

# Computing Research Association **Programmatic Executive Summaries**

**JULY 2024** 

UNITING INDUSTRY, ACADEMIA, AND GOVERNMENT TO ADVANCE COMPUTING RESEARCH AND CHANGE THE WORLD.



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# **Agenda**

# CRA Board of Directors Meeting Agenda

July 22-23, 2024

All times MDT

Cliff Lodge, Snowbird, Utah

#### Monday, July 22

3:00 pm Orientation for New Board Members (Camp, Amato) *Cirque* 

4:00 pm CRA Conference Registration is Open (p/u badge and fleece)

5:00 pm Call to Order (Amato) <u>Ballroom 1</u>

Introduction of New Board Members (Amato)

David Bader, NJIT Nadya Bliss, ASU (CCC Will Enck, NCSU (USENIX) Bruce Hendrickson, LLNL Fatma Ozcan, Google

Manuel Pérez-Quiñones, UNCC Susan Rodger, Duke (CRA-WP) Kelly Shaw, Williams (CRA-E) Deborah Silver, Rutgers (IEEE-CS)

Introduction of Guests (Amato)

Yannis Ioannidis (ACM)

Dan Lopresti, Lehigh (CCC); Tuesday only

Chair's Remarks (Amato)

Executive Director/CEO's Update (Camp)

Above and Beyond (Camp)

Introduction of New CRA Staff (Camp)

Nene Bundu, Admin for Event Management

Ashley Crnkovich, Grants Specialist

Petruce Jean-Charles. Communications Associate (CCC)

5:45 pm CRA Business

Thanks to Snowbird Organizers (Amato) Approval of the Minutes from Feb 2024 (Siek)

Treasurer's Report / Reserve Discussion (Allan)

6:15 pm CRA Board Picture (please pick up/wear CRA gray fleece)

6:30 pm Dinner <u>Atrium Patio</u> (Magpie if inclement weather)

7:30 pm Gov't Affairs Report (Aiken) <u>Ballroom 1</u>

8:00 pm Tee up topics for discussion tomorrow (Various)

 Who does CRA serve well and who else should we be serving (and how)? (Allan and Camp)

 How should computing programs encourage the responsible use of AI in interdisciplinary research across campus? (Gil and Maher)

- What else (if anything) should CRA do regarding DEI? (Rodger, Pérez Quiñones,

and Cain)

8:30 pm Adjourn

#### Tuesday, July 23

7:00 am Breakfast with New Chairs Workshop Attendees Golden Cliff/Eagle's Nest

8:00 am Call to Order (Amato) <u>Ballroom 1</u>

Updates on CRA Board Documents (Amato)

Collaborations with Minoritized Groups (Gosha/Gini)

Teaching and T/TT (Allan/Dwarkadas)

Evaluation of Computing Research (Amato/Hayes)

Multidisciplinary Research (Amato)

2024 CRA Quad Papers - Status (Amato)

8:30 am Discussion Breakouts (3 x 30 min each) *Various Locations* 

- <u>Magpie A</u>: Who does CRA serve well and who else should we be serving (and how)? (Allan and Camp)
- <u>Magpie B</u>: How should computing programs encourage the responsible use of Al in interdisciplinary research across campus? (Gil and Maher)
- <u>Cirque:</u> What else (if anything) should CRA do regarding DEI? (Rodger, Pérez Quiñones, and Cain)

10:00 am Break

10:15 am CRA Board Committees / Working Groups Updates (Amato) Ballroom 1

Board Book Materials: elections, surveys, misconduct issues etc. (Camp)

Career Mentoring Workshop (Lin)

Governance (Camp)

Socially Responsible Computing (Libeskind-Hadas)

New Chairs Workshop (Allan)

CV Database (Khuller)

10:35 am Society Reports

11:00 am Retiring Board Members Get Their Say (Amato)

11:15 am Unfinished Business; New Business (quad paper topic?)

Executive Session
Board Only Session

12:00 pm Adjourn

Lunch with New Chairs Workshop Attendees Golden Cliff/Eagle's Nest



#### Tuesday, July 23

1:00 pm Pre-Conference Events Begin

5:00 pm Pre-Conference Event: CRA 101 <u>Ballroom 2</u>

6:00 pm Reception

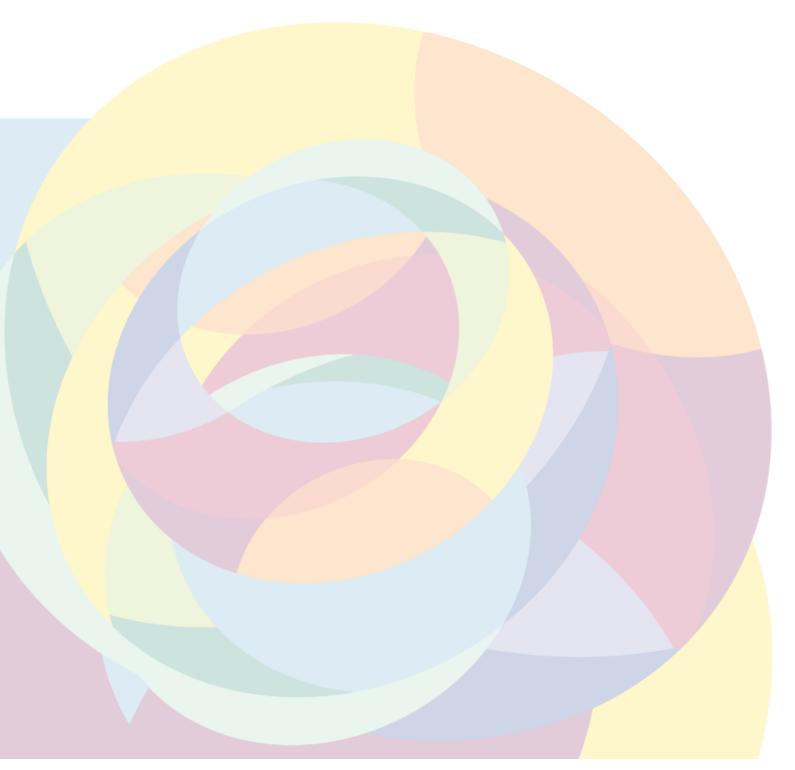
#### Wednesday, July 24

8:30 am CRA Updates and Awards *Ballroom* 

#### Thursday, July 25

5:30 pm Future CRA Leaders Reception Golden Cliff

# **Programmatic Committee Updates**



# **Computing Community Consortium (CCC)**



https://cra.org/ccc/

**Mission:** To enable the pursuit of innovative, high-impact computing research that aligns with pressing national and global challenges.

#### Leadership

- Nadya Bliss, Arizona State University, Chair
- Katie Seik, Indiana University, Vice Chair
- Mary Lou Maher, CRA Director of Research Community Initiatives / CCC Director

#### **Recent Highlights**

New Communications Associate: Petruce Jean-Charles

#### Visioning workshops:

- Artificial Intelligence/Operations Research III in Washington, DC on March 21-22, 2024.
- Future of Information Retrieval Research in the Age of Generative AI: July 19-20, 2024

#### Roundtable Discussions:

- CCC Interdisciplinary Best Practices (6)
- Global Al Research Agenda Request for Information (2)
- Grand Challenges (4)
- LLMs and the Future of Programming Roundtable (3)

#### Reports released:

- Future of Pandemic Prevention and Response Workshop Report
- Community Driven Approaches to Research in Technology & Society CCC Workshop Report
- The Future of Research on Social Technologies: CCC Workshop Visioning Report
- Systems and Applications Challenges for the Emerging Bazaar of Accelerators Workshop Report
- Addressing the Unforeseen Harms of Technology

#### RFI Responses:

- Response to the Request for Information (RFI) Related to NIST's Assignments Under Sections 4.1, 4.5 and 11 of the Executive Order Concerning Artificial Intelligence (Sections 4.1, 4.5, and 11)
- Response to the Request for Information (RFI): Inviting Comments on the National Institutes of Health's (NIH) Strategic Plan for Data Science 2023-2028
- Response to NTIA's Request for Information on Dual Use Foundation Artificial Intelligence Models With Widely Available Model Weights
- Response to the Request for Information Related to DOE's Responsibilities on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence
- Response to the National Institute of Justice's Request for Input on Section 7.1(b) of Executive Order 14110, "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence"

#### **What's Coming**

#### CCC at Snowbird:

- Haben Girma, "Disability & Innovation: A Conversation with Haben Girma": Wednesday, July 24
- Grand Challenges Session: Thursday, July 25, 2:00 pm MT

#### Visioning workshops:

• Grand Challenges for the Convergence of Computational and Citizen Science Research: April 8-9, 2025

#### July 2024

## **Center for Evaluating the Research Pipeline (CERP)**



#### cra.org/cerp

#### Mission:

To increase diversity in the field of computing research through evaluation and research.

#### **New Advisory Board**

- 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
- Christine Ong, University of California Los Angelos, National Center for Research on Evaluation, Standards, and Student Testing (CRESST)
- Gary Silverstein, WeStat

#### **CRA Staff Leader**

• Burçin Campbell, CRA Director of Data and Evaluation / CERP Director

#### **Recent Highlights**

- CRA received a new NSF award, <u>Center for Evaluating the Research Pipeline: A Community Resource</u>, to fund CERP projects through a cooperative agreement with NSF.
- A total of 149 institutions worked with CERP for the <u>Data Buddies Survey 2023</u> (DBS), with 46 departments receiving "elite" status by obtaining a response rate of 20 percent or more.
- <u>CISE REU Evaluation</u> contract with NSF was completed. CERP will continue providing services to the REU PIs through the new cooperative agreement.
- <u>BPCnet.org</u> is undergoing a redesign based on user feedback and to accommodate the expanding content.
- <u>BPCnet BPC Indicators Report 2024</u> was published as a pilot report. This report will be published annually to provide an overview of data on some of the major indicators of broadening participation in computing.

#### What's Coming Up

- <u>Departmental BPC Plan Workshop 2024</u> will be virtual and include synchronous and asynchronous components. The workshop will begin with an orientation session on July 29 followed by a meeting day on August 16.
- The new CERP Advisory Board will begin meeting later this year. Two additional Board members will join by the first meeting.
- "DBS-on-demand" short survey modules with accompanying real-time reporting will be launched as part of the NSF BPC Alliance Data Alliance on Persistence and Perception in Computing (DAPPIC).
   DAPPIC is a partnership between CERP and Northeastern University's Center for Inclusive Computing.
- BPCnet.org redesign web development will be completed by summer 2024. Launch date of the new site will be advertised through an outreach campaign.
- Evaluation of programs and events from CRA Committees and external partners will continue.
- CERP will be hosting BPC Community Forums and attending BPC Accelerator meetings.

# **Computing Research Association - Education (CRA-E)**



#### cra.org/cra-e

**Mission:** To address society's need for a continuous supply of talented and well-educated computing researchers.

#### Leadership:

- Michael Hilton, Carnegie Mellon University, Co-Chair
- Kelly Shaw, Williams College, Co-Chair
- Erik Russel, CRA Director of Educational Initiatives / CRA-E Director

#### **Recent Highlights:**

- CSGrad4US Fellowship & Mentoring Program 68 fellows currently enrolled in CISE PhD programs. 71 of 74 pre-fellows applied to Ph.D. programs, 47 admitted and will start in Fall 2024, nine admitted and deferred (will start in Fall 2025), eight applied and were not admitted, five applied and were accepted but declined, two are still listed as decision pending. We established the review process for the next cohort within Monday.com, using Jotforms for reviews. We have recruited three panels of reviewers, each reviewing approximately 12 applications and participating in panels. For 2024, we received 99 completed applications, of which 84 met the eligibility criteria.
- UR2PhD Undergraduate Research to PhD National Mentoring We hired instructors and recruited faculty, undergrads, and grad student mentors for two offerings of the undergraduate research methods course and grad student mentoring training course this summer to accommodate semester and trimester schedules. Our bridge webinar series was launched with four virtual sessions, one each month February through May. Session attendance varied from 26 to 71 participants. We held a virtual advisory board meeting on March 7. We are actively working on identifying subaward partners and recruiting IPs for fall 2024. We are interviewing facilitators for the first fall grad admissions preparation workshop series. We are revising program components based on feedback received to help reach students who would not otherwise participate in research.
- <u>CRA Outstanding Undergraduate Research Awards</u> The 2023/24 competition received 153 nominations. In addition to the four winners and four runners-up, 16 nominees were selected as finalists, and 116 received honorable mentions. We are currently forming the committee for handling nominations next year.
- <u>CRA-E Faculty Mentoring Award</u> The committee reviewed nine nominees and selected three awardees this year. The awardees are Dr. Carrie Demmans Epp (Univ. of Alberta), Dr. Raja Kushalnagar (Gallaudet Univ.), and Dr. Mubarak Shah, (Univ. of Central Florida).
- <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>SIGCSE Workshop on Professional Development for Teaching Faculty</u> The seventh instance was held in March 2024 at the SIGCSE Conference in Portland, OR. Our two-year NSF proposal was awarded (~\$50K) for this workshop and a virtual landscape series.

#### What's Coming:

- <u>Leadership Change</u> Lori Pollock stepped down as Co-Chair, and Michael Hilton started as Co-Chair in June 2024.
- <u>UR2PhD Undergraduate Research to PhD National Mentoring</u> Both research awareness and grad admissions preparation bridge webinar series will run in fall 2024. The URMC and GSMT courses will run in the summer and fall 2024.

# **Computing Research Association - Industry (CRA-I)**



https://cra.org/industry/

**Mission:** To 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

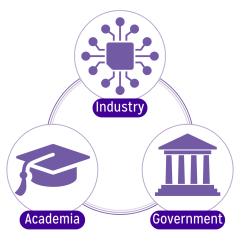
- Fatma Özcan, Google, Co-Chair
- Divesh Srivastava, AT&T, Co-Chair
- Helen Wright, Computing Research Association, CRA-I Manager

#### **Highlights**

- Transitioned leadership with Divesh Srivastava (AT&T) and Fatma Özcan (Google) assuming roles as Co-chairs as of July 1.
- Expanded the CRA-I Council to 12 members by welcoming Theo Drane (Intel) and Heather Stephens (Oracle).
- Secured an NSF subaward to disseminate the CRA Practitioner to Professor (P2P) Survey, resulting in over 2,000 responses.
- Facilitated the Dual Appointment Working Group in disseminating a survey to the community, garnering over 130 responses.
- Orchestrated the GenAl for Research and Science Roundtable in May.
- Co-organized the CCC Virtual Roundtable on LLMs and the Future of Programming.
- Organized two sessions at the CRA Conference at Snowbird focused on GenAl in Scientific Research and Dual Appointments: Living Between Academia and Industry.

#### **What's Coming**

- Organize and host a Meet and Greet for 70+ industry professionals at the CRA Conference at Snowbird.
- Organize and host an industry lunch for 50 attendees at the CRA Conference at Snowbird.
- Decide on next steps for the Dual Appointment working group.
- Analyze the 2,000+ P2P survey responses and develop a resulting report.
- Cultivate strategic collaborations with the TIP Directorate at NSF on mutually beneficial topics, working on a proposal on Future of Enterprise Cybersecurity and Storage Technologies.
- Planning a workshop on Sharing Healthcare Data on October 17-18, 2024 in Washington, DC.
- Planning a workshop on Breadth of Partnership Practices in Fostering Academia/Industry Relationships in Spring 2025.



### July 2024

# **Computing Research Association -Widening Participation (CRA-WP)**



https://cra.org/cra-wp

Mission: To widen the participation and improve the access, opportunities, and positive experiences of individuals from populations underrepresented in computing research and education (including but not limited to people who identify as women; people who are Black/African American, Native American/Alaskan Native/Pacific Islander, Hispanic/Latinx; people who are LGBTQIA; people with disabilities; or veterans).

#### Leadership

- Amanda Stent, Colby College, CRA-WP Co-Chair (rolling off Fall 2024)
- Susan Rodger, Duke University, CRA-WP Co-Chair
- Soha Hassoun, Tufts University, Upcoming CRA-WP Co-chair (Fall 2024)
- Curtis Cain, CRA Director of Broadening Participation in Computing Initiatives / CRA-WP Director

#### **Recent Highlights**

- 252 participants and 42 panelists attended the co-located 2024 Grad Cohort for IDEALS and Grad Cohort for Women.
- 36 participants and 21 mentors are participating in the 2024 DREU program this summer.
- 16 participants were accepted to the summer 2024 DREAM program.
- Sophia Shao, Assistant Professor of Electrical Engineering and Computer Sciences at the University of California, Berkeley, received the 2024 Anita Borg Early Career Award.
- Martez Mott, Senior Researcher in the Ability group and Human Centered Al Experiences team at Microsoft Research, received the 2024 Skip Ellis Early Career Award.
- Recent Pipelines 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 were updated and shared with
- CRA-WP ran its first series of Mentoring Mentors webinars in May 2024, content from the series will be made available to members soon.

#### What's Coming

- CRA-WP will present a session at the Tapia conference in September 2024 on Effective Programs for Increasing Diversity in Computing: Learning and Engaging.
- CRA-WP will run a six-week Career Mentoring Webinar Series from October to November 2024, open to computing researchers in industry, government labs, and academia who have previously attended a CRA-WP CMW.
- CRA-WP will continue to collaborate with CRA-E on NSF CSGrad4US and UR2PhD and will continue participating in the CRA program LEVEL UP, which is in collaboration with ACM and IEEE-CS.
- CRA-WP will host co-located Grad Cohort for Women and Grad Cohort for IDEALS again in 2025.

#### **Government Affairs Committee**

cra.org/govaffairs/blog



**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

- Alex Aiken, Chair
- Peter Harsha, Senior Director of Government Affairs
- Brian Mosley, Associate Director of Government Affairs

#### **Highlights**

- Thank you, Stephanie Forrest, for your service! On July 1, Stephanie Forrest stepped down as the chair of the CRA Government Affairs Committee, a position she has held since 2017.
- CRA Statement Expressing Serious Concerns About Fiscal Year 2024 Funding Levels: In March, in response to the poor FY24 final budgets for NSF and other federal research agencies, <u>CRA released a statement</u> expressing serious concerns with the state of the US research enterprise. The statement highlighted the likely negative impacts these budget cuts will have on the country's research enterprise, with the reduced quantity of research, number of researchers, and number of students educated in key fundamental areas of computing and other fields of discovery.
- **Policy Spotlight CRN Feature:** In March, CRA launched a new Computing Research News feature called "Policy Spotlight: Conversations with Computing Researchers."
- Senate Robotics Showcase & Demo Day: CRA co-hosted, with Carnegie Mellon University and IEEE-USA, an exhibition of 35 robotic demonstrations, representing the field across industry, academia, and government, in the US Senate on April 30. With over 250 attendees, the event was headlined by remarks from NSF Director Panchanathan and Representative Bill Foster (D-IL). CRA contributed three long-time CCC contributors as exhibitors: Chad Jenkins (University of Michigan), Melanie Moses (University of New Mexico), and Holly Yanco (University of Massachusetts Lowell).
- CRA Welcomes Tisdale Fellow: In early June, GAC welcomed Radhika Agrawal as this summer's Eban Tisdale Science Policy Fellow. Radhika is a rising sophomore at Ohio Wesleyan University, studying quantitative economics and computer science. She spent the summer helping GAC staff navigate science policy issues through the end of July.

#### What's Coming

September Congressional Visit Day: GAC will hold its regular Congressional Visit Day (CVD) in
Washington DC on Tuesday, September 10 and Wednesday, September 11. For volunteers, CRA will
schedule meetings with Congressional staff, provide materials and training on having an effective
meeting, and host a thank you reception the night before the meetings. Participants will be responsible
for their travel costs. GAC will release a call for volunteers in June; please contact Brian Mosley
(bmosley@cra.org) in the CRA Office of Government Affairs if you would like to participate.