Advanced Mobility Research Center

[Designing the Next Generation Transport Systems]

Intelligent Transport Systems


1: Dept. of Fundamental Engineering, 2: Dept. of Mechanical and Biofunctional Systems, 3: Dept. of Informatics and Electronics, 4: Dept. of Materials and Environmental Science, 5: Dept. of Human and Social Systems

https://www.its.iis.u-tokyo.ac.jp/

Advanced Mobility, Intelligent Transport Systems

Research and Developments on ITS

Various Traffic Simulation Models (TS)

Traffic simulators (TS) of various scales developed, to evaluate political options with high accuracy.

- SOUND: A network traffic simulator, covering a wide network including expressways, while vehicles are considered individually.
- AVENUE: A street-level traffic simulator, based on the detailed maneuvers of individual vehicles, such as lane changing at an intersection. Used for evaluating traffic operation strategies, reducing congestion on streets, etc.
- KUKUMO: A micro traffic simulator, connecting TS and DS. It fills the gap of spatiotemporal resolution between TS and DS by calculating driver’s behavior and vehicle dynamics of hundreds of vehicles around the test driver in DS. Simultaneously, the behavior of the test driver in DS is reflected to TS, and then the movements of surrounding vehicles and the traffic condition change interactively.

ITS R&R Experiment Field

Experiment fields for automobiles and trains and a driving simulator for large vehicle.

Kashiwa ITS FOT Model City

ITS research activities launched for environment-friendly transport society in Kashiwa City, which is designated as one of the ITS FOT model cities by the Cabinet Office of Japan

Field test of automated driving bus (2019.11~)

Global Collaboration

ITS Center hosts an international symposium every year and exchanges faculty members and students with other universities and institutes through international collaboration as well as domestic collaboration.