



CMAI: Artificial Intelligence Colloquium Series The Chinese University of Hong Kong

This CMAI AI Colloquium Series is organized by Centre for Mathematical Artificial Intelligence (CMAI), under Department of Mathematics at CUHK.

Date: April 5, 2024 (Friday)

Time: 10:00am-11:00am (Hong Kong Time)

Zoom: 905 330 9693

High-Performance Mobile AI Computing: From Mobile Devices to Large-Scale Systems

Speaker: Dr. Xiang Chen
Peking University

Abstract: Mobile computing platforms are always at the forefront of trending artificial intelligence (AI). Accordingly, mobile computing has evolved dramatically over the past few years along with the continuous development of the theoretical complexity of AI, computing architecture, system scales, etc. This talk aims to unfold different development stages and perspectives of high-performance intelligent mobile computing. Particular research spotlights will be presented on AI computing acceleration on the single mobile device, collaborative mobile learning in the large-scale federation, as well as corresponding system and architectural supports in different system scales. Through these cases, we hope to show our complete path of technology development around mobile computing, and at the same time, combine the latest mobile applications to look at the challenges and opportunities of related technologies in the future.

Bio: Xiang Chen received his Ph.D. degree with the major of computer engineering in 2016 from the University of Pittsburgh, under the guidance of Dr. Yiran Chen. After that, Dr. Chen joined the George Mason University and founded the Intelligence Fusion Lab. His research works focus on mobile computing system, high-performance systems, and artificial intelligence. He has published more than 60 papers, and received the Best Paper Award in MLSys 2023, DATE 2017, and several other competition awards. He has also led multiple research projects funded by NSF, AFRL, Comcast, and Microsoft, and received the NSF CAREER Award in 2022. In 2023, Dr. Chen joined Peking University, Computer Science School.