Title of the Talk: Emerging Trends and Demands in Technical Careers

Abstract: We are going through a highly exciting time in scientific and technological development. From robotic medicine to artificial intelligence to quantum computing, newer dimensions have been, and are being added to our world with increasing speed. These new dimensions come with their own unique challenges that introduce new types of demands to our careers. This interactive talk will expose the audience to some of those demands.

Date: FRIDAY, MARCH 15, 2024

Time: 11:00 A.M – 12:00 NOON

Location: Via Zoom (Join Zoom Meeting: https://ullafayette.zoom.us/j/93148290474)

Biography: Fahmida N. Chowdhury is a Program Director at the U.S. National Science Foundation (NSF, https://www.nsf.gov/), where she directs and manages funding programs in the NSF Office of International Science and Engineering (OISE, https://www.nsf.gov/dir/index.jsp?org=OISE) and handles a country portfolio consisting of several South and Southeast Asian countries. As a Program Director at NSF, she develops funding solicitations, manages and leads proposal review processes, makes funding recommendations and manages/oversees funded projects. She co-manages a funding portfolio of approximately 25 million US Dollars. Dr. Chowdhury has been with NSF for 14 years. Before that, she was a professor of electrical and computer engineering at the University of Louisiana, Lafayette, where she held the W. Hansen Hall and Mary O. Hall Endowed Chair in Computer Engineering. She was educated at the Moscow Power Engineering Institute, Moscow, ex-Soviet Union and Louisiana State University, Baton Rouge, Louisiana, USA. Her research interests are in dynamic systems modeling/control and artificial neural networks. She has been a Fulbright Scholar and an Embassy Science Fellow, and she is fluent in Russian. She served as an Associate Editor for IEEE Transactions on Control Systems Technology and IEEE Transactions on Neural Networks; currently she is an Associate Editor for IEEE Transactions on Artificial Intelligence.

Fahmida Chowdhury's NSF Bio:
https://www.nsf.gov/staff/staff_bio.jsp?lan=fchowdhu&org=NSF&from_org=NSF LinkedIn:
https://www.linkedin.com/in/fahmida-chowdhury-109037a/

Number of Participants: 65

Objective of the talk: The main goal of the talk is to empower participants on emerging technologies like machine learning, quantum computing, smart cities. And to provide a brief insight on NSF / funding opportunities.

Summary: The talk is about Emerging Trends and Demands in Technical Careers. The talk started with detailed discussions on AI, ML, quantum computing, smart cities that are required to pursue technical careers for the graduate students. Then the talk emphasized on funding opportunities provided by NSF. Dr. Fahmida is the program director in NSF where she manages the funding for the universities and she explained how technology development is making new dimensions to the world. She explained about the NSF smart health research and cybersecurity technologies. She explained the importance of ethics in science and technologies in order to maintain security and provide sustainability. She also explained about Smart health and bio-medical research. Dr. Fahmida pointed out some important points regarding Human Centered Computing which basically comes under Human Computer Interaction. It is mainly beneficial for the physically disabled people. She guided regarding ethical and responsible research. After her talk, we had a question-and-answer session which was interactive. Lot many questions were posed by the students in the talk and all of them were addressed by the speaker.

Outcome of the talk:

Students gained knowledge on technical careers and the demand for the same. Also they gained knowledge on NSF funding opportunities for research.

Screenshots of the talk: