COLLEGE OF
Engineering, Computer Science, and Technology

Seminar in Interdisciplinary STEM Research

March 26th – Thursday, 3:05-4:20 PM PST

Location: E&T C256

HOSTED BY CREST-CATSUS AND SIKAND SITI CENTERS

Franceli L. Cibrian, Ph.D.

Assistant Professor at the Fowler School of Engineering at Chapman University

Dr. Cibrian is an Assistant Professor at the Fowler School of Engineering at Chapman University. She specializes in Human-Computer Interaction and Ubiquitous computing for the design and evaluation of mobile and wearable technologies that support children's well-being, learning, and accessibility. Her research focuses on how interactive systems and multimodal sensing can transform everyday data into meaningful, actionable support for children, families, and educators. This work has received funding from the National Science Foundation (NSF) and the Agency for Healthcare Research and Quality (AHRQ). Additionally, she is a Well-Being by Design Fellow for the Sesame Workshop. Dr. Cibrian completed a postdoctoral training at the University of California, Irvine. Dr. Cibrian earned her Ph.D. in Computer Science from the Center for Scientific Research and Higher Education (CICESE) in Mexico.

Engineering Human-Centered Interactive Systems for Learning, Health, and Access

This talk presents my research program, advancing human-centered interactive systems from early design through real-world deployment across three domains: learning, health, and accessibility. I will describe how combining HCI methods with ubiquitous/mobile computing enables technologies that fit users' routines, constraints, and goals, especially for children, families, and communities that are often underserved by "one-size-fits-all" systems. The talk highlights case studies of digital health interventions for ADHD, showing how child- and caregiver-facing workflows can support self-regulation and caregiving practices while remaining feasible in everyday contexts. I will then discuss deployments of mobile and wearable devices (e.g., smartwatches and smart rings), what "in-the-wild" physiological sensing entails, and their potential for supporting screening for developmental milestones. I conclude with open challenges and collaboration opportunities in robust sensing, adaptive interventions, and inclusive, deployable systems.

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