aspect of the program has been particularly valuable in ensuring that career changers approach graduate school with confidence and purpose.

Mentorship and Peer Support Drive Success

Returning to school after years in the workforce can feel isolating, but the NSF CSGrad4US Mentoring Program provides their mentees with a strong sense of community. Both cohorts reported significant improvements in their access to mentorship and professional networks after their first year in the program. Program participants valued the program's one-on-one coaching model, which allowed them to receive tailored advice on topics such as selecting research advisors, navigating the admissions process, and adapting to the expectations of graduate study.

Expanding the Pipeline *(continued)*

In addition to individualized mentorship, peer support emerged as a critical factor in participants' success. Many program participants found encouragement from connecting with others who were undergoing the same transition. Cohort-based networking opportunities helped them establish relationships with faculty, peers, and NSF CSGrad4US Fellows currently in PhD programs, creating a support system that extended beyond the mentoring program itself. These connections not only provided academic and professional guidance but also helped participants manage the personal and emotional aspects of returning to school.

The evaluations also highlighted the importance of structured networking opportunities. The mentees benefited from engagement with faculty members who could offer insight into the realities of academia. Learning from those who had successfully navigated similar paths gave program participants fellows a more realistic perspective on what to expect in graduate school.

Looking Forward: Strengthening the Pipeline

The NSF CSGrad4US mentoring program has already proven to be an important initiative in expanding pathways to graduate education for returning doctoral students in computing. By addressing the unique challenges faced by professionals returning to academia, the program has helped expand computing research and support individuals from industry and research roles to successfully transition into graduate programs.

Moving forward, the NSF CSGrad4US Mentoring Program continues to build on its success by improving its efforts. Strengthening financial resources, expanding peer mentorship opportunities, and refining mentor-mentee matching could promote its impact. Additionally, building long-term support pathways to help participants succeed beyond the admissions process could ensure that they not only enter PhD programs but also thrive once they are there.

The success of the NSF CSGrad4US Mentoring Program shows the importance of mentorship, structured guidance, and community in supporting career changers in computing and their transitions to doctoral programs. By continuing to refine and expand this mentorship model, the program can serve as a leading example of how to build supportive pathways to acquiring a PhD in computing. With each new cohort, NSF CSGrad4US is helping to reshape the landscape of computing research, ensuring that individuals with a variety of experiences and backgrounds can contribute to the field in meaningful ways.

About the Author

Eniola Idowu is a Research Associate for the Center for Evaluating the Research Pipeline (CERP) at the Computing Research Association (CRA). Her work at CERP focuses on conducting and leading the evaluation for a selection of programs focused on broadening participation at the higher education level. She currently serves as the lead evaluator for CRA Committee on Widening Participation (CRA-WP) programs.

Infographic: The Impact of NSF CSGrad4US on Graduate School Success for Returning Professionals

CERP
Computing Research Association
Evaluation

By Eniola Idowu, Research Associate, CERP

For professionals transitioning from industry to academia, pursuing a graduate degree in computing can present various challenges. Many returning students face hurdles like adapting to academic culture, honing research skills, and building a strong support system. These challenges can be particularly daunting without mentorship and guidance.

To address these needs, the NSF CSGrad4US Mentoring Program, a collaboration between the Computing Research Association's Committees on Education (CRA-E) and Widening Participation (CRA-WP), was specifically designed to support and mentor recipients of the NSF CSGrad4US Graduate Fellowships who are returning to graduate school for a PhD in computing after working in industry. Through mentorship, coaching, and structured guidance, the program helps participants navigate the process of graduate school applications, admissions, and the transition into academic life.

Over the past two years, the Center for Evaluating the Research Pipeline (CERP) has conducted a comprehensive, multi-year evaluation of the program's impact. Using a comparative pre-posttest design, the series of infographics presented below highlight key insights from Year 2 of the evaluation. It compares the first-year experiences of program participants with a matched group of first-year doctoral students, who also transitioned from the workforce, and participated in the Fall 2022 and 2023 Data Buddies Surveys.

The data presented focuses on 20 mentees from Cohort 1 (out of 31 mentees total) and 26 from Cohort 2 (out of 68 mentees total), who enrolled in doctoral programs.

Creating a Sense of Belonging in Graduate School

The importance of feeling connected and part of an academic community is necessary, especially for students transitioning into graduate programs after years in the workforce. Here's how the NSF CSGrad4US Mentoring Program made a difference:

1. Cohort 1 mentees showed significant improvement in feeling part of a community of scientists compared to their peers, which may help them to feel connected to their peers and other networks in their programs.

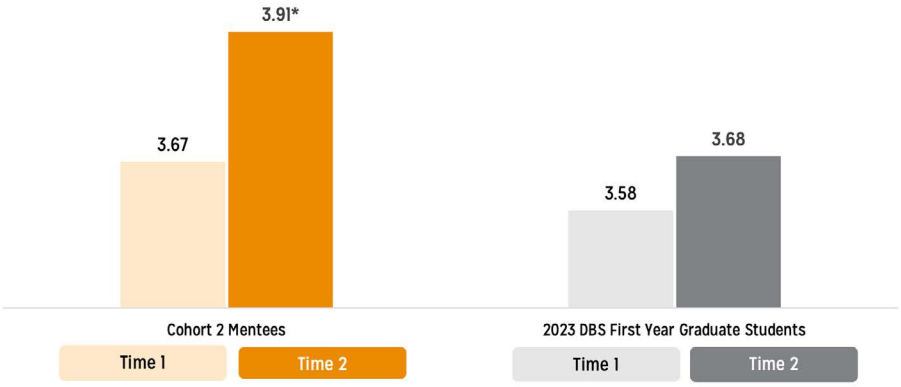
Cohort 1 NSF CSGrad4US mentees reported a strong sense of belonging to the scientific community after completing their first year in the program.

Source: Center for Evaluating the Research Pipeline, Computing Research Association.
Notes: This data only focused on past NSF CSGrad4US mentees who enrolled in their doctoral programs and completed both pre and post program surveys N for Cohort 1 = 17-20; N for 2022 DBS Comp Group (first-year graduate students who transitioned from the workforce) = 19-21. An asterisk (*) indicates that the paired sample test was significant at $p < .05$. Scale as the following: (1) Strongly disagree – (5) Strongly agree.

Infographic *(continued)*

2. By the end of their first year, Cohort 2 mentees also showed a noticeable improvement in their overall sense of belonging.

Cohort 2 NSF CSGrad4US mentees showed significant improvements in their overall sense of belonging after completing their first year in their programs.

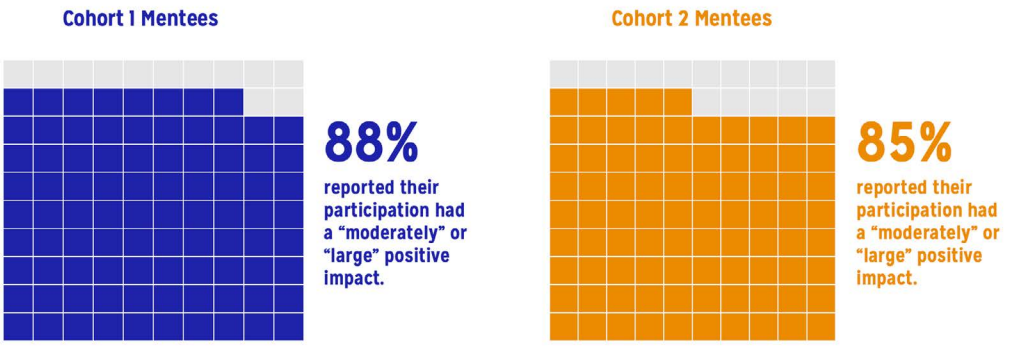


Source: Center for Evaluating the Research Pipeline, Computing Research Association
Notes: This data only focused on past NSF CSGrad4US mentees who are enrolled in doctoral programs and completed both pre and post surveys. N for Cohort 2 = 21-26; N for 2023 DBS Comp Group (first-year graduate students who transitioned from the workforce) = 41-53. An asterisk (*) indicates that the paired sample test was significant at p < .05. (1) Strongly disagree - (5) Strongly Agree.

Fostering Graduate School Confidence and Preparedness

1. Cohort 1 was more likely to agree that they will have a successful graduate experience, which indicates how NSF CSGrad4US mentorship helped them to establish strong expectations for their graduate school readiness.
2. Both Cohorts 1 and 2 felt equally confident that they received valuable research experience, which highlights the program's impact in preparing program participants for the research demands of graduate school.

How do you think your involvement in the NSF CSGrad4US program affected your ability to achieve your graduate school goals?

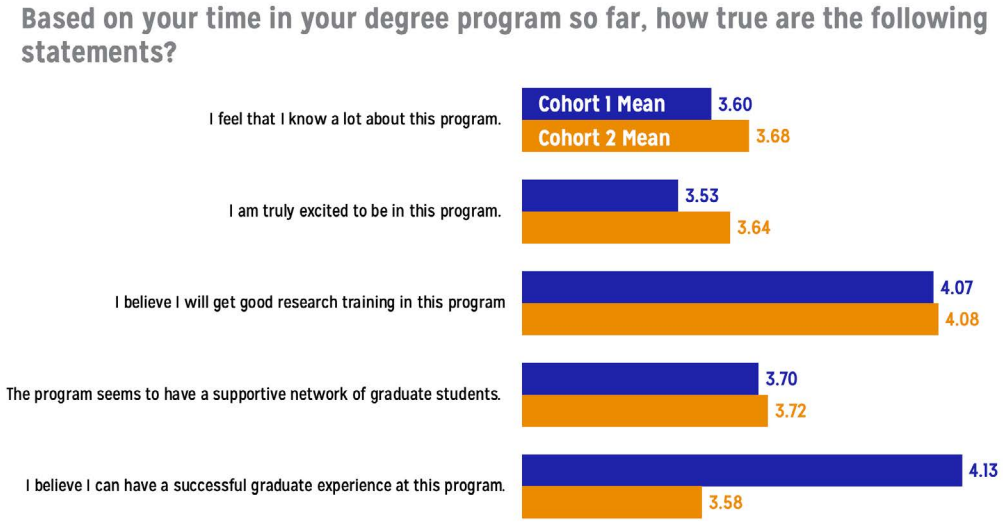


Source: Center for Evaluating the Research Pipeline, Computing Research Association
Notes: This data only focused on past NSF CSGrad4US mentees who are enrolled in doctoral programs and completed both pre and post program surveys. N for Cohort 1 = 20; N for Cohort 2 = 26. The following scale: (1) A large negative impact - (7) A large positive impact.

Positive Impact of NSF CSGrad4US on Achieving Graduate School Goals

Both cohorts of NSF CSGrad4US mentees reported that the program significantly helped them achieve their graduate school aspirations:

1. The program prepared the participants with the necessary guidance not just for applying to graduate programs, but also for navigating their first year successfully.
2. Mentees expressed feeling more confident in achieving their graduate school goals, thanks to the continuous mentorship and peer support.



Source: Center for Evaluating the Research Pipeline, Computing Research Association
Notes: This data only focused on past NSF CSGrad4US mentees who are enrolled in their doctoral programs. N for Cohort 1 = 20; N for Cohort 2 = 26. The following scale: (1) Not at all true- (5) Extremely true.

Implications for the Broader Computing Community

The results from this evaluation offer valuable insights for the broader computing community, particularly in fostering the success of graduate students from non-traditional pathways**:**

1. **Building a sense of belonging and confidence** is essential to fostering student success. The program's focus on creating a supportive academic community and network helps mentees to feel connected with their peers in graduate school.
2. **Structured coaching and mentorship** are needed in helping students navigate the transition into graduate school and receiving the support needed to thrive.
3. The program aims **to strengthen the graduate school pipeline in computing and support** those transitioning from industry to academia.

By continuing to highlight the impact of NSF CSGrad4US Mentoring Program, the computing community can create more inclusive environments that empower returning students to succeed in graduate school by strengthening the pipeline of talented researchers in the field.

Notes:

- The data analyzed for these analyses were collected by the Center for Evaluating the Research Pipeline via the following evaluation surveys:
  - » NSF CSGrad4US Cohort 1 Follow-Up Program Surveys
  - » NSF CSGrad4US Cohort 2 Follow-Up Program Surveys
  - » Fall 2022 Data Buddies Survey
  - » Fall 2023 Data Buddies Survey
- Due to attrition in longitudinal sizes, sample sizes and survey response rates are small for both cohorts.
- The statistical analysis included in the first and second graphs was conducted using a paired sample t- test. An asterisk (*) in the graphic indicates that group differences in means differ at $p < .05$.

This analysis is brought to you by the CRA's Center for Evaluating the Research Pipeline (CERP). CERP provides social science research and comparative evaluation for the computing community. Subscribe to the CERP newsletter here. *Check out CERP's activities and find out how to engage on* CERP's website. *For more information on the analyses and program impact, please refer to the evaluation reports* here.

This material is based upon work supported by the U.S. National Science Foundation under grant numbers CNS-2123180 and CNS-2231962. 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 U.S. National Science Foundation.

NSF CSGrad4US Fellows - Get to Know Mora Labisi

CRA
Computing Research Association

By Elora Daniels, Communications Associate

Returning to academia can be a challenging endeavor; knowing what makes your application shine and how to narrow down your research focus can feel overwhelming. That's where the NSF CSGrad4US Graduate Fellowship and Mentoring Program comes in.

The NSF CSGrad4US program supports industry professionals wanting to go back to school to get their PhD. The first phase of the program matches individuals with a mentor to help guide them through their application process and support them in their journey from industry professional to PhD student. Once accepted into a PhD program, students then become an NSFCSGrad4US Fellow, which notably includes funding for their research.

Mora Labisi is an NSF CSGrad4US Fellow, currently pursuing a joint PhD in computer science and learning sciences at Northwestern University. Before her return to academia, Mora worked as a Software Engineer at Starbucks Technology. During her time as an

industry professional, she recognized the need to "shed light on the importance of comprehensive and effective education in shaping skilled professionals," which influenced her decision to return to school.

She recently sat down with us to share her insights into being an NSF CSGrad4US Fellow.

How did you learn about the NSF CSGrad4US Fellowship program?
I reconnected with one of my professors from undergrad, Dr. Tingting Chen, and became involved in her nonprofit Code The Spectrum, an organization dedicated to providing neurodivergent people of various ages with technical training and direct connections to meaningful opportunities in the tech industry. In particular, I worked as Technical Programming Co-Chair for the organization's first-ever Inclusive Coding Festival, where I collaborated with and heard from inspiring professors on a weekly basis. It was through my work on the ICF that I began to think seriously about pursuing a PhD and becoming a computer science professor who can make an impact teaching the next generation of computer science professionals.

What has been the most rewarding part of being an NSF CSGrad4US Fellow?
The honor of having secured funding for the duration of my PhD cannot be understated. Thanks to this fellowship, I have the freedom to think seriously about my research as a first-year PhD Student without having to worry about securing the appropriate funding.

What would your advice be to those interested in applying?
Don't be afraid to tell your story. I think being able to tell your story does a great job of allowing you to show off your achievements and accomplishments in a way that also highlights your individual journey and potential as a person.

Through your mentoring experience, did you have any 'lightbulb moments' of insight about your career or earning a PhD? If so, what were they?
In regards to the PhD application process, getting a transparent look at what an admissions committee looks for and how applicants are prioritized gave me the freedom that comes with knowing that anything beyond my application is out of my control! After having that realization, all I had to do was prepare my application materials and tell my story, and the people and programs that aligned with me would find their way to me.

How do you hope to improve the field of computing beyond your time as an NSF CSGrad4US Fellow?
Ultimately, I intend to bring empathy and passion to the field – especially when it comes to female computer science majors. It's comforting to know that there are plenty of initiatives dedicated to introducing students to Computer Science while they're in elementary, middle, and high school. However, I can't help but be concerned about the lack of easily accessible support for these students beyond the K-12 system.

I believe we shouldn't leave these students to their own devices as they are tasked with the challenge of navigating life as a computer science major, and I'm dedicated to providing sufficient education, support, and guidance for the future computer science students I will have the honor of teaching in the future.

What would you say to someone who is thinking about going back to school for a PhD in computing?
Making the switch back to academia from industry puts you in a unique position that not many people find themselves in. As

someone in this position, you have a lot to offer and bring in a new perspective that not many grad students (and even professors) may have. If you feel the calling to return to academia, go for it!

Is there anything else you'd like to share about your experience as an NSF CSGrad4US Fellow?
I am so thankful that I found my way to the NSF CSGrad4US Fellowship. Attempting to return to academia on my own would have been overwhelming, to say the least. It's thanks to the resources, funding, and community that CSGrad4US offers that I've been able to embark on my PhD journey!

Ready to start the journey to your PhD?

Applications for the 2025 cycle are now open! Learn more about the NSF CSGrad4US program at cra.org/csgrad4us. Applications are due **May 31, 2025**.

Learn More and Apply

UR2PhD Makes It Easier to Bring Meaningful Research Experiences to Your Students

By Julia Sepulveda, Senior Program Associate, CRA-E

The Computing Research Association (CRA)'s UR2PhD program was started in 2023 with the goal of expanding computing pathways and cultivating a more robust and skilled workforce. Since then, over seven institutions across the United States and Canada have partnered with the team to increase the training and support their students and faculty can access.

The University of Waterloo, in Waterloo, Ontario, Canada is one such school.

UNIVERSITY OF WATERLOO
DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE

Building Recruitment Success

In fall of 2023, **Edith Law**, Associate Professor at the David R. Cheriton School of Computer Science and local coordinator for UR2PhD at Waterloo, recruited 31 undergraduates and 14 graduate students as participants in our courses. Her initial experience was a bit of work — she developed targeted messaging and marketing that would encourage first-time researchers to explore the opportunity.

Last fall, after iterating on her recruitment process, she was able to engage 36 undergraduates and 14 graduate students.

Creating Impactful Experiences

Participants at the University of Waterloo benefited from UR2PhD's activities — undergraduates learned foundational research skills while applying them to their projects, and graduate students engaged in community discussions about student development and research productivity.

Through UR2PhD's courses, students were able to build and hone research and research-related skills, like communications, teamwork, and self-confidence. Beyond building their knowledge, participants expanded their sense of community locally through weekly research meetups involving panels, presentations, and social mixers.

Student Voices: Impact of UR2PhD

Participating in the UR2PhD program enabled the University of Waterloo, a university with a strong co-op program, to encourage students to understand the value of undergraduate research.

One participant, **Sam Jiayou Zhong**, shared that his experience empowered him to think about and approach problems — even those beyond research — more systematically. Sam shared, "This program has been instrumental in helping me achieve my initial goal of gaining research experience, and it also opened my eyes to the broader possibilities of academic and professional growth through research."

Reflecting on his experience in the research training course over fall 2024, Sam added that the experience significantly changed his perspective. "Personally, it has boosted my confidence in engaging with complex ideas, and professionally, it has equipped me with tools and insights that will be invaluable in my future endeavors. I would wholeheartedly recommend this program to other undergraduates, especially those without prior research experience. It serves as a perfect starting point to explore the world of academia, guided by supportive mentors and structured learning opportunities."

Law concurs with this sentiment, noting, "without this program, many undergraduate students would have only a vague notion of what research is and a false impression that graduate school is simply not for them. Building a community of students collectively exploring research is extremely effective in fostering both knowledge and confidence."

Graduate student participant **Joy Idialu** added, "[it] was an incredibly rewarding experience. The program not only allowed me to guide a group of talented students through their first computing research project, focusing on machine learning, but also equipped me with valuable training which enhanced my mentoring skills. Each mentoring session was a chance to apply these best practices, share my passion for mentorship, and witness the remarkable development of these young researchers."

Joy noted that her participation was empowering not only because it taught her valuable skills, but also because it enabled her to pay it forward to a community she's passionate about. She added, "It was truly inspiring to support their journey and play a role in a program that champions the presence of women in the tech field."

Institutional Partner Guide

The UR2PhD program leadership team is grateful to partner with institutions like the University of Waterloo that emphasize preparing students for life after college. To make it easier for departments to set up and adapt local processes, the UR2PhD team has created an institutional partner guide, available on the UR2PhD university resource webpage.

Get Involved in 2025

The UR2PhD program is accepting institutional partners for 2025! Institutions that plan to participate in the summer term should apply by **April 30, 2025**.

If you'd like to learn more about how your department can get involved, reach out to our team at ur2phd@cra.org.

Undergraduates: Explore How Computing Research Drives Social Impact at UR2PhD's Workshop

By Julia Sepulveda, Senior Program Associate, CRA-E

The Computing Research Association (CRA)'s UR2PhD program is dedicated to helping undergraduates gain the knowledge, community, and support they need to thrive as researchers. Through a series of structured activities, UR2PhD provides students with opportunities to explore research, develop essential skills, and connect with mentors who can guide their academic and professional growth.

Expanding Access to Research Workshops

Last year, the UR2PhD team hosted eight workshops across the fall and spring, engaging more than 200 unique undergraduate students. These workshops helped students expand their understanding of research — what it is, what it can look like, and how it can impact their academic and career trajectory. Throughout the series, students heard from researchers across different disciplines and career stages, gaining insights into the many opportunities within computing research.

This spring, the team is preparing to host workshops that continue to explore computing and its many applications. In addition, UR2PhD aims to provide more opportunities for students across North America to engage with one another and build critical research skills.

Join Our Upcoming Workshop - Research and Social Impact

Whether you're an undergraduate with multiple research projects under your belt or just beginning to explore research, we invite all North American undergraduates to participate in our workshops.

Our next workshop, Research and Social Impact**,** will provide students with an opportunity to hear from active researchers who seek to make positive change through their projects. Students will not only learn about ongoing work in the field but also how research is presented to various audiences. Attendees are encouraged to drop by and connect with the UR2PhD team and guest speakers.

Workshop Date: Friday, March 28, 2025

Time: 1:00 - 2:00 pm ET

Register Here

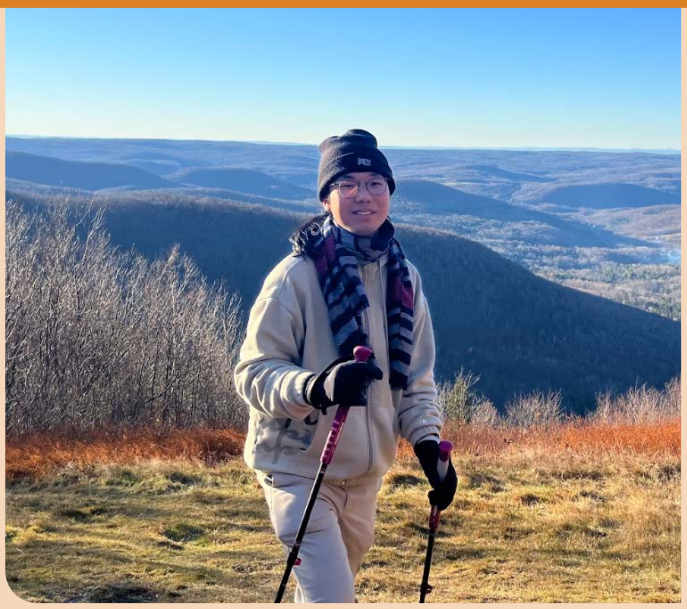
To participate, students must register in advance of the session. We look forward to seeing you there!

Undergraduate Research Highlight: Helping Computer Science Research by Improving Online Surveys

CRA-E
Computing Research Association
Education

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

This Q&A highlight features Ye Shu, an Honorable Mention for the 2024 CRA Outstanding Undergraduate Researchers Award. Ye finished his undergrad from Williams College with a double major in Computer Science and Philosophy and a concentration in Cognitive Science. They are now pursuing a PhD in Computer Science at UC San Diego.



Ye Shu, B.A. in Computer Science and Philosophy, Williams College

How did you get involved in computing research?

During the summer before my sophomore year, I heard that Prof. Daniel Barowy had developed an autograder system, which reminded me of a project I was working on to automate testing and deployment processes when someone pushed code changes to a git repo. I approached Dan and asked what he thought about these automations. It turned out that we saw eye to eye and he took me on as a research assistant to implement a git action-triggered autograder. By next summer, I was convinced that I liked doing research and wanted to try doing it full-time, so I applied to Williams College's summer research program and was unsurprisingly paired with Dan.

Can you tell us about your research?

One of the projects I worked on addresses the difficulties that can arise when implementing an online survey as part of a research project. We designed a programming language that allows scientists to describe their surveys using a template with potential synonymous word choices, similar to the game Mad-Libs. Then, during runtime, the system distributes the survey, each time selecting a different way of wording. The idea is similar to a randomized controlled trial, where each correspondent sees the same survey but with slightly altered wording, thus mitigating the potential bias introduced by word choices in the aggregated result.

I also discovered that authentic online survey results will stand out from the random background noise of inattentive respondents who use tactics like selecting random answers. I built our algorithm to filter out these inattentive responses. This work will help scientists with little CS or statistical background to design and automatically conduct robust online surveys. I presented the preliminary results at PLATEAU 2024, a workshop on the intersection of HCI and PL. We are preparing the full paper for submission to a conference.

What challenges did you encounter throughout the research process?

One unique thing about attending a small liberal arts college is that there are no graduate students, so undergraduate students like me get to work with faculty members directly and take charge of the research projects. While this gives us more space to explore and learn as independent researchers, it also presents challenges early on as there are no senior graduate students to ask for help. Fortunately, my faculty advisor, Dan, helped me close my knowledge gaps with lots of hands-on mentoring. As I slowly gained experience from trials and errors, Dan also gave me more independence to explore and steer the project into directions that we both were interested in.

How has your interest in philosophy influenced your research path?

During my philosophy training, we were rigorously trained to read broadly, understand other people's ideas, and write extensively about our own ideas. These skills have proven to be extremely useful for my research, as these are also the three things I do: read relevant literature to know what others are doing, identify gaps in current works, write about our ideas, and communicate them with peers. In this regard, my philosophical training prepared me well for a career in research. It also allows me to look at many computing problems from an entirely different perspective. When I was applying for IRB approval for the survey project, my formal training in applied ethics allowed me to better reason about potential consequences of my research and design informed disclosure and anonymized data processing procedures. Ethical considerations become ever more relevant to me, because my PhD research is in the fields of security and measurement, where we have to interact with real-world systems and impact real people behind them.

What do you think are the most important qualities for a successful researcher?

Resiliency and ability to handle setbacks. Research is not straightforward and often lacks clear indication of progress (although the philosopher inside me is questioning what the word "progress" really means). Instead, the research experience is full of visible failures. Maybe an idea does not work out or your paper is rejected. As a researcher, it is important to learn to handle these setbacks and learn from them. The path of research is going to be nonlinear.

How do you stay motivated and inspired in your research?

The interesting questions themselves keep me motivated, but when I run out of steam I go hiking with friends. The beautiful natural views of Western Massachusetts work magic to generate new thoughts and ideas.

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

If you are unsure whether you want to pursue a career in research, start by getting your feet wet! Start with a small project, explore different areas, and work with different people. Most importantly, try to have fun!

CRA-Industry Call for Council Nominations

By Helen Wright, Manager, CRA-I

The Computing Research Association – Industry (CRA-I) is seeking visionary leaders to help guide its efforts in strengthening collaboration between industry, academia, and government. CRA-I was established in 2020 as a committee of the Computing Research Association (CRA) and has since grown into a dynamic community of computing researchers from industry who are committed to advancing shared research interests and improving societal outcomes.

To support this mission, CRA-I is expanding its Council, which will eventually consist of 21 leaders representing the breadth and diversity of the computing research field.

Why Join the CRA-I Council?

The CRA-I Council plays a critical role in shaping initiatives that enhance industry-academic partnerships, influence research priorities, and foster collaboration across sectors. Council members serve a **three-year term** and contribute their expertise to help steer CRA-I's activities and strategic direction.

Nominations *(continued)*

Council Member Responsibilities

CRA-I Council members are expected to actively engage in one or more of the following areas:

- Develop and lead new initiatives aligned with CRA-I's mission.
- Identify key focus areas for CRA-I's efforts.
- Organize and participate in roundtable discussions and workshops.
- Author whitepapers and reports that inform the computing research community.
- Coordinate CRA-I activities with the broader work of CRA.
- Provide input on CRA-I's growth and outreach strategies.
- Participate in monthly virtual meetings.
- Respond to community requests and agency RFIs as needed.

Current CRA-I Leadership

CRA-I is currently led by a seven-member Steering Committee, co-chaired by **Fatma Özcan** (Google) and **Divesh Srivastava** (AT&T). The committee, along with the growing CRA-I Council, is supported by CRA-I Manager **Helen Wright**.

Nomination Process

CRA-I invites nominations for new Council members from industry and academia. If you or someone you know would be a strong candidate, please submit a nomination by **April 30, 2025**, to hwright@cra.org.

Nominations should include:

- Name, affiliation, and email address of the nominee.
- Technical areas of expertise.
- Up to five significant service contributions to the computing research community.
- Nominee's resume or a link to their professional webpage.
- A brief statement explaining why the nominee would be a valuable addition to the CRA-I Council.
- Names and contact information (email and phone) for two to three references who can speak to the nominee's qualifications.

CRA-I is looking for leaders who are ready to engage in meaningful efforts that strengthen computing research and industry partnerships. **Submit your nominations by April 30, 2025.**

For any questions, contact Helen Wright at hwright@cra.org.

Unlocking Innovation: CRA-Industry's "Research in a Box" Virtual Roundtable on Building Successful Research Programs

CRA-I
Computing Research Association
Industry

By Helen Wright, Manager, CRA-I

The Computing Research Association's Industry (CRA-I) Committee invites you to its upcoming "Research in a Box" virtual roundtable on **Wednesday, April 30, from 12:00–1:30 pm ET**.

Moderated by **Andrea Gibbs** (CEO of Gibbs Corporation and former Intel executive), this engaging session will feature insights from **Jaime Teevan** (Microsoft) and **Claire Vishik** (Stealth Startup) on how industrial organizations – regardless of size – can successfully establish and sustain computing research programs.

Register Now

This interactive forum will foster open discussion and knowledge-sharing among industry leaders, university researchers, and government lab representatives. Participants will gain actionable strategies for navigating research collaborations and overcoming common roadblocks in industry-academia-government partnerships.

Key Discussion Topics:

- **Building impactful research collaborations** across industry, academia, and government.
- **Navigating intellectual property and legal considerations** when engaging in research partnerships.
- **Aligning stakeholder interests and expectations** to create long-term research impact.
- **Overcoming common challenges** faced by organizations developing research initiatives.

This roundtable will also shape the development of a "Research in a Box" whitepaper, providing a valuable resource for companies looking to launch or grow their research efforts.

Register now to secure your spot!

ICYMI Items from Across CRA: March 2025

By Matt Hazenbush, Director of Communications

2025 CRA Board of Directors and Officers Announced

The Computing Research Association (CRA) has finalized its 2025 Board of Directors and Officers election, welcoming new and returning leaders who will help shape the future of computing research. With record-breaking engagement from CRA members, the election underscores the community's commitment to advancing the field. For the full list of elected Board members and officers, read the full announcement.

CRA Releases Three New Quadrennial Papers

As part of its 2024-2025 Quadrennial Paper Series, CRA has published three additional papers addressing key challenges in computing workforce development and AI's role in healthcare and the economy. The new papers propose strategies for expanding AI education, improving healthcare data infrastructure, and strengthening domestic pathways to computing PhDs. Read the full announcement and explore the complete series.

Cuts to NSF and CISE Directorate Threaten U.S. Computing Leadership

On February 18, 2025, CRA issued a statement condemning the termination of 10% of the NSF workforce, including significant cuts to the Computing and Information Science and Engineering (CISE) Directorate. CRA warned that these cuts will undermine U.S. innovation, weaken national security, and hinder advancements in AI, quantum computing, and high-performance computing. Read CRA's full statement.

CCC to Host Workshop on Computing and Neural Interfaces

On April 22-23, 2025, CCC will host a workshop in Washington, D.C., to explore computing's role in advancing neural interfaces. Experts from computing, neuroscience, and industry will discuss research challenges, technology development, and future directions. Learn more on the CCC blog and express your interest in getting involved.

CRA-I Releases Report on Healthcare Data Sharing Workshop

CRA-I has published the report from its Sharing Healthcare Data Workshop, held in October 2024. The event brought together experts from industry, academia, and government to discuss barriers to data sharing, AI's role in healthcare, and regulatory challenges. Key takeaways highlight the need for collaboration, standardization, and responsible AI governance. Read more on the CRA-I blog.

Expanding U.S. AI Leadership Requires Stronger Academic Research Funding

The U.S. must increase federal funding for academic AI research to maintain its global leadership, argues a new CCC statement. While industry investments are critical, academia drives long-term innovation, talent development, and open-source progress—key to sustaining U.S. competitiveness. Read more about the urgent need for balanced AI funding.

Help Shape the Future of Cybersecurity and Storage

CRA-Industry (CRA-I) is launching an initiative to address key challenges in enterprise cybersecurity and storage technologies. This effort will identify barriers to real-world cybersecurity adoption and explore future storage trends, culminating in two reports with insights and recommendations. Read more on the CRA-I blog.

DeltaAI Supercomputer Now Open for Computing Researchers

NCSA's DeltaAI supercomputer, funded by NSF, is now available to support computing and AI research at scale. Bill Gropp, CCC Council member and CRA Board member, encourages researchers from all computing fields to apply for access through ACCESS CI. Learn more and apply today.

Kennesaw State University

Assistant/Associate Professors of Information Technology

Department of Information Technology at Kennesaw State University, an R2 institution located north of Metro Atlanta, GA, is hiring three tenure-track positions at Associate or Assistant Professor rank. For a full description of these positions, application deadlines, and application procedures, please visit *https://hr.kennesaw.edu/careers.php*. Search for Job IDs 280529 and 280524. The Department of Information Technology enrolls 1,400+ students. It offers the Bachelor of Applied and the Bachelor of Science in Information Technology accredited by the Computing Accreditation Commission of ABET, Master of Science in Information Technology, Master of Science in Cybersecurity, an IT minor, several graduate certificates, and participates in the Ph.D. in Computer Science in the college.

Stony Brook University

Assistant Professors (tenure track) in Responsible AI and Societal Impacts of AI, Technology and Society - College of Engineering and Applied Sciences

The Department of Technology and Society (DTS) at **Stony Brook University** is seeking applicants for **two tenure-track Assistant Professor** positions:

- **Responsible AI** – Focused on advancing knowledge and research in the ethical and responsible development of artificial intelligence.
- **Societal Impacts of AI** – Concentrating on the broader social, cultural, and economic effects of AI technologies.

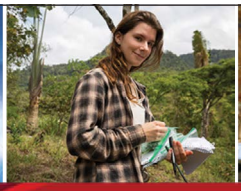
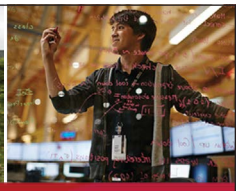
To Apply, Visit:

Responsible AI: http://apply.interfolio.com/157264

Societal Impacts of AI: https://apptrkr.com/5875142

Applications received by February 15, 2025 will receive full consideration. Candidates who apply on or after February 15, 2025 will be considered on a rolling basis until the position is filled.

Stony Brook University

Empire Innovation Professor (Associate Professor) - College of Engineering and Applied Sciences

Location: Department of Applied Mathematics and Statistics - College of Engineering and Applied Sciences

Open Date:
Dec 03, 2024

Deadline:
Mar 30, 2025 at 11:59 PM Eastern Time

Description:
The Department of Applied Mathematics and Statistics (AMS) invites applications to apply for a **tenure-track Empire Innovation Professor (Associate Professor)** position at Stony Brook University with an expected starting date of Fall 2025. The Empire Innovation Professor will join a robust community of scholars committed to advancing AI research for scientific discovery and engineering design.

Qualifications

Required Qualifications:
Ph.D. (or foreign equivalent) in Applied Mathematics, Statistics, Computer Science, Bio-engineering, or a closely related field. Distinguished research record in artificial intelligence (AI) or machine learning, with demonstrated expertise in applications to biomolecular and/or drug design. Established track record of scholarly achievements, high-impact publications, and significant research funding. Demonstrated leadership in the field with an international reputation for outstanding research.

Application Instructions:
To apply, visit https://apptrkr.com/5984448

Applications received prior to January 15, 2025 will receive full consideration. Candidates who apply on or after January 15, 2025 will be considered on a rolling basis until the position is filled. The below documents are required and must be submitted through Interfolio.

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@interfollio.com or (877) 997-8807.

Please address inquiries to Dmytro Kozakov at dmytro.kozakov@stonybrook.edu.

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.

TEXAS A&M UNIVERSITY KINGSVILLE

High-Performance Computing Systems Engineer

The High-Performance Computing (HPC) Systems Engineer designs, develops, and manages the university's HPC infrastructure. This role supports faculty, researchers, and students by optimizing computational methods and enabling research across disciplines.

Key Responsibilities

- System Architecture: To meet research needs, design and implement HPC infrastructure, including clusters and storage.
- Administration & Maintenance: Manage and optimize HPC systems; perform configuration, troubleshooting, and security.
- User Support: Provide technical assistance, training, and HPC tools and strategies workshops.
- Strategic Planning: Advise IT leadership on HPC-related strategies to support teaching, research, and service goals.
- Software Management: Deploy scientific software and develop tools to automate workflows.
- Data Management: Ensure data integrity and scalable storage solutions for research.
- Disaster Recovery: Maintain and document recovery plans and align with campus policies.
- Research Collaboration: Lead campus HPC systems administration and support computational research.

Minimum Requirements

- Education: Bachelor's degree or equivalent experience.
- Experience: Six years of related experience in HPC administration.

Preferred Qualifications

- Master's in Computer/Computational Science, Statistics, or Engineering.
- Extensive experience in HPC cluster management, parallel computing, programming languages (C/C++, Fortran), scripting (Python, Bash), and container technologies (Docker, Kubernetes).
- Higher education experience Linux/UNIX and HPC storage management certifications.

Other Requirements

- Availability for occasional nights, weekends, and holidays.
- Availability to travel when needed.

To Apply: https://apptrkr.com/5946919

University of Pittsburgh

Faculty Leadership Role for Innovative Academic Programs

The School of Computing and Information (SCI) at the University of Pittsburgh (Pitt) invites applications for an inaugural Faculty Director for academic programs. The Faculty Director will spearhead SCI's Professional Graduate Program Initiative (PGPI) for an innovative new class of academic programs (online and residential) that are inclusive, accessible, and affordable at scale for the workforce. The Faculty Director will work closely with a professional staff team, current and future faculty members, and future staff hires to shape the school's PGPI offerings. These programs include the school's signature online Master of Data Science (MDS) and our interdisciplinary residential undergraduate data science major as well as future offerings. The Faculty Director will teach courses and hold an appointment as Teaching Assistant, Teaching Associate, or Teaching Professor.

The Faculty Director will promote and implement a vision for graduate and undergraduate education at SCI focused on career advancement and social mobility of learners. This role involves a combination of curricular innovation, academic program leadership, and teaching, along with establishing partnerships across the university and industry to ensure programs meet high quality standards and evolving workforce needs.

The key responsibilities of the Faculty Director include:

- Lead faculty in managing, improving, and developing academic programs, focusing on interdisciplinary, workforce-aligned curricula to expand access.
- Collaborate with faculty to design and implement stackable credentials that support lifelong learning and career development for a wide range of learners.
- Teach courses at SCI with a reduced teaching load to accommodate administrative responsibilities.
- Oversee academic program resources, including hiring and mentoring new faculty and staff, managing budgets, and advocating for infrastructure and support.
- Foster relationships with stakeholders to strengthen curricular relevance, experiential learning opportunities, and career placement outcomes.
- Develop program assessments, report outcomes, and implement improvements based on findings.
- Promote a representative, inclusive, and welcoming environment.

Commensurate with experience, the faculty rank for this position may be Teaching Assistant Professor, Teaching Associate Professor, or Teaching Professor in the appointment stream outside the tenured/tenure stream. The Faculty Director is appointed with a faculty position and has a reduced teaching and summer compensation for administrative service. The Faculty Director's home department will be selected through consultation with the candidate, department faculty, and the Dean.

Learn more about the school at our website *https://sci.pitt.edu*. Inquiries and nominations may be sent in confidence to *sci-recruit@pitt.edu*.

Required Qualifications

- Doctoral or terminal degree in Data Science, Computer Science, Information Science, or a related discipline.
- At least three years of teaching experience related to Data Science, Computer Science, Information Science, or a related discipline.
- Experience teaching in online or hybrid (online/in-person) environments.
- Experience with workforce aligned curriculum development and academic program design.
- Interpersonal and communication skills to engage effectively with partners.

Preferred Qualifications

- Experience designing and delivering online courses and scalable programs at the undergraduate or graduate levels, especially for adult learners.
- Experience coordinating and/or developing faculty development initiatives focused on course design and delivery for the adult and online learner.
- Experience collaborating with private and public sector partners to develop career-focused, timely curricula.
- Leadership and management experience, such as budget oversight, strategic planning, staff management, grant writing, and faculty-staff collaboration.

- Proficiency in teaching and developing data science or computer science curricula, including capstone projects and experiential learning opportunities.
- Experience working in interdisciplinary settings and collaborating on complex initiatives with multiple stakeholders.
- Experience in using data-informed strategies for forecasting, assessment, and continuous improvement.
- A record of contributions to the field through research, scholarship, professional practice, or educational innovation.

About the School of Computing and Information (SCI)

As Pitt's newest school, SCI is a growing, interdisciplinary community dedicated to collaboratively transforming lives for a better digital future, from our community to the world. Since 2017, SCI has hired over 40 faculty members and continues to expand. We create transformative education and conduct research that enrich both individual and societal growth, powered by innovation and impact. We seek candidates who share our values to nurture and sustain an equitable and inclusive environment for students, faculty, staff, alumni, and our many partners.

SCI is committed to the well-being of our community through its scholarship, education, and faculty development initiatives, including programs and policies to promote a healthy work-life balance; support for two-career couples; professional development, career advancement, and mentoring; and ongoing efforts to recruit, retain, and develop a faculty representative of society. Candidates who have experience working with students from varied lived experiences are especially encouraged to apply.

Application Process

Interested candidates should submit a cover letter, curriculum vitae, a teaching statement, optional evidence of teaching assessment, optional letter of commitment to representation, and the names of at least three recommenders. The cover letter should outline the candidate's vision for academic programs and detail their experience in academic programs and curricular innovation. Six recommendation letters are needed for appointment at rank of Teaching Associate Professor or Teaching Professor. Candidates have the option to be notified before recommenders are contacted.

Application review is underway. For full consideration, please submit applications by February 1, 2025. Applications will be accepted after this date until the position is filled or May 1, 2025, whichever comes first. On-campus interviews are expected to begin after February 1, 2025, with a start date of August 15, 2025.

Questions about the search and/or application status may be emailed to *sci-recruit@pitt.edu*.

The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer and values equality of opportunity, human dignity and diversity, EOE, including disability/vets.

Enterprise Net Engineer-Sr

El Paso, TX
Full Time – Exempt Pay: Commensurate with education and experience

The University of Texas at El Paso (UTEP) is a comprehensive public research university that is increasing access to excellent higher education.

Key highlights of the Enterprise Net Engineer-Sr include:
- Collaborates with executive management & leadership. Manages, supervises, and mentors peers and departmental team members to fulfill business objectives & processes
- Performs overall design, deployment and development of campus network architecture
- Develops, implements, configures, maintains, and trains on policies and procedures for all network & firewall administration, usage, and disaster recovery.
- Experience with Aruba and Arista switching hardware and components.

Qualifications:
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

Education: Bachelor of Science in Computer Science, Computer Engineering, Information Technology, or field related to network technologies and infrastructures.
and
Experience: Ten years of related experience and training in the statement of duties and responsibilities; or equivalent combination of education and experience.

Preferred Qualifications:
*Please note U.S. citizenship is required due to the nature of the job.

To apply, visit: https://apptrkr.com/5964597

UTEP is an Equal Employment Opportunity/Affirmative Action employer.