



School of Data Science

香港城市大學
City University of Hong Kong

ONLINE SEMINAR

AI-empowered mHealth: Pioneering Applications and Overcoming Key Challenges

Date: 22 July 2024 (Monday)

Time: 2:30pm - 3:30pm

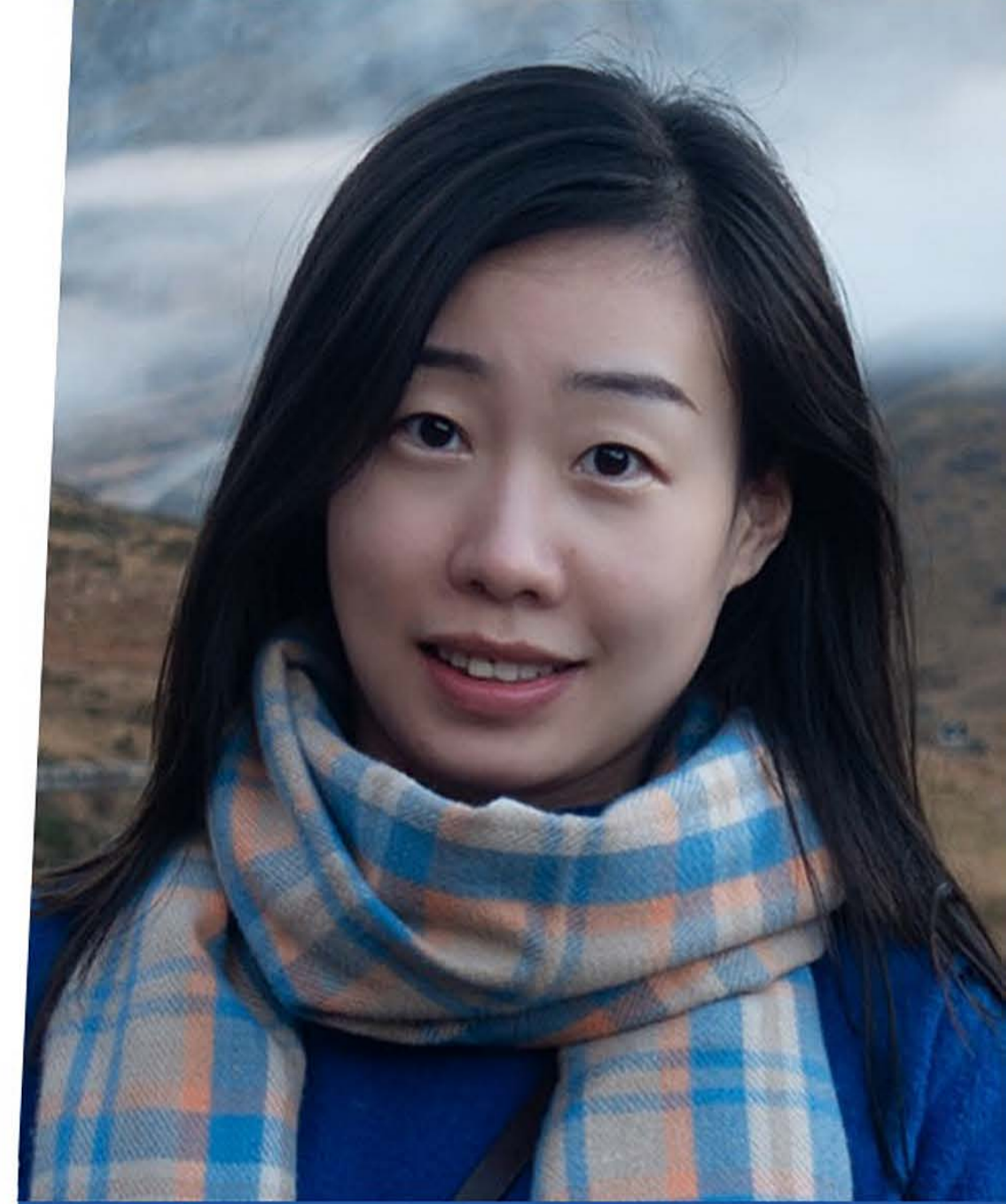
Seminar Link: <https://cityu.zoom.us/j/91540535142>



ABSTRACT

The proliferation of mobile devices such as smartphones, smartwatches, and portable medical devices presents a significant opportunity for continuous health monitoring anytime and anywhere. This emerging trend, known as mobile health (mHealth), shows great promise, especially when empowered by artificial intelligence (AI). AI-empowered mHealth can deliver health diagnoses and interventions at scale, revolutionizing the way we approach healthcare.

In this talk, I will provide an overview of several AI-empowered mHealth applications and discuss key challenges in data privacy, model robustness, and model generalization. In particular, I will present my recent work on acoustic mHealth, which leverages audio signals collected from ubiquitous microphones to diagnose individual health conditions. I will also introduce how my studies can tackle these unsolved problems to improve the effectiveness of acoustic mHealth solutions in the real world.



Dr. XIA Tong

GUEST SPEAKER'S PROFILE

Dr. XIA Tong is a postdoctoral research associate in the Department of Computer Science at the University of Cambridge. She received her PhD from Cambridge University, her Master's degree from Tsinghua University, and her Bachelor's degree from Wuhan University. During her PhD, she was funded by the Huawei Scholarship.

Her main research interests are machine learning, mobile data mining, and their applications in medicine and public health, with a focus on modelling data from mobile and wearable devices and on ensuring the reliability and generalization of deep learning for health applications. She has published over 30 papers in top journals like NPJ Digital Medicine, IEEE JBHI, and IEEE TKDE, and top AI conferences, including NeurIPS, AACL, KDD, ICASSP, and INTERSPEECH, with more than 1500 citations on Google Scholar.

Dr. Xia has received many honours including the CSC award for Outstanding Self-financed Students Abroad, the Cambridge University Hall of Fame "Better Future Award", and the INTERSPEECH Conference Travel Award. She serves as a reviewer for many top journals and conferences and was the poster session chair for UbiComp 2022. Dr. Xia has maintained close collaboration with industry such as Huawei, Tencent, and Nokia Bell AI Labs and has mentored many undergraduate and graduate students for their graduation theses.

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All are welcome