

Dhaval Solanki - URI Electrical, Computer and Biomedical Engineering Department

An aspiring early stage biomedical investigator, Dhaval Solanki, PhD, received his PhD in 2020 and joined the University of Rhode Island (URI) as a Postdoctoral Fellow. He stepped up as Assistant Professor, Teaching at URI in 2022. Soon, he became co-director of the Wearable Biosensing Lab. His research interest includes designing technologies for healthcare. He has been involved in developing solutions for patients with neurological disorders such as stroke and parkinson's disease. His work is published in several reputed peer-reviewed journals and conferences. He has been rewarded with patents for his research work. He seeks to design point-of-care technologies for telemonitoring and telerehabilitation of neurological disorders.

Title: Kaya- Telemonitoring progress of Parkinson's

Continuous progress monitoring of Parkinson's disease is a pivotal factor in medication titration. Researchers at the Wearable Biosensing Lab at the University of Rhode Island (URI) have pioneered the development of an Internet of Wearables solution for monitoring Parkinson's disease progress in the comfort of one's home. These wearable technologies encompass an E-Textile-based smart glove system and sensor-integrated shoe caps. During this presentation, Dr. Solanki will delve into the details of this cutting-edge technology and share insights gained from in-home feasibility testing utilizing these innovative devices. Furthermore, the presentation will illuminate additional research initiatives undertaken at the Wearable Biosensing Lab, including digital health solutions for Parkinson's management and a virtual reality-based grip strength training platform tailored to Parkinson's patients.