

# Computing Research Association

## **Programmatic Executive Summaries**

**FEBRUARY 2024** 

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



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## **Agenda**

## **CRA Board of Directors Meeting**

### February 22-23, 2024

All times EST

Hyatt Regency On Capitol Hill, Washington, DC 400 New Jersey Ave NW, Washington, DC 20001

Registration in the <u>Columbia/Regency Foyer</u> on the Ballroom level Reception in the <u>Thornton Room</u> on the 11th floor Main meeting in <u>Regency A</u> on the Ballroom level

#### Thursday, February 22

7:00 am Registration in the *Columbia/Regency Foyer* 

3:30 pm Reception with CRA Board, Career Mentoring Workshop, and

Thornton Leadership Summit Attendees

5:00 pm Call to Order (Amato)

Regency A

The View from NSF

Dilma Da Silva, Acting AD CISE, NSF

6:00 pm Let's Connect / Network

6:10 pm Dinner in <u>Congressional B</u>

7:15 pm Introductions (Amato, Camp)

Regency A

Introduction of New Board Member (Amato):

Jeannette Wing, Columbia

Introduction of New Staff - Part 1 (Camp)

Introduction of Guests (Amato)

Chair's Remarks (Amato)

Executive Director/CEO's Update (Camp)

7:45 pm Approval of the July 2023 Minutes (Siek)

Board Outreach Project (Camp)

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

(5 minutes of presentation + 5 minutes of Q&A)

Communications (Hazenbush)

Al Education (Maher) FY25 Objectives (Camp)

8:30 pm Gov't Affairs Update (Forrest/Mosley)

9:00 pm Adjourn

Friday, February 23

7:00 am Breakfast with Career Mentoring Workshop attendees

in Columbia/Regency Fover

8:00 am Call to Order (Amato)

Regency A

CRA Goals (Camp)

Industry Membership Drive (Wright/Zorn)

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

Variety Communications (Hazenbush)

Al Education (Maher)

FY25 (Camp)

10:00 am BREAK in <u>Columbia/Regency Foyer</u>

10:30 am When Should CRA Engage/Respond? (Forrest/Aiken)

Regency A

11:00 am Treasurer's Report (Allan)

Adoption of the FY2025 Budget (Allan)

11:30 am Lunch Table Topics (Amato)

CRA Conference at Snowbird Update (Gini, Pottinger, Srivastava)

Al Governance

David Danks, Professor of Data Science & Philosophy

University of California, San Diego

12:00 pm Working Lunch in Congressional B

Table Topics:

- Al Governance (Danks)

- New Chairs Workshop (Allan)

- CSGrad4US (Russell)

- CV Database (Khuller)

- UR2PhD / DREU (Pollock/Rodger)

- CRA Conference (Pottinger)

1:00 pm
Regency A

1:15pm

CRA Awards (Franklin)

CRA Nominations (Spafford)

Above and Beyond / etc. (Camp)

Introduction of New Staff - Part 2 (Camp)

1:40pm

Taulbee Interactive (Siek)

2:15 pm

CRA Board Election (Amato)

Retiring Board Members Get Their Say (Amato)

2:30 pm

Unfinished Business; New Business (Amato)

2:40 pm Executive Session
Board Only Session

3:00 pm Adjourn

# **Programmatic Executive Summaries**



### **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.

#### **Recent Highlights:**

Received \$5 million grant from NSF to continue CCC initiatives for another 2 years.

Hired Mary Lou Maher, PhD, to the position of CCC Director of Research Community Initiatives.

Visioning workshops (with reports in progress):

- Systems and Applications Challenges for the Emerging Bazaar of Accelerators in Washington, D.C. on August 9-10, 2023. 28 participants.
- Future of Pandemic Prevention and Response in Ann Arbor, Michigan on September 20-21, 2023. 43 participants.
- The Future of Research on Social Technologies in Washington, D.C. on November 2-3, 2023. 51 participants.

#### Visioning report released:

• 5 Year Update to the Next Steps in Quantum Computing Workshop

#### White Paper released:

Algorithmic Robustness

#### **RFI** Responses:

- Response to the FDA's Using Artificial Intelligence and Machine Learning in the Development of Drug and Biological Products Request for Comment
- Response to the OSTP's Request for Information on National Priorities for Artificial Intelligence
- Response (joint with CRA's GAC) to the Request for Information (RFI) on Developing a Roadmap for the TIP Directorate at NSF
- Response to the PCAST Working Group on Generative Al's Request for Public Input
- Response to the White House National Cyber Director Requests Feedback on Open-source Software Security
- Response to the OMB's RFC on Advancing Governance, Innovation, and Risk Management for Agency Use of Al Draft Memo
- Response (Joint with CRA-I) to the NIH's Request for Information: Developing Consent Language for Research Using Digital Health Technologies

#### What's Coming:

Visioning workshops:

- Planned:
  - Artificial Intelligence/Operations Research III
  - o Grand Challenges for The Convergence of Computational and Citizen Science Research
- In development: Computing for Vulnerable Populations
- Blue Sky Ideas Conference Track: SIAM International Conference on Data Mining (SDM24), April 18-20, 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.

#### **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**

- Negotiations currently ongoing for a cooperative agreement with NSF to fund most activities of CERP as a community resource.
- <u>Data Buddies Survey</u> (DBS) is set to close January 31, 2024. As of the writing of this report DBS received over 20,000 raw responses from a total of 149 departments.
- <u>CISE REU Evaluation</u> project delivered reports to the second cohort of REU Sites and NSF reporting for the first cohort is under way.
- <u>BPCnet.org</u> is undergoing a redesign based on user feedback and to accommodate the expanding content.

#### What's Coming

- The new CERP Advisory Board will begin meeting later this year upon completion of the cooperative agreement with NSF.
- DBS short survey modules with accompanying real-time reporting 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.
- BPCnet.org redesign web development will be completed spring 2024.
- BPC Shared Measures project, a BPC demonstration project, will publish a white paper to disseminate lessons learned from the project team's work with BPC Alliances developing a shared framework for BPC.
- Data Buddies Survey 2023 reports will be generated and disseminated.
- Evaluation of programs and events from CRA Committees and external partners will continue.
- <u>Departmental BPC Plan Workshop 2024</u> is currently in the planning phase tentatively scheduled for June 2024
- 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.

#### Co-chairs:

Lori Pollock (University of Delaware) and Kelly Shaw (Williams College)

#### **Recent Highlights:**

- <u>CSGrad4US Fellowship & Mentoring Program</u> Sixty-eight fellows currently enrolled in CISE Ph.D. programs. Seventy-three pre-fellows have applied to Ph.D. programs and are awaiting decisions. We were awarded NSF #2313998, a 7-year award to manage all components of the NSF CSGrad4US Fellowship & Mentoring Program for \$40,122,001. We then submitted a request for supplemental funding for an additional \$2,000,436 which was also awarded.
- <u>UR2PhD Undergraduate Research to PhD National Mentoring –</u> During Fall 2023 we developed and ran the following:

Undergraduate Research Methods Course (URMC) = 130 participants Graduate Student Mentor Training (GSMT) = 50 participants

Hired designer/facilitators for the bridge webinar series

- <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.
- <u>CRA-E Faculty Mentoring Award</u> The committee reviewed 9 nominees and will be announcing the award shortly.
- <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.

#### What's Coming:

- <u>Leadership Change</u> Lori Pollock will step down as co-chair, and Michael Hilton will start as co-chair in June 2024.
- <u>UR2PhD Undergraduate Research to PhD National Mentoring –</u> The bridge webinar series will run in the Spring and Fall of 2024. The URMC and GSMT courses will run in the Summer and Fall of 2024, with application deadlines in March.
- The <u>2024 CSGrad4US Fellowship</u> application period has opened and applications are due by May 31, 2024. Share this opportunity with your networks. Link to application: <a href="https://etap.nsf.gov/award/4918/opportunity/6074">https://etap.nsf.gov/award/4918/opportunity/6074</a>
- <u>SIGCSE Workshop on Professional Development for Teaching Faculty</u> The seventh instantiation will be held in March 2024 at the SIGCSE Conference in Portland, OR.

# 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.

#### **Recent Highlights:**

- Expanded CRA-I Council to nine members.
- Secured Board approval for Committee Bylaws, solidifying governance and operational frameworks.
- Achieved recruitment of two additional Industry members (JPMorgan Chase & Co. and SpiNNcloud), bolstering CRA's network and expertise.
- Delivered a compelling keynote on "Establishing Partnerships with Industry" at CRA-WP's Career Mentoring Workshop (November 2023).
- Orchestrated a high-impact roundtable on "Sharing Healthcare Data" in December 2023, fostering crucial industry dialogues.



















Ron Brachman (Cornell Tech), Elizabeth Bruce (Microsoft), Jofish Kaye (Wells Fargo), Hank Korth (Lehigh University), Nita Patel (Otis Elevator Co.), Jennifer Rexford (Princeton University), Eve Schooler (University of Oxford), Mark Segal (National Security Agency), and Tammy Toscos (Parkview Health)

#### What's Coming:

- Spearheading an upcoming influential roundtable on "GenAl for Research and Science" in Spring 2024, setting the stage for cutting-edge discussions.
- Unveiling a comprehensive report on dual appointments in the community during Summer 2024, providing invaluable insights into diverse practices.
- Pioneering a groundbreaking workshop on Sharing Healthcare Data in Fall 2024, driving forward crucial advancements in data collaboration.
- Conducting a targeted survey among industry community members to discern key aspects of undergraduate education impacting their careers.

# 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).

#### **CRA-WP Programs**

CRA-WP programs support people throughout their computing research careers. All of our programs offer funding. To apply to our programs, see <a href="https://cra.org/cra-wp/">https://cra.org/cra-wp/</a>. To volunteer, see <a href="https://cra.org/cra-wp/giving/">https://cra.org/cra-wp/yolunteer/</a>. To donate, see <a href="https://cra.org/cra-wp/giving/">https://cra.org/cra-wp/giving/</a>.

- For undergraduates in computing, we offer
  - <u>Distributed Research Experience for Undergraduates</u> (DREU) participate in or mentor an undergraduate summer research experience
- For people considering graduate school in computing, we offer
  - Mentoring workshops at Tapia discuss how to succeed in computing research
  - Mentoring for CSGrad4US be mentored/to mentor someone through the process of applying to graduate school in computing
- For graduate students in computing, we offer
  - The Grad Cohort Workshop for Inclusion, Diversity, Equity, Accessibility, and Leadership Skills (IDEALS) and Grad Cohort for Women Workshop - learn what it takes to succeed in computing research careers and receive one-on-one mentoring from leaders in computing research
  - Distributed REsearch Apprenticeships for Master's (DREAM) participate in or mentor a first research experience for Master's students
- For early- and mid-career computing researchers (from industry, government labs and academia), we offer
  - Early Career Awards honor early career computing researchers who are leading in both research and outreach
  - The CRA-WP Career Mentoring Workshop network with peers and mentors and strategize how to get to the next stage in your computing research career (in academia, industry or a government lab)
  - Mentoring Mentors learn how to give back and grow a diverse next generation of computing researchers

CRA-WP also participates in the CRA programs UR2PhD and LevelUp.

#### **Program Evaluation**

CRA-WP programs are evaluated by CERP. Participants in CRA-WP programs are more likely to persist in, and more likely to succeed in, computing research careers. Our programs contribute to making computing research more diverse, equitable and inclusive. See <a href="https://cra.org/cra-wp/program-infographics/">https://cra.org/cra-wp/program-infographics/</a>.

#### **Sponsor Benefits**

Would you like to hire the best, most diverse computing researchers? CRA-WP provides sponsors with access to program participants from across North America. See <a href="https://cra.org/cra-wp/sponsor-us/">https://cra.org/cra-wp/sponsor-us/</a>.

Are you a CRA-WP alumnus or someone who cares about the culture of computing research? Make a positive difference for the next generation! See <a href="https://cra.org/cra-wp/giving/">https://cra.org/cra-wp/giving/</a>.

Follow Us! Follow us on Twitter (@cra\_wp), LinkedIn and Instagram (@crawpdotin).

#### **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.

#### **Recent Highlights:**

- Artificial Intelligence Executive Order: In late October, the Biden Administration released an executive order titled "Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," informally known as the AI EO. While the EO is centered around setting up regulations for federal bureaucratic procurement requirements, it does have several items that directly and indirectly impact the nation's research enterprise, including piloting specific AI research programs, training AI researchers, and streamlining high skilled immigration. The order is expansive and covers a wide range of topics; please consult the CRA Policy Blog post for details. The committee is responding to requests for information and comment from an assortment of federal agencies on how to implement this order; we expect to continue to respond to more RFIs and RFCs throughout the year.
- "Deconstructing AI" Congressional Events: On October 26th, CRA co-sponsored two Congressional briefings, one in the House of Representatives and one in the Senate, with member organizations of the <u>Task Force on American Innovation</u>. The briefings were titled, "<u>Federally Funded Research and the Advent of Artificial Intelligence: A TFAI Deconstructing Event</u>," and it "deconstructed" AI to show how decades of federal research funding has powered the latest advances in the field.
- Leadership in Science Policy Institute (LiSPI): GAC held its biannual <u>LiSPI workshop</u> in Washington DC on November 16<sup>th</sup> and 17<sup>th</sup>. 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. We had a final count of 38 participants from CRA member institutions, including a student intern who provided a <u>perspective of his experience at the workshop</u>.

#### What's Coming:

• Computing Research Policy Virtual Town Hall: GAC is planning the next Policy Town Hall for March 1<sup>st</sup> at 3pm eastern. The topic will be research security with Rebecca Keiser, Chief of Research Security Strategy and Policy at NSF, as the speaker. More details will be released closer to the event time; please contact Brian Mosley (<a href="mailto:bmosley@cra.org">bmosley@cra.org</a>) for information.