# UCIrvine

## **SEMINAR**

#### Tuesday, March 14, 2017 10:15 am – 12:00 pm Seminar Room 4080 AIR Building

### DETECTION METHODS OF TRAFFIC INCIDENTS WITH MASSIVE PROBE VEHICLE DATASET

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#### Abstract

Traffic flow monitoring is one of the important processes of road traffic managements. With the improvement in information technology systems, many sensors such as traffic detectors and probe vehicles generate large amounts of traffic flow data. Recent spreading of probe vehicles enable us to observe dense and wide-ranging road network. They are expected to include a huge amount of incidents or unusual situations that are usually overlooked.

This study introduces incident detection method which can detect incidents which influence large area in the network. The method is applied to the massive probe vehicle dataset which is collected by about 40000 commercial vehicles all over Japan for one year.

Dr. Takahiko Kusakabe received the Dr.Eng. degree from Kobe University, Kobe, Japan. He was Research Fellow (DC2) and (PD) of Japan Society for the Promotion of Science, Assistant Professor at Tokyo Institute of Technology, and is currently Assistant Professor at the Center for Spatial Information Science, the University of Tokyo. He received the Best Paper Award at the IEEE 18th International Conference on Intelligent Transportation Systems and Young Scholar Paper Award from Japan Society of Civil Engineers.

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Google Scholar: https://scholar.google.com/citations?user=4Kt60z4AAAJ&hl=ja