Scope
Public transportation is a vital part of the urban transportation system in order to mitigate environmental problems such as pollution, noise and climate change. There is a continuing need for research on planning and operations to make public transportation efficient, reliable and attractive. In addition, with the current situation caused by the COVID-19 pandemic, focus on strategies to improve the safety and security management is required. Intelligent Transportation Systems (ITS) focus on applying ICT in order to improve information sharing, optimize network management and influence travel behavior. The introduction of 5G Cellular Networks and the integration of IoT technologies will help in exchanging valuable information with users and vehicles based on reliable and multi-sourced data.

The goal of this Special Issue is to cover theoretical, experimental and operational aspects to provide innovative solutions dealing with public transportation problems in general, and with particular attention to COVID-19. We invite applicants to review recent advances and applications in Intelligent Public Transportation Systems and call for innovative works that explore frontiers and challenges in the field.

The Special Issue will include a paper by Noursalehi, P., Koutsopoulos, H.N. and Zhao, J. titled “Machine-learning-augmented analysis of textual data: application in transit disruption management”. The paper develops a comprehensive, pragmatic framework for automated analysis of rail incident reports to support a wide range of applications and functions. The techniques utilized range from topic modeling and dependency graphs in the absence of labeled data, to deep neural networks leveraging pre-trained language models for processing large, labeled documents.

The technical areas include but are not limited to:

- Trajectory planning and cooperative maneuvering
- Connected, cooperative and automated vehicles
- V2X communications
- 5G research and testing
- Information and data sharing
- Map Fusion and Location coordination
- ITS and AI for disruption management
- Planning and scheduling
- Data management (AVL, APC, AFC)
- Safety regulations for travelling by public transport
- Operator/passenger protection systems
- Cleaning and disinfection of means of transportation
- Distancing and hygiene protocols
- Pandemic preparation, recovery, and adaptation

Time line: Submission from September 1, 2020 to June 30, 2022. Accepted papers will be published upon acceptance as early access.

Paper Submission Link: https://mc.manuscriptcentral.com/oj-its (choose manuscript type ITSPT)

Guest editors:
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