



**THE CHINESE UNIVERSITY OF HONG KONG**  
Department of Information Engineering  
*Seminar*

**Privacy-Preserving Machine Learning in Sensor Rich IoT Systems**

by

**Prof. HU Wen**  
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**Date : 19 May 2023 (Friday)**

**Time : 11:00am to 12:00nn**

**Venue : Room 833, Ho Sin Hang Engineering Building, CUHK**

Abstract

Sensor-rich IoT systems are becoming ubiquitous in our lives, from smart wristbands with IMU, to smartphones with depth cameras, to low-cost embedded networked radars. These systems are providing very good alternative ways for human context detection. Yet, making the robust inference from the multi-modality raw sensor data to individual's context in the wild remains difficult. Furthermore, human context may consist of sensitive information, which needs to be protected from malicious attackers. In this talk, I will discuss my group's ongoing research on addressing these challenges with example applications in fitness, health and cybersecurity.

Biography

Wen Hu is a professor at School of Computer Science and Engineering, the University of New South Wales (UNSW). His current research focuses on novel applications, low-power communications, security, signal processing and machine learning in Cyber Physical Systems (CPS) and Internet of Things (IoT). Hu published regularly in the top-rated sensor network and mobile computing venues such as ACM/IEEE IPSN, ACM SenSys, ACM MobiCOM and ACM UbiCOMP. He is an associate editor of ACM TOSN, the general chair of CPS-IoT Week 2020, co-chairs the program committee of ACM/IEEE IPSN 2023 and ACM Web Conference (WWW 2023, Systems and Infrastructure for Web, Mobile Web, and Web of Things track). Hu actively commercialises his research results in smart buildings and IoT, and his endeavours include Parking Spotz and WBS Tech. Prior to joining UNSW, he was a principal research scientist and research project leader at CSIRO.

**\*\* ALL ARE WELCOME \*\***