



Department of Computer Science

Intelligent Sensing Systems through AI and Interaction

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Hosted by Guiling Wang

Date: Monday, November 22, 2021
Refreshments: 2:15 PM – 2:30 PM
Seminar: 2:30 PM – 3:30 PM
Location: GITC 4402 (4th Floor Seminar Lecture Hall)

<https://cs.njit.edu/seminars>

Abstract:

This talk is about designing systems and algorithms for sensing systems that interact directly with humans. I will discuss our work in the Cyber-Physical Intelligence lab (CyPhy-Lab) at Rutgers University, where we study sensing systems that learn about human behavior through sensing and machine learning techniques. I will describe two projects that explore this more precisely: Project Paz and Patient Sense. Project Paz is an in-car interrupt model and system that learns from context when it is best and safest to engage with a driver. Patient Sense is a system that uses unique interaction patterns with an instrumented pillbox to classify the current user and automatically log pill-extraction events. I will close with some thoughts on the cyber-physical human systems and the future of AI-driven sensing and human interaction.

Bio:

Jorge Ortiz is an Assistant Professor at Rutgers University, where he directs the Cyber-Physical Intelligence Lab and is where he is also a member of the Wireless Information Network Laboratory (WINLAB). His work focuses on building and studying sensing systems that learn with and about humans. Before joining Rutgers, he was a Research Staff Member at IBM Research, working on machine learning and the internet of things. In his five years at IBM, he attained 12 patents and published in multiple top academic conferences, journals, and books. Dr. Ortiz earned his M.S. and Ph.D. in Computer Science from UC Berkeley in 2013 and a B.S. in Computer Science from MIT in 2003.