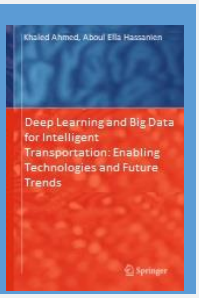
Call for Book Chapter

Deep Learning and Big Data for Intelligent Transportation: Enabling Technologies and Future Trends

To be published in "Studies in Computational Intelligence", Springer Verlag



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.

In general, the use of big data, deep learning and reinforcement learning in transportation is still limited and there are potential limitations for utilizing this advanced approach to improve prediction models. The main aim of this book is to encourage recent studies of big data, deep learning and reinforcement learning for intelligent transportation and focus on the following topics but not limited to:

Topics:

- 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

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Submission Procedure

All book chapters proposal must be electronically submitted by using Easychair link below, following these guidelines:

- Researchers and practitioners are kindly invited to submit chapter proposal containing a preliminary title, a short abstract and authors affiliations.
- The length of the book chapter should be between 15 to 20 pages (including reference).
- All submitted chapters will be reviewed by at least three reviewers on a double-blind review basis
- Submission link: https://easychair.org/conferences/?conf=dlits2020

Important Dates:

March 12, 2020: Chapter proposal submission deadline
March 23, 2020: Proposal acceptance notification and invitation to submit full chapter
May 11, 2020: Full chapter submission deadline
July 14, 2020: Review results including notification of acceptance of chapter
August 04, 2020: Final Chapter Submission
August 18, 2020: Final Deadline

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