2024 Board Nominees - Non-Academic

The following 5 academic candidates are vying for 3 open seats on the Board of Directors. We encourage CRA members who are voting to rank at least 3 candidates in their vote.

Bruce Hendrickson
José E. Moreira
Fatma Ozcan
Chris Ramming
Eve Schooler



Bruce Hendrickson

Principal Associate Director for Computing Lawrence Livermore National Lab

Recent Awards and Honors

- Fellow, Society for Industrial and Applied Mathematics (SIAM), 2012
- Fellow, American Association for the Advancement of Science, 2015
- SuperComputing Conference Test of Time Award for development of multilevel graph partitioning, 2014
- George R. Cotter Award for "Vision and Leadership in the Field of Data Analytics", 2017
- Distinguished Scientist, Association for Computing Machinery, 2009



• I have long been an observer and admirer of CRA activities, but I have never before had an opportunity to contribute to them.

Other Relevant Experience

- I lead the largest computing organization in the national lab system
- I have served and led SIAM in numerous ways through the years, including:
 - o Serving on the Committee on Science Policy (policy and advocacy focus), 2017-Present
 - Serving two (elected) terms on the Council, 2009-2014
- I was the Program Manager for the Department of Energy's Applied Mathematical Sciences Program,
 2000
- I was an Affiliated Professor of Computer Science at the University of New Mexico, 1997-2017

Research Interests

- Computational science
- Parallel algorithms
- Combinatorial scientific computing

- Linear algebra
- Data analytics
- Graph algorithms
- Computer architecture

Personal Statement

US national laboratories are home for thousands of computing researchers whose work spans the discipline. I have led computing research efforts at two labs, and currently lead the largest computing organization in the lab system. I have long followed the important work of the CRA but lamented its lack of lab ties. I hope to rectify this by serving on the Board. I bring broad experience in congressional engagements, deep knowledge of the funding agencies, and an understanding of the lab environment. I hope to build mutually beneficial relationships between the CRA and the lab computing research community.





José E. Moreira

Distinguished Research Staff Member IBM Research

Recent Awards and Honors

- Fellow. Institute of Electrical and Electronic Engineers (IEEE).
 2020. For advances in high performance computing systems software and processor design.
- Distinguished Scientist. Association for Computing Machinery (ACM). 2009. For advances in computing technology.
- SC20 Test of Time Award. "An Overview of the BlueGene/L Supercomputer" 2020. (published at SC2002).
- IBM Outstanding Innovation Award. "Research Contributions to the AI-infused POWER10 Processor: microarchitecture, energy efficiency and design/verification tools." 2022.
- IBM Outstanding Technical Achievement Award. "Contributions to Power8 Processor and Memory I/O Design." 2015

Involvement in CRA Activities

I served in the Career Engagement Working Group (2023)

Other Relevant Experience

- RISC-V Vector Special Interest Group Chair (2023-)
- IBM Power System Architecture research and development (2008-)
- Blue Gene/L System Software architecture (2001-2005)
- Adjunct Faculty, Columbia University (2023-)
- GraphBLAS standards committee (2014-)

Research Interests

- Parallel computer architecture
- Parallel programming
- Numerical linear algebra
- Sparse matrix computations

Personal Statement

I have been an active member of the computing research community. While most of my research work can be described as "industrial", since it is performed for IBM, I have also been active with the academic community, organizing various conferences and workshops. I have led major industrial research projects, including system software for Blue Gene/L and matrix and vector processing for IBM's Power Systems. I have worked on standards for graph processing with linear algebra (GraphBLAS) for approximately 10 years. I am a co-author in highly cited journal and conference publications, including an SC "Test of Time" paper.





Fatma Ozcan

Principal Software Engineer Google

Recent Awards and Honors

- VLDB Endowment Women in Database Research Award. 2022
- ACM Distinguished Member, 2019
- IBM Corporate Award for PureXML Database Technology, 2008
- IBM Extraordinary Technical Accomplishment Awards: 2010 (research contributions to Db2), 2009 (Standards Leadership)
- IBM Outstanding Technical Achievement Awards; 2018 (NLQ), 2016 (Join algorithms for big data), 2014 (BigSQL), 2007 (Db2 PureXML)

Involvement in CRA Activities

- I served on the board of directors between 2020 and 2023. During that time, I served on the awards committee, and participated in the Research Integrity Working Group.
- I am currently on the steering committee for CRA-Industry, and will become its co-chair with Divesh Sirivastava in July 2024. As part of CRA-Industry, I organized roundtables and workshops, and co-authored workshop reports.

Other Relevant Experience

- ACM SIGMOD executive committee; 2017-2021 as secretary/treasurer, 2021-2025 as vice chair
- VLDB Endowment Board of Trustees, 2016-2022
- PVLDB Advisory Board, 2018-present
- CRA-Industry Steering Committee Member
- Distinguished/Principal RSM and Senior Manager (2016-2020), IBM Almaden Research Center, San Jose, CA; Led a research group of 15-20 to explore, innovate and deliver data and information management solutions

Research Interests

• Foundation ML models for databases and ML for databases, NL2SQL, infra-structure and platforms for large-scale data analysis, conversational interfaces to data, semi-structured data processing, query processing and optimization, and database engines, and data management platforms.

Personal Statement

I am honored to run for the board of directors of CRA. I served on the CRA board 2020 to 2023. I am on the steering committee of CRA-Industry, organizing roundtables, workshops, and co-authoring white papers. I am very passionate about industrial research, and have been an industrial researcher for 23 years, leading research teams and delivering core technology into products. I am the vice-chair of SIGMOD, served on the board of VLDB Endowment, chaired many program committees, and organized major conferences. All these experiences have given me the skills and prepared me well for serving the computing research community.





Chris Ramming

Senior Director, Research & Innovation VMware by Broadcom (soon to be independent)

Recent Awards and Honors

 Secretary of Defense Medal for Exceptional Public Service (2007)



Involvement in CRA Activities

- Strategic planning committee. Represented industry points of view.
- Ad-hoc governance committees (2x). Supported qualitative and data-driven analysis of board strengths and weaknesses, inclusivity, and new mechanisms.
- Industry ad-hoc committee. Helped analyze and motivate the foundation of CRA-Industry and served on the CRA-Industry steering committee.

Other Relevant Experience

- Member/vice-chair/chair/steering committee DARPA Information Science and Technology Study Group - ISAT (2014-present)
- Board member/chair, UIDP.org (2019-2022)
- Senior Director, VMware Research & Innovation (2016-present)
- Director, Intel University Collaboration Office (2008-2016)
- DARPA Program Manager (2003-2007)

Research Interests

- Technology strategy
- Research management
- New product incubation
- Public-private partnerships

Personal Statement

I am running for a third and final CRA board term to continue work with CRA-Industry and the Governance Committee. In particular, I hope to explore and experiment with ways in which CRA-Industry can catalyze impactful public-private partnerships. I also hope to understand how CRA governance might evolve so that CRA's broader constituents are appropriately represented in developing and executing the organization's agenda.



Eve Schooler

Intel, retired
University of Oxford

Recent Awards and Honors

- IEEE Internet award (2020)
- IEEE Fellow (2021)
- Royal Academy of Engineering (RAEng) Visiting Professor program (2023-), which targets industry-academia partnership
- Intel patent innovation awards (2016, 2018, 2019)
- Intel Achievement Award (Intel's highest honor), ROAR program to retain Senior Technical Women (2015)

Involvement in CRA Activities

- CRA Board of Directors (7/21-), elected initially as an industry representative from Intel
- CRA Career Mentoring Workshop (2023), industry mentor
- CRA Industry (CRA-I), Council member (5/23-)
- CRA Socially Responsible Computing Committee (7/22-) and its Computing, Climate and Sustainability working group (1/23-)
- CCC/NSF-sponsored Workshop on the Role of Information Sciences and Engineering in Sustainability (RISES), invited speaker and panelist (2011)
- CRA/CCC Computing Innovation Fellows Program, submitted a mentor/mentee proposal (2010?) not selected

Other Relevant Experience

- NSF service BoA Intel-NSF ICN-WEN (2017-2020); BoA, Wireless Nano-Bio-Info Sensors and Systems Program (2008-2009); Reviewer, Aware Networking (ANET) program area (2008); Committee of Visitors for CISE/ANIR (2003); Industry Recommender, many Letters of Support for University Researcher proposal submissions (2005-2023).
- Intel external grant giving committees Intel RISE2030 Technology Innovation, Sustainability committee (2021-2023); Intel Labs' Corporate Research Council (CRC), Emerging Ingredients committee (2016-2023); Next Generation & Standards BU (2018-2023); CRC Software and Systems, Research Center review committee (2017); IoT Group BU (2014-2017, 2020-2023); University Research Office (2010-2013); Intel Research Council, Communications committee (2005-2009).
- Anita Borg Institute service Intel BRAID liaison (2020); Career Panel, Girl-serving Organizations (Grace Hopper Conference, GHC'20); Technical Panels, Partner Collaboration Forum (GHC'16, GHC'17, GHC'19); New Investigators Committee (GHC'08); Co-Chair, Invited Technical Talks Committee (GHC'07); Publications Chair (GHC'05), Web Designer and Host for resume database (GHC'02).
- Intel Patent Review committees Edge Networking & Applications (2018-2023); Automotive, Drones, & Robotics (2017-2018).
- PhD committees U. Trento (2013), Sorbonne (2018), Aalto U. (2018), CMU (2019)





Research Interests

- Networking
- Distributed systems
- Collaborative systems
- Internet of Things (IoT)
- Industrial IoT control systems
- Distributed data discovery
- Distributed data stewardship
- Data-centric Networking (aka ICN, NDN, CCN)
- Semantic interoperability
- Internet Edge-ification
- Electric Grid Edge-ification
- Edge Networking

- Edge Computing
- Carbon-aware Computing
- Carbon-aware Infrastructure (aka Sustainable infrastructure)
- Computing in the Network (aka COIN, CFN, in-network compute)
- Deterministic Networks (aka DetNets, TSN)
- Wireless DetNets (aka Reliable Available Networks)
- Reverse Content Distribution Networks (rCDNs)
- The intersection of Sustainability & DEI (Diversity Equity and Inclusion)

Personal Statement

Throughout my career in industry, I have strongly championed long-term research and applied research, their linkage to innovation, and their benefit from academia-industry partnership. Having led and been recognized for Internet standardization efforts, I know that the path of an idea from inception to realization is often not straight and that novel solutions often lie at the intersection of disciplines. At this pivotal moment, the CRA has an opportunity to bring Computing to bear on many urgent societal issues, including Climate Change, whilst simultaneously addressing Diversity, Equity, and Inclusion. All themes for which I would continue to advocate.

