

Special Lecture by Professor Bin RAN

Date & time:

28th July 2025, 13:30 – 15:00

Venue:

Large Seminar Room Dw-601, Block D, Institute of Industrial Science,
The University of Tokyo

Participation:

Free. In-person lecture. No registration needed.



Title:

AI Empowered Vehicle-Cloud and Vehicle-Road-Cloud Systems for Autonomous Mobility

Abstract:

The AI empowered autonomous driving system is relying heavily on the Vehicle-Cloud (VC) or Vehicle-Road-Cloud (VRC) platforms. Initially, this report will discuss the scale of work for autonomous mobility system in the US, China, and Europe. Then, it will present the system architecture for AI empowered autonomous mobility system. The AI model system for autonomous mobility will be discussed in details. The application and impact of AI large models on autonomous mobility will be analyzed. Subsequently, it will discuss about the practice of Vehicle-Cloud (VC) or Vehicle-Road-Cloud (VRC) Systems in US, China, and Europe.

About Professor Bin Ran:

Dr. Bin Ran is the Vilas Distinguished Achievement Professor and Director of ITS Program at the University of Wisconsin at Madison. He served as the Director of the Traffic Operations and Safety Lab (TOPS) at UW-Madison. He obtained his master's degree in Transportation Engineering from the University of Tokyo in 1989 and his Ph.D. in Transportation Engineering from the University of Illinois in 1993.

Dr. Ran is an expert in ITS and Cooperative Autonomous Mobility (CCM). He has more than 200 patents or patents pending in the US, China, Japan, Europe, and other countries. In addition, Dr. Ran's international teams have been developing system designs and pilot systems of CCM in US, Europe, and China.

Supporter for this special lecture:

The Foundation for the Promotion of Industrial Science (一般財団法人 生産技術研究奨励会)

Moderator:

Professor Takashi Oguchi (大口 敬 教授)

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