



THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering
Seminar

**Decoding Your Body with Ubiquitous Sensing:
Wearable & Contactless Perception for Health and Interaction**
by
Prof. Wentao Xie
The Hong Kong University of Science and Technology

Date : 30 Oct 2025 (Thursday)

Time : 11:00 am – 12:00 pm

Venue : Rm C3, Lady Shaw Building, CUHK

Abstract

Understanding human behaviour is central to applications in healthcare, entertainment, and human–computer interaction. Yet many existing behaviour-sensing approaches rely on bulky equipment or specialised instrumentation, limiting their practicality and reach of these applications. In this talk, I will present our recent work on ubiquitous sensing methods that bring these capabilities into everyday environments. In particular, I will describe techniques that leverage ubiquitous sensors (i) to enable home-based respiratory health management and (ii) to create immersive interaction experiences on unmodified wearable devices.

Biography

Wentao Xie is a Research Assistant Professor at the Department of Computer Science and Engineering at the Hong Kong University of Science and Technology (HKUST). Previously, He received his PhD degree in Computer Science and Engineering from HKUST. His research addresses human-centric physical world problems with ubiquitous computing approaches. Specifically, he designs ubiquitous sensing systems and robust AI models to ease the measurement and interpretation of human activities, enabling applications such as home-based healthcare and interaction design on resource-constrained devices. His work has been published in top peer-reviewed journals and conferences such as ACM UbiComp/IMWUT, MobiCom, SenSys, and IEEE PerCom.

**** ALL ARE WELCOME ****