

# ADVANCING DIVERSITY IN EDA

Location: Co-located with DAC'19 in Las Vegas  
Date: June 3, 2019  
Time: 14:00 – 18:00  
Organizers: Chengmo Yang, University of Delaware  
Ayse Coskun, Boston University

## Time

## Session

**14:00 – 14:15** **Welcome and Introduction:** Chengmo Yang, University of Delaware

**14:15 – 14:45** **Keynote:** Advancing Design Automation for Biological Engineering

**Speaker:** Soha Hassoun, Tufts University

**Introduction:** Chengmo Yang, University of Delaware

Analyzing and exploiting biochemical features has shown great promise in advancing our understanding of biological systems and engineering synthetic systems that produce commercially useful biomolecules, including polyesters, biofuels and therapeutic natural products. In this talk, I will describe how I used familiar EDA concepts, e.g., synthesis and technology mapping, to advance the design of biological systems. I will also explain how deep learning can be applied to graph-structured biochemical data to predict undocumented biochemical interactions. I will conclude by highlighting a few personal experiences (successes and challenges) that shaped my journey from EDA to Bio Design Automation.

Soha Hassoun is Professor and Past Chair of the Department of Computer Science at Tufts University. She holds secondary appointments in the Department of Electrical and Computer Engineering and also in the Department of Chemical and Biological Engineering at Tufts. Soha received the BSEE degree from South Dakota State University, Brookings, SD, the Master's degree from the Massachusetts Institute of Technology, Cambridge, MA, and the Ph.D. degree from the Department of Computer Science and Engineering, University of Washington, Seattle, WA. She was an integrated circuit designer with the Microprocessor Design Group, Digital Equipment Corporation, Hudson, MA, 1988-1991, and worked as a consultant to several EDA companies including Mentor Graphics and Carbon Design Automation. Her current research interests are in using machine learning to advance Systems Biology and Metabolic Engineering. Dr. Hassoun was a recipient of the NSF CAREER Award, and several awards from ACM/SIGDA for her service, including the Distinguished Service Award in 2000 and 2007, and the 2002 Technical Leadership Award. She held executive and technical leadership positions for several conferences and workshops, including DAC, ICCAD, IWLS, and TAU. She is a fellow of Tau Beta Pi, and a senior member of IEEE and ACM.

# Advancing Diversity in EDA

## **14:45 – 15:30 Panel 1: Negotiating: Practical Strategies for Women and URM in Tech**

**Moderator:** Sharon Hu, University of Notre Dame

**Panelists:** Iris Bahar, Brown University  
Anne Cirkel, Mentor Graphics  
Ian Harris, University of California, Irvine  
Tajana Rosing, University of California, San Diego

This panel discusses negotiation in the EDA industry and academia at various job levels, including for addressing the gender and minority pay gap, when seeking promotions, or for increasing personal visibility at the workplace and in the community. The panelists will provide practical strategies as well as their broader insights and experiences.

**15:30 – 16:00** Coffee break

## **16:00 – 16:45 Panel 2: Work-Life Balance: Myth or Reality?**

**Moderator:** Seda Ogreneci-Memik, Northwestern University

**Panelists:** Valeria Bertacco, University of Michigan  
Agnieszka Dubaj, IEEE CEDA  
Helen Li, Duke University  
Tulika Mitra, National University of Singapore

This panel discusses observations, challenges, and methods regarding work-life balance, seeking answers to questions such as: What does balance mean at different stages of life and career? How do work-life balance and personal goals interact? Are there better (or worse) ways for time management?

## **16:45 – 17:30 Panel 3: Job Hunting and Breaking the Glass Ceiling**

**Moderator:** Cristiana Bolchini, Politecnico di Milano

**Panelists:** Patrick Groeneveld, Stanford University  
Christopher Harris, Auburn University  
Farinaz Koushanfar, University of California, San Diego  
Xue Lin, Northeastern University

This panel discusses the opportunities, challenges, and obstacles experienced by women and URM in the job-hunting process both in academia and in industry, discussing topics related to better ways of presenting oneself, challenges and strategies with applications and reference letters, how to demonstrate strengths in phone or on-site interviews, how to decide on competing job offers, and more.

# Advancing Diversity in EDA

**17:30 – 18:00 Speed Mentoring Session**

This structured mentoring session will match each mentee with a few mentors throughout the session, with the goals of getting quick tips and feedback, as well as identifying good mentor-mentee matches for longer term mentorship.

**18:00 Closing Remarks, followed by DAC Reception**

This event is jointly sponsored by IEEE CEDA and ACM SIGDA.

