

Mission

Enable the pursuit of innovative, high-impact computing research that aligns with pressing national and global challenges.

Leadership

- Daniel P. Lopresti, Lehigh University, CCC Chair
- Nadya Bliss, Arizona State University, CCC Vice Chair

CRA Staff Leader

• Ann Schwartz Drobnis, Director of Research Community Initiatives

Recent Highlights

- <u>New CCC Council members</u> announced to begin three year terms on July 1.
- Visioning activities
 - 5 Year Update to the Next Steps in Quantum Computing
 - Community-Driven Approaches to Research in Technology & Society
- Visioning reports released
 - Artificial Intelligence / Operations Research II
 - Mechanism Design for Improving Hardware Security
- Community white paper released
 - Mid-cycle Update to the US National Robotics Roadmap
- Responses to the Community
 - <u>CCC's Response to RFI on the 2023 Federal Cybersecurity Research and Development</u> <u>Strategic Plan</u>
 - CCC's Response to RFC on AI Accountability Policy

- Planned visioning activities: Systems and Applications Challenges for the Emerging Bazaar of Accelerators; Future of Pandemic Prevention and Response; Future of Research on Social Technologies
- In development visioning activities: Artificial Intelligence / Operations Research III; Grand Challenges for the Convergence of Computational and Citizen Science Research
- Blue Sky Ideas Conference Track: 25th ACM International Conference on Multimodal Interaction
- Visioning workshop reports: 5 Year Update to the Next Steps in Quantum Computing Workshop; Community-Driven Approaches to Research in Technology & Society
- Whitepapers: Algorithmic Robustness; Research Ecosystem: Grand Challenges
- Responses to the Community
 - Using AI & ML in the Development of Drug & Biological Products Discussion Paper and Request for Feedback
 - PCAST Working Group on Generative AI Invites Public Input
 - Request for Information (RFI) on Developing a Roadmap for the Directorate for Technology, Innovation, and Partnerships at the National Science Foundation
- New task forces to be determined based on Summer Council Meeting (July 2023)



Mission

Increase diversity in the field of computing research through evaluation and research.

Advisory Board

- Deb Agarwal, Lawrence Berkeley National Laboratory
- Dorian Arnold, Emory University
- Carla Corroto, Otterbein University
- Wendy DuBow, National Center for Women in Technology (NCWIT)
- Ann Gates, University of Texas El Paso, Computing Alliance of Hispanic Serving Institutions (CAHSI)
- Kinnis Gosha, Morehouse College, Institute for African American Mentoring in Computing Science (iAMMCS)
- Ran Libeskind-Hadas, Claremont McKenna College
- Kathryn McKinley, Google
- Sepi Hejazi Moghadam, Google
- Susan Rodgers, Duke University, CRA-WP

CRA Staff Leader

• Burçin Campbell, Director of Data and Evaluation

Recent Highlights

- <u>Data Buddies Survey</u> (DBS) 2022 closed with 13,209 responses. (UG: 9,431; GR: 2,810; Other: 968)
- <u>CISE REU Evaluation</u> project delivered reports to first cohort of REU Sites
- <u>Departmental BPC Plan Workshop 2023</u> brought together 30 departments (80 participants) in a workshop co-hosted with Morehouse College in Atlanta, Georgia on May 30-June 1.
- <u>BPCnet.org</u> is undergoing a redesign based on user feedback and to accommodate the expanding content.
- Formalized a CERP Advisory Board (listed above), which is tasked with determining the higher-level direction of CERP projects and evaluating its effectiveness.

- The new CERP Advisory Board will begin meeting later this year.
- Updated Data Buddies Survey data will be available for use by the public.
- DBS department reports will include an additional shorter report with selected questions most relevant for departmental policy to help faculty use the reports more easily.
- DBS short survey modules will be launched in collaboration with Northeastern University Center for Inclusive Computing as part of the NSF BPC Alliance, Data Alliance on Persistence and Perception in Computing.
- CISE REU Evaluation project will publish a public report for the first cohort of REU Sites.
- BPCnet.org redesign web development will begin during summer 2023.
- BPC Shared Measures project, a BPC demonstration project, will publish two white papers to disseminate lessons learned from the project team's work with BPC Alliances developing a shared framework for BPC.

Computing Research Association - Education (CRA-E) <u>cra.org/crae</u>



Mission

Address society's need for a continuous supply of talented and well-educated computing researchers.

Leadership

- Lori Pollack, University of Delaware, CRA-E Co-Chair
- Kelly Shaw, Williams College, CRA-E Co-Chair

CRA Staff Leader

• Erik Russell, Director of Educational Initiatives (CRA-E) and Director of Broadening Participation in Computing (BPC) Initiatives (CRA-WP)

Recent Highlights

- <u>CSGrad4US Mentoring Program</u> Approximately 50 CSGrad4US Cohort 2 Fellows will join CISE PhD programs this Fall 2023. Sixteen Cohort 1 Fellows completed the first year of their PhD programs and also attended CSGrad4US Activities at the 2023 CRA-WP Grad Cohort Workshop for IDEALS in March 2023.
- <u>UR2PhD Undergraduate Research to PhD National Mentoring</u> Hired curriculum development teams for the research methods course and graduate student mentoring program, recruited for instructor positions and institutional partners, and created an application for individual students to participate.
- <u>CRA Outstanding Undergraduate Research Awards</u> The 2022/23 competition received 159 nominations. In addition to the four winners and four runners-up, 21 nominees were selected as finalists and 32 received honorable mentions.
- <u>CRA-E Faculty Mentoring Award</u> The committee awarded three awards for 2023: Jessica Wu (Harvey Mudd), William Wang (UC Santa Barbara), and Nanette Velleux (Simmons University).
- <u>SIGCSE Workshop on Professional Development for Teaching Faculty</u> The sixth instantiation was held in March 2023 at the SIGCSE Conference in Toronto, ON. The workshop included 40 participants and a panel of senior faculty shared their perspectives for mid-career teaching track faculty.
- <u>Undergraduate Research Highlights</u> The research highlights series showcases outstanding research conducted by undergraduate students, one highlight approximately every month (10 per year) written by CRA-E Graduate Fellows.
- <u>Academic Landscape Workshop</u> Took place at FCRC 2023 and educated grad students and postdocs about teaching-focused and non-research focused faculty positions.

- <u>UR2PhD Undergraduate Research to PhD National Mentoring</u> Curriculum is being developed this summer to launch in Fall 2023. Undergraduate students can <u>apply to the online</u> research methods course now.
- <u>Conquer Website Redesign</u> The committee embarked on a study of how faculty mentors, graduate students, and undergraduates use the CONQUER site. Twenty contextual inquiries were conducted and used to develop a redesign with a new name: sparc.cra.org (Student Pathways into Research in Computing). The SPARC website will be launched soon.

Computing Research Association - Industry (CRA-I) <u>cra.org/industry</u>



Mission

Convene industry partners on computing research topics of mutual interest and connect them with CRA's academic and government constituents for mutual benefit and improved societal outcomes.

Leadership

- Vivek Sarkar, Georgia Tech, CRA-I Chair
- Ben Zorn, Microsoft, CRA-I Co-Chair
- Divesh Srivastava, AT&T, CRA-I Co-Chair

CRA Staff Leader

• Helen Wright, Senior Program Associate, CRA-Industry

Recent Highlights

- Launched <u>inaugural cohort of Council</u>, which will work with the Steering Committee (SC) to achieve the mission of CRA-I. Its members are Ron Brachman (Cornell Tech), Elizabeth Bruce (Microsoft), Hank Korth (Lehigh University), Eve Schooler (formerly Intel), and Tammy Toscos (Parkview Health). We are continuing to accept nominations for Council members as we grow the Council to 21 members at steady state.
- Bylaws for CRA-I were prepared for approval by the CRA Board at the upcoming July 2023 Board Meeting. These bylaws serve as the governing rules and regulations that outline the structure, responsibilities, and operations of the Committee.
- Organized, in collaboration with CCC and CRA-WP, the February 2023 <u>Accessibility</u> <u>Technology for All Workshop</u> and produced a workshop report of the same title.
- Organized the <u>Workshop on Computing Research in Industry</u> at the Federated Computing Research Conference (FCRC) 2023. It was attended by over 40 participants, including 15 students.

- Host future roundtables on the following topics: PhD in Industry, Data Sharing / Quality, Impact of AI on Software Engineering, and Quantum Computing.
- Develop a set of best practices for dual/joint appointments, which highlight a set of models most frequently used by the computing research community.
- CRA-I, in collaboration with CCC, CRA Government Affairs, and Microsoft is planning to develop a potential *AI Workforce Report* to provide recommendations for building a skilled and diverse workforce.
- Establish a 21 person CRA-I Council to help grow ideas and increase communication in the community.
- Respond to the June 2023 TIP RFI.
- Participate in CRA-WP's 2023 Career Mentoring Workshop in November by hosting a CRA-I panel on "Building Partnerships with Industry."

Computing Research Association -Widening Participation (CRA-WP)





Mission

Widen the participation and improve the access, opportunities, and positive experiences of individuals from populations underrepresented in computing research and education.

Leadership

- Amanda Stent, Colby College, CRA-WP Co-Chair
- Susan Rodger, Duke University, CRA-WP Co-Chair

CRA Staff Leader

• Erik Russell, Director of Educational Initiatives (CRA-E) and Director of Broadening Participation in Computing (BPC) Initiatives (CRA-WP)

Recent Highlights

- 121 participants and 34 panelists attended the 2023 Grad Cohort for IDEALS.
- 263 participants and 31 panelists attended the 2023 Grad Cohort for Women.
- 28 participants and 19 mentors are participating in the 2023 <u>DREU</u> program this summer.
- 13 participants were accepted to the summer 2023 <u>DREAM</u> program.
- 15 women in computer security were selected to receive <u>SWSIS</u> scholarships.
- Robin Brewer, Assistant Professor in the School of Information at the University of Washington, received the 2023 <u>Anita Borg Early Career Award</u>.
- Michael Carbin, Associate Professor of EECS at MIT and Founding Advisor at MosaicML, received the 2023 <u>Skip Ellis Early Career Award</u>.
- Recent <u>Pipelines</u> articles include a roadmap of CISE BPC efforts through the years and an overview of the new DREAM program.
- CRA-WP conducted outreach at SIGCSE to share information and resources about computing research careers and program opportunities.
- The CRA-WP resume database and graduating class directory was updated and shared with sponsors.

- CRA-WP will present a session at the Tapia conference in September 2023 on *Effective Programs for Increasing Diversity in Computing: Learning and Engaging.*
- CRA-WP submitted nine session proposals to provide mentoring at the Grace Hopper conference in September 2023.
- CRA-WP will run a <u>Career Mentoring Workshop</u> in November 2023, open to computing researchers in industry, government labs and academia. Deadline to apply: July 10th.
- CRA-WP will release a new program on Mentoring Mentors in fall 2023.
- CRA-WP will continue to collaborate with CRA-E on CSGrad4US and <u>UR2PhD</u> and is also participating in the new CRA program, which is in collaboration with ACM and IEEE-CS, called <u>LEVEL UP</u>.

CRA Government Affairs

cra.org/govaffairs



Mission

The Government Affairs Committee (GAC) serves as the U.S. computing research community's representatives in Washington, D.C., conveying the importance of government support for computing research; tracking and influencing relevant science policy and legislation; and helping engage members of the computing research community in the policymaking process.

Leadership

- Stephanie Forrest, Arizona State University, Chair
- Alex Aiken, Stanford University, Vice-Chair

CRA Staff Leader

• Peter Harsha, COO and Senior Director, Government Affairs

Recent Highlights

- Tracking the <u>Fiscal Year 2024 budget process</u> and how it is impacted by the <u>May Debt Limit</u> <u>Agreement</u>. While the agreement doesn't cut scientific research, it makes a <u>difficult budget</u> <u>situation worse</u>. As of publication, the House and Senate were starting to release their individual funding legislation; please check the <u>CRA Policy Blog</u> for the latest information.
- CRA joined a well-publicized CEO letter, organized by the <u>Task Force on American Innovation</u>, of leaders from American science societies, colleges and universities, and high-tech companies, calling on Congressional leaders to provide strong investments for research in line with the Chips and Science Act.
- Attacks on Disinfo/Misinfo Research: An item of concern to GAC is NSF funded <u>disinfo/misinfo</u> research at the University of Washington, and other institutions, that has come under attack from the House Judiciary Committee and its Chairman, Rep. Jim Jordan (R-OH). The GAC is monitoring the situation, consulting with the affected researchers, and reaching out to the field's allies throughout government to understand what is happening and how to respond.

- Leadership in Science Policy Institute (LiSPI): With CCC, GAC will hold the next <u>LiSPI</u> workshop in Washington DC on November 16th and 17th. The workshop is part of CRA's mission to develop the next generation of leaders in the computing research community by educating researchers on how science policy in the U.S. is formulated and how our government works. Nomination site is closed; final selections will be made by end of July.
- Sept 2023 Congressional Visit Day: GAC will hold its <u>Congressional Visit Day (CVD)</u> this Fall (likely mid-September) in Washington DC. For volunteers, CRA will schedule meetings with Congressional staff, provide materials and training on having an effective meeting, and host a reception the night before the meetings. Participants will be responsible for their travel costs. GAC will release a call for volunteers in July; please contact <u>Brian Mosley</u> in the CRA Office of Government Affairs if you would like to participate.