Presents

Dr. Changxu (Sean) Wu, State University of New York at Buffalo

Human Performance Modeling and its Applications in Systems Engineering

This research seminar introduces the major research activities at the Cognitive System Lab at SUNY-Buffalo, focusing on human performance modeling with its applications in transportation safety, human-machine interaction, and smart energy systems design. Human performance modeling is a growing and challenging area in cognitive systems engineering. It builds computational models based on the fundamental mechanisms of human cognition and human-system interaction, employs both mathematical and discrete event simulation methods in industrial engineering, and predicts human performance and workload in real-world systems. It can be used to design, improve, and evaluate systems with human in the loop. Current and future research topics will also be introduced.

Bio: Dr. Changxu (Sean) Wu received his Ph.D. degree in Industrial and Operational Engineering from the University of Michigan-Ann Arbor (2007). He is an Associate Professor of Department of Industrial and System Engineering at the State University of New York (SUNY)-Buffalo, starting from August 2007. Dr. Wu directs the Cognitive System Lab at SUNY and he is interested in integrating cognitive science and engineering system design, especially modeling human cognition system with its applications in system design, improving transportation safety, promoting human performance in human-computer interaction, and inventing innovative sustainable and smart energy systems with human in the loop. He has published 56 journal papers in the field, including *IEEE Transactions on Systems, Man, and Cybernetics (Part A)*, *IEEE Transactions on Intelligent Transportations Systems*, *Psychological Review*(Impact Factor: 9.02), *ACM Transactions on Computer-Human Interaction*, *International Journal of Human-Computer Studies*, as well as several other journals. He is Associate Editors for IEEE Transactions on Intelligent Transportations Systems, IEEE Transaction on Human-Machine Systems, and Behaviour & Information Technology. He is elected as the Chair of Human Performance Modeling Technique Group at HFES in 2015. He also received the Outstanding Student Instructor Award from the American Society of Engineering Education (ASEE) at the University of Michigan in 2006. Dr. Wu is a member of IEEE, Human Factors & Ergonomics Society (HFES), Society of Automobile Engineers (SAE), Cognitive Science Society, and American Society of Engineering Education (ASEE).

Thursday, October 1, 2015   3:30 – 4:30 pm

University at Buffalo – North Campus – Davis 113A

This talk is free and open to the public   For more information, email cse-dept@cse.buffalo.edu