THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering
Seminar

Wearable Computing for Healthcare and Motion Analysis

by

Prof. ZHOU Gang
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Date : **14 July 2023 (Friday)**
Time : **11:00am to 12:00pm**
Venue : **Rm 804, William M W Mong Engineering Building, CUHK**

Abstract

Healthcare is a fundamental human need that has been revolutionized by computing in the past century. Technology has transformed the way we approach healthcare from paper and pencil to individual computers, to connected devices via the internet, and now to wireless and mobile smartphones and wearables. In recent years, sensors have been integrated into these mobile and wearable devices, making healthcare a potential killer application for wearables. Additionally, non-contact sensing based on radio technologies is emerging as a promising new approach.

As mobile and wearable computing can potentially dominate the healthcare landscape, I am excited to introduce three wearable computing platforms that my research group has been developing for Parkinson's Disease patients and other subjects for gait and motion analysis and real-time intervention. These platforms include IMU, magnet, and textile sensors. Using these sensors, we can provide personalized and targeted interventions to improve patient outcomes and well-being.

Join me as we explore the possibilities of wearable technology in healthcare and motion analysis and how these innovative platforms can help us provide better care to those in need.

Biography

Dr. Gang Zhou is a professor of computer science at William & Mary, where he previously served as the Graduate Program Director from 2015 to 2017. He is an IEEE Fellow, a co-Editor-In-Chief of ACM Transactions on Computing for Healthcare, and a co-Area-Editor of IEEE Internet of Things Journal. He earned his Ph.D. degree from the University of Virginia in 2007. His research interests encompass a range of cutting-edge topics, including wearables & sensor systems, smart health, internet of things, wireless, ubiquitous & mobile computing.

Dr. Zhou has served as a Steering Committee member (2018-present), General Chair (2019), and TPC Chair (2018 and 2023) of CHASE---ACM/IEEE's premier conference on Connected Health: Applications, Systems and Engineering Technologies. He has also been recognized with several prestigious awards, including the NSF CAREER Award in 2013, the Best Paper Award from IEEE Internet Computing in 2020, and the Best Paper Award from IEEE ICNP in 2010.

** ALL ARE WELCOME **

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