



The Spring 2024 Faculty Spotlight is on...

Dr. Behin Elahi



Dr. Behin Elahi joined San Jose State University (SJSU) as an Associate Professor in the Department of Industrial and Systems Engineering in Fall 2023. Prior to joining SJSU, she was Associate Professor at Purdue University, Fort Wayne (2016-2023). She received her Ph.D. in Industrial Engineering from the University of Toledo in 2016 and holds a master's degree in the same field. She was a consultant and project manager of the Business Waste Reduction Assistance Program (BWRAP), a partnership between the Environmental Protection Agency (EPA), University of Toledo, and Lucas County in Ohio (2012-2016).

Her research interests include application of robotics and virtual reality in manufacturing systems, human-robot interaction and collaboration, data mining, machine learning, optimization of healthcare systems, operations research, decision making algorithms, supply chain optimization, lean manufacturing, water quality assessments, modeling and simulation of complex systems such as healthcare systems and automated manufacturing systems. She has published one book, three book chapters, and more than 35 research articles. She is the topic editor for *Mathematics Journal* with focus on data mining and stochastic optimization initiatives in *Advanced Manufacturing Systems* and reviewer for top-tier Journals such as *Journal of Computers & Industrial Engineering* and *Journal of Mathematics* and international conferences such as IEEE and ASEE

Dr. Elahi has obtained nine grants from external funding agencies and three internal grants. She has devoted much effort to serving students and the professional society. Her research engaged with students resulted in SJSU Research, Scholarship, and Creative activities (RSCA) fellowship. She is currently the faculty advisor for 10 master's students from Industrial and Systems Engineering and Engineering Management programs at SJSU. She is particularly proud of one of her MS Engineering Management students, Ishan Sharmahwo, who has recently received a 2024-2025 Research and Innovation Student RSCA Fellowship. Ishan will work on a project titled "Real-time Simulation to Enhance Object and Human Detection in Self-Driving Cars using YOLONOS and MM YOLO Algorithms, Trained on Reliable Datasets" in Dr. Behin Elahi's research group.

Read further about Dr. Elahi on page 2...



. Behin Elahi, cont.

At the university level, Dr. Elahi is the senate committee member for the special committee on senate representation (CSR)-SJSU (2023-Present). She actively attends enrollment summits to review and provide feedback on SJSU strategic enrollment management plan. At the college level, she is the planning committee and session chair for the annual Charles W. Davidson College of Engineering conference “Silicon Valley Women in Engineering”.

Behin was honored as the 2020 Featured Faculty in Research by Purdue University Fort Wayne-Office of Research Sponsored Programs. She also received the 2018-2020 Honors Faculty Award from the Purdue University Fort Wayne Honors Program, and was granted the 2020 Research Appreciation Award by the Indiana Society of Professional Engineers Anthony Wayne Chapter. Her other noteworthy awards include the IEEE Young Engineer of the Year award in 2015, The Honor Society of Phi Kappa Phi Award of Excellence in 2013, and the Dan Christian Memorial Scholarship in 2013.

Little known facts:

In her leisure time, she engages in the creation of musical art using natural wood, focusing on intricate inlay designs. This artistic endeavor allows her to express creativity and craftsmanship. She also enjoys hiking, cooking, travelling, learning about different cultures, and tackling problem-solving challenges. That’s why she is establishing Human-Robot Interaction and Collaboration (HRIC) lab.



Dr. Elahi adjusting the Omron Hornet robot in the Tim and Vy Li Industrial Engineering Lab