Editorial

Special Issue: PHM for Human Health and Performance II

Thurmon E. Lockhart and Rahul Soangra

This special issue was conceived during the 11th Annual Conference of Prognostic and Health Management Society's Panel session on the September 25th at Scottsdale, AZ, USA. We would like to thank the panel members and their colleagues in their participation in this special issue focusing on engineered technologies for older adults. This work was partially funded by the NSF ERC seed grant from an interdisciplinary group of researchers from Iowa State University, Arizona State University, Georgia Tech, Florida State University, Chapman University and the University of California Irvine who are engaged in developing a large-scale grant proposal that will be focused on integrated technologies to promote resilient aging and reducing healthcare costs.

The manuscripts exemplify our research focus and illustrates contributions in the fields of wearable smart sensors, sensor-data-fusion, machine learning and data mining, prediction and diagnosis, and electronic health records and databases - all in the context of prognostics and health management for human health and performance.

We would like to thank the PHM Society for providing an opportunity to publish in their premier journal, and importantly, we are grateful for help of the Editor-in-Chief – Marcos Orchard, Ph.D. for his countless hours to edit and make it best possible of this special issue. Finally, we would like to express sincere appreciation to all the reviewers who have contributed their time and thoughtful feedback to making this special issue publication a success.

Key words: Smart Technologies for Health and Independent Living of Older Adults

BIOGRAPHIES

Thurmon E. Lockhart is a human locomotion biomechanist specializing in fall accidents and the Director of the Locomotion Research Laboratory at the Arizona State University where he is a Professor of Biomedical Engineering and Biological Design. His research focuses on the identification of injury mechanisms and quantification of sensorimotor deficits and movement disorders associated with aging and neurological disorders on fall accidents utilizing wearable biosensors and nonlinear dynamics. His research interest includes wearable biomedical devices, gait and posture, chaos and ergonomics.

Rahul Soangra is an Assistant Professor in the Department of Physical Therapy at Crean College of Health and Behavioral Sciences. He is also an affiliate faculty for Fowler School of Engineering at Chapman University. His research focuses on Gait and Posture biomechanics of patients with musculoskeletal and neurological disorders. His research interests include the utilization of virtual environments and wearable sensors for gait rehabilitation.