Special session on

Big data and Deep Learning for Intelligent Transportation

**Special Session Organizers:**

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**Description:** Deep learning and big data are very dynamic, grooming and important research topics of today’s technology. They are contributing to the progress towards intelligent transportation such as fully autonomous vehicles. Transportation generated massive amount of data collected from multiple sources including road sensors, UAVs, probe, GPS, CCTV and incident reports. The collected data are highly needed to make serious traffic decisions such as rerouting, safe-driving decision, etc. With this rich volume and velocity of data, it is challenging to build reliable prediction models based on traditional relational database and machine learning methods. Recently, big data, deep learning and reinforcement learning are new state-of-the-art data management and machine learning approaches which have been of great interest in both academic research and industrial applications.

**Scope and Topics**

The aim of this special session is to provide opportunity for international researchers to share recent advances in big data, deep learning and reinforcement learning in intelligent transportation. The special session aims to solicit original, full length original articles on new findings and developments from researchers, academicians and practitioners from industries, in the area of intelligent transportation.

The topics of interest include, but are not limited to:

- IoT-driven intelligence and incorporate deep learning models
- Big data and autonomous vehicles
- Deep learning for transportation models
- Reinforcement learning for intelligent transportation
- Detection of Vulnerable Road Users and Animals Air, Road, and Rail
- Deep learning models for achieving pedestrians and cyclist safety
- Practical issues in building Safe transports applications
- Vision, Image Processing and Environment Perception
- Vehicle localization and autonomous navigation
- Vehicle Platooning and Automated Highways
- Performance and Traffic Management Issues
- Intelligent Automation
- Operational and Policy issues in Automation
- Cyber-physical transportation systems
- Advanced Public Transportation Management
- Air, Road, and Rail Traffic Management
- Smart Driver and Traveler Support Systems
- Big Data & Vehicle Analytics
- Big Data Analytics for Intelligent Transportation
- Big Data and Naturalistic Datasets
- Infrastructure and Platform for Big Data and Intelligent transportation

Paper submission Process:

- Paper submission: 15, April 2020
- Notification of acceptance: 30 May 2020
- Camera-Ready: 15 June 2020
- Conference Dates: 19-21 October 2020

Authors are invited to submit original research contributions not concurrently submitted elsewhere (Submission system). Normal length papers should be 8-10 pages, formatted in Springer's single column format (detailed instructions for paper format in Latex and MS Word can found here https://www.springer.com/series/11156#).

Submitted papers will be refereed by at least three reviewers for quality, correctness, originality, and relevance. Notification and reviews will be communicated via email. Authors of the best papers will be invited to extend their papers for inclusion in a special issue of the some journals indexed by SCOUPS and EI.

Web Submission: https://ocs.springer.com/misc/home/AISI2020

All accepted conference papers will be presented at the conference and included in the published proceedings by Springer