School of Data Science
香港城市大學
City University of Hong Kong

Data-driven Specialization towards Intelligent Internet of Things

Date: 26 April 2022 (Tuesday)

Time: 10:00am - 11:00am

Seminar link: https://cityu.zoom.us/j/91329576865

ABSTRACT

Beyond the Internet of Things (IoT) lies the Artificial Intelligence of Things (AIoT): the vision of ubiquitous objects interacting with the environment and humans autonomously and intelligently. Realizing this vision relies on implementing complex computation under stringent resource constraints, at both the levels of individual devices and the overall system. In this talk, I will advocate for a data-driven approach that optimizes the computation to the application context in order to break the resource limits of IoT devices and systems. To highlight the efficacy of our approach, I will present two examples: compression of multiple deep neural networks for mobile computer vision, and post-deployment sensor calibration for air pollution monitoring. Both examples show extra resource saving beyond the corresponding domain sciences without compromising performance.

ONLINE SEMINAR

Dr Zimu ZHOU

GUEST SPEAKER'S PROFILE

Dr. Zimu Zhou is currently a tenure-track assistant professor in the School of Computing and Information Systems, Singapore Management University. His research interest lies broadly in mobile and ubiquitous computing, with a focus on AIoT. He obtained his Ph.D. from the Hong Kong University of Science and Technology in 2015 and B.E. from Tsinghua University in 2011. Prior to joining SMU, he was a postdoctoral researcher at ETH Zurich.

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All are welcome