

Human Factors and Ergonomics Forum

Towards Semi-Autonomous Surgical Robotics Using Cognitive Load Sensing and Algorithms

Speaker: Dr. Denny Yu, Associate Professor, Purdue University

Invited by: Dr. Boyi Hu, Assistant Professor, ISE Department

Short Biography



Denny Yu, PhD, CPE is an Associate Professor of Industrial Engineering at Purdue University and an Adjunct Associate Professor of Surgery at Indiana University School of Medicine. He received his Ph.D. in Industrial and Operations Engineering at the University of Michigan. Dr. Yu's expertise is in human factors engineering, specifically in quantitative sensing techniques to assess individual and team behaviors in high workload-dynamic environments. In conducting this work, his team has received the RSJ/KROS Distinguished Interdisciplinary Research Award (RO-MAN 2021) and the 2021 Human Factors Prize (by the Human Factors and Ergonomics Society).

Abstract

Healthcare services are provided in dynamic environments with complex human interactions and stressful work demands. Sensing technology can transform and enhance our current capabilities to monitor and assist personnel for these in high-workload environments. This talk will focus on the application of sensing and machine learning techniques into interventions that enhance human performance.

Time: September 13 (Tuesday), 1:30-2:30 pm

Location: Weil Hall 406

