THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering
Seminar

Infrastructure-assisted Autonomous Driving: A Retrospective on Five Years of Experience

By

Prof. CHEN Hongkai
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Date : **15 March 2024 (Friday)**
Time : **11:30am – 12:15pm**
Venue : **Rm 801, Ho Sin Hang Engineering Building, CUHK**

Abstract

Autonomous driving has the potential of revolutionizing transportation mobility and safety. Intelligent roadside infrastructures such as lampposts equipped with computing and sensing units provide autonomous vehicles various real-time services such as collision avoidance and dynamic route planning. In this talk, we will talk about a retrospective on five years of experience of the AIoT Lab in the Department of Information Engineering, CUHK. First, we will discuss the design and large-scale deployment of the roadside infrastructures in CUHK campus. Then, we will discuss our experience in infrastructure-assisted cooperative perception. Last, we will demonstrate our infrastructure-assisted autonomous driving applications.

Biography

Hongkai Chen is currently a Research Assistant Professor in the Department of Information Engineering at the Chinese University of Hong Kong. He earned his Ph.D. in Electrical Engineering from Stony Brook University, M.S. from Washington University in St. Louis, and B.S. from Nanjing University. Hongkai's research interests lie in the intersection of cyber-physical systems, Internet of Things, ubiquitous computing, AI, and control. He has published on venues including MobiSys, HSCC, IMWUT, FORMATS, CDC, and MASS. He received the Best Paper Award at FORMATS 2022, the Best Repeatability Evaluation Award at HSCC 2023, and the Best Artifact Reviewer Award at MobiSys 2023. He received the 2023 ACM SIGBED China Rising Star Award. He is the Industrial Liaison and Sponsorship Co-Chair for CPS-IoT Week 2024.

** ALL ARE WELCOME **

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