

Transportation Research Part C :

Special Issue Call for Papers

Topic: Trajectory-based modeling, design, operation and assessment of road transportation systems

Introduction:

A trajectory is a sequence of sampled or continuous locations, speeds and time stamps along the route of a moving object. Nowadays, with the roll-out of location-aware technologies (such as GPS, Wi-Fi, bluetooth, and Radio Frequency Identification (RFID)), various community-driven platforms, and even connected vehicles, massive trajectory data have become available. Such trajectory data provides a critical means for understanding microscopic behavior and managing macroscopic transportation systems. Moreover, trajectories can be influenced by emerging vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications in real time to enable a higher level of mobility and sustainability.

The availability of trajectory data and the emerging ability to control trajectories are expected to bring profound and disruptive changes to transport systems. It is thus, imperative to understand (i) how the trajectory data should be used to better understand, plan, design, and manage transport systems; (ii) how moving subject (vehicles, pedestrians, bicyclists) trajectories can be optimally controlled to meet the needs of individual travelers as well as system-wide operations.

Scope of the special issue:

This special issue will focus on innovative applications of trajectory data in transport system modeling, analysis, design, optimization, and system-level policy and decision making. The focus also includes methods and tools for optimizing trajectories, considering multiple transportation modes. Potential topics of interest include, but are not limited to:

- Trajectory data processing
- Trajectory data enrichment
- Trajectory data analytics for privacy and disclosure management
- Trajectory data application in traffic forecasting and prediction
- Trajectory data enabled driving/traffic behavior analysis
- Trajectory data driven system-wide traffic evaluation

- Trajectory-based traffic operation and control
- Route decision and motion planning for cooperative automation system
- Integrated design of traffic control and vehicle trajectory planning
- Trajectory data for safety analysis and modeling

Submission Method:

Guidelines for manuscript submission can be referred to <https://www.evise.com/evise/jrnl/TRC> .

When submitting your manuscript, please choose “SI:Trajectory Optimizaiton for “Article Type”. This is to ensure that your submission will be considered for this Special Issue instead of being handled as a regular paper.

Important dates:

- Special issue article type becomes available in **EVISE**: April 14th, 2018
- Submission deadline – September 15th, 2018
- Author notification of first round of reviews – December 1st, 2018
- Author notification of second round of reviews (if needed) – March 1st, 2019
- Special issue completed –Jun 31st, 2019

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