NATIONAL ACADEMIES *Sciences*
Engineering
Medicine

AGENDA

Committee on Pathways to Doctoral Degrees in Computing

Meeting 3
March 14, 2023
Virtual
https://vimeo.com/event/3135966

MEETING OBJECTIVES

- Discuss recent relevant reports to provide context to the study topic
- Review topics and speakers for remaining meetings

Tuesday, March 14, 2023

OPEN SESSION

6:00 pm Growing and Diversifying the Domestic Graduate Pipeline
National Science Foundation, CISE Advisory Committee Report
  → Marie desJardins, CISE AC Subcommittee Co-Chair, Consultant
  → Ran Libeskind-Hadas, CISE AC Subcommittee Co-Chair, Founding Chair, Department of Integrated Science, Claremont McKenna College

6:30 pm Assessing and Responding to the Growth of CS Undergraduate Enrollments
National Academies of Science, Engineering and Medicine Report
Generation CS: Computer Science Undergraduate Enrollments Surge
Computing Research Association Report
  → Susanne Hambrusch, NASEM Study Chair, CRA Subgroup Committee Member, Professor, Department of Computer Science, Purdue University

CLOSED SESSION

7:00 pm Closed Session Begins

8:00 pm Adjourn Meeting

SPEAKER BIOGRAPHIES

Marie desJardins is currently a consultant who offers her expertise in artificial intelligence, machine learning, and computer science education to higher education, industry, nonprofits, and government agencies. She previously served as the Inaugural Dean of the College of Organizational, Computational, and Information Sciences at Simmons University; Professor of Computer science and Associate Dean for Academic Affairs at the University of Maryland, Baltimore County; and Senior Computer Scientist at SRI International in Menlo Park, California. A career researcher and educator, Dr. desJardins has published over 140 scientific papers in journals, conferences, and workshops and secured nearly $12 million in external research funding. Dr. desJardins' research in artificial intelligence has focused on the areas of machine learning, multi-agent systems, planning, interactive AI techniques, information management, reasoning with uncertainty, and decision theory. At UMBC, she mentored 12 PhD students, 27 MS students, and over 100 undergraduate researchers. She is also a committed educator and supporter of diversity in computing, and led the Maryland coalition that expanded CS education access in the public school system and created the Maryland Center for Computing Education. Dr. desJardins graduated magna cum laude from Harvard University with a Bachelor of Arts in engineering and computer science, and earned her PhD in computer science from the University of California, Berkeley.

Ran Libeskind-Hadas received the A.B. in Applied Mathematics from Harvard University and the M.S. and Ph.D. in Computer Science from the University of Illinois at Urbana-Champaign. He was a faculty member in the Department of Computer Science at Harvey Mudd College for 28 years before joining Claremont McKenna College in 2021 as Founding Chair of the Kravis Department of Integrated Sciences. He has served as the co-chair of CRA-E (the Computing Research Association's Education Committee) and is currently a member of the CRA's Executive Committee as well as a member of the NSF CISE Advisory Committee.

Susanne Hambrusch is a professor of Computer Science at Purdue University. She served as the Department Head of the Computer Science department from 2002-07 and 2018-19. From 2010 to 2013, she served as the Director of the Computing and Communication Foundations (CCF) Division in the CISE Directorate at NSF. Her research interests are in analysis of algorithms, computer science education, and parallel computation. Susanne is currently a board member of CRA's Education committee where she served as co-chair until 2022. She is a past CRA Board member and she served as CRA's vice chair 2015-19. Susanne played a leading role in two CS undergraduate enrollment efforts addressing the drivers of the recent surge enrollments: the NAS study on "Assessing and Responding to the Growth of Computer Science Undergraduate Enrollments" which she co-chaired and the CRA study "Generation CS: CS Undergraduate Enrollments Surge Since 2006." Currently, Susanne is a member of the CSGrad4US Fellowship Mentoring team which developed and delivers the mentoring program for recipients of NSF's CSGrad4US Graduate PhD Fellowships. She holds a Diplom Ingenieur in Computer Science from the Technical University of Vienna, Austria, and a Ph.D. in Computer Science from Penn State. She is a Fellow of the ACM.