



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

**Picturing Real-life Stress Through the Lens of Consumer-grade Sensors**  
By

**Dr. Tian Hao**

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**Date : 18<sup>th</sup> October, 2018 (Thu)**  
**Time : 11:00am – 12:00nn**  
**Venue : Room 1009, William M.W. Mong Engineering Building**  
**The Chinese University of Hong Kong**

*Abstract*

Given the prevalence and the growing evidence of stress's negative impact on health and wellbeing, the ability to assess and manage everyday stress becomes increasingly important. Recent advancements in bio-sensing technologies unlock new opportunities to develop non-invasive, valid objective measures of stress level in real-time and on a level of granularity that was not possible before.

We believe enabling the system to seamlessly and reliably infer real-time stress using consumer-grade sensors is a vital first step towards understanding people's mental status and realizing personalized feedback and interventions to improve health and wellness. To this end, we have conducted a series of studies including in-lab experiments to investigate the feasibility, and in-field experiments for further validation in unconstrained real-life setting using a smartwatch-based prototype. In this talk I would like to share our journey in designing such a system and discuss future challenges.

*Biography*

Tian Hao is a computer scientist who is passionate about delivering innovations in Smart and Connected Health. Working with a multidisciplinary team at IBM Research, he leads the technical development of Cognitive IoT Systems for Healthcare that harness innovative sensing technologies and advanced analytics to understand physical/mental health at a level of granularity that was not possible before, which in turn enables automatic assessment, prediction, and personalized intervention. His current projects aim to solve challenges in managing stress and chronic disease. Tian holds a Ph.D. in Computer Science from Michigan State University.

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