Disability, Aging & Technology-Cluster Lead Candidate

"The Role of Smart Wearables in Intervention-Centered Health Technologies"

Kunal Mankodiya, Ph.D.

Associate Professor & Director, Wearable Biosensing Lab
University of Rhode Island

Abstract - Dr. Mankodiya will present Wearable IOT, a unique framework that establishes human-centered interconnections with wearable sensors, smart textiles and clinically-reliable data analytics—key elements for the future success of intervention-centered health technologies. He will demonstrate some of his ongoing projects (funded by NSF) involving smart textiles that are targeted to enhance the interventions of Parkinson's disease remotely via telemedicine. Since 2012, he has developed a number of smartwatch-based health technology projects to support patients with medical conditions such as PTSD and mood and anxiety disorders. He will also touch upon his recent NIH-funded mHealth technology with an objective to support caregivers of dementia patients. He will share lessons learned from his journey of developing and validating health technologies. Lastly, he will talk briefly about his student-centered activities, including newly-developed courses and hack-a-thons with an aim to nurture entrepreneurial thinking in the intersection of clinical interventions and health technologies.

About the candidate - Kunal Mankodiya, PhD is the Director of Wearable Biosensing Lab and is a tenured associate professor in the Dept. of Electrical, Computer, and Biomedical Engineering, University of Rhode Island, RI, USA since 2014. He is a recipient of NSF CAREER (2016) Award enabling research on "Internet of e-textile wearables for telemedicine". In 2018, he received TechConnect Defense Innovation Award for his work on "Smart Textile Trouser". He was recognized as the "Innovator-of-the-year" by Future Textiles Awards, Frankfurt, Germany in 2017. Mankodiya was also selected among "40 under 40" by Providence Business News in 2017. His embedded computing design of a smart-textile ECG system earned him the 2010 SYSTEX Award, University of Ghent, Belgium. He regularly organizes scientific workshops/symposiums on IOT for healthcare at various international conferences. He enjoys organizing an annual 48-hour HealthHacks event to promote entrepreneurial thinking in the areas including IOT, healthcare, and aging. He pursued his postdoctoral research at Intel Science & Technology Center (ISTC) and Carnegie Mellon University (CMU), Pittsburgh, PA, USA. He received his Ph.D. degree from the University of Luebeck, Germany. He holds MS (University of Luebeck, Germany) and BE (Saurashtra University, India) degrees in Biomedical Engineering.

Date:
Friday, 1/24/2020

Time:
9:30 - 10:30 AM

Location:
HEC, Room 356

For more information please contact:

Dr. Janan Smither
Janan.Smither@ucf.edu

OR

Jade Laderwarg
Jade@ucf.edu