IEEE Transactions on Intelligent Transportation Systems

Call For Papers

Special Issue on:
Mechatronics as An Enabler for Intelligent Transportation Systems

MOTIVATION AND SCOPE

Together with urgent demands for highly energy efficient transport systems, the need to make them safer, greener and smarter has been increasing rapidly in recent years. As a result, development of ITS (Intelligent Transportation System) combining both advanced propulsion and innovative control systems is known as a feasible solution to address all of these challenges. For example, electric vehicles with smart supervisory control could enable active safety features, adaptive torque management and high energy efficiency. Intelligent battery management systems with the use of telematics could accurately predict future behaviors of battery, consequently extending range of electric vehicles while guaranteeing vehicle safety. Autonomous and connected vehicle technologies with the use of IoT (Internet of Things) have been implemented in both on and off –road vehicles, underpinning self-driving capability with high reliability and satisfaction. Traffic control infrastructures that are controlled by AI (Artificial Intelligence) -based systems to improve traffic efficiency, enhancing level of safety, efficiency, and sustainability. Utilization of mechatronics technologies is therefore known as one of the most effective ways to underpin the ITS development strategy.

The International Conference on Mechatronics Technology (ICMT) is recognized as one of the foremost and world-renowned conference series in fields of Mechatronics. This year, the 23rd ICMT is held at the University of Salerno, Italy on October 23rd -26th, 2019, and will gather contributions from the broad research community, to present and discuss breakthrough the latest developments in Mechatronics and it's applications, covering the emerging techniques for transport such as: Mechatronics as an Enabler for Innovative and Intelligent Transportation Systems; Sustainable Transport and Energy Systems; Advanced Mechatronics Devices, Sensing and Control; Human Resource Development and Education on Mechatronics Technology; and Internet of Things, Internet based Manufacturing, AI, Super Smart Society. For further information about the 23rd IMCT 2019, please find at: www.icmt2019.org

This Special Issue aims to publish the highest quality articles, including, but not limited to, selected papers from the IMCT 2019, to contribute to the main theme 'Mechatronics as An Enabler for Intelligent Transportation Systems'. This Special Issue will therefore introduce the most recent research findings, the progress, and the advancements of ITS empowered by the mechatronics technologies, from both theoretical and practical perspectives. This Special Issue of IEEE Transactions on Intelligent Transportation Systems can be a flagship issue to draw the attention of the technical and scientific communities to the mechatronics technologies studied and applied

in relation to next generations of ITS.

LIST OF TOPICS: Topics of interest to this special issue include, but are not limited to:

This Special Issue is to address issues and problems related to ITS through the development and implementation of mechatronics technologies. Therefore, the Special Issue welcomes new studies of mechatronics for applications to ITS in the following fields (but not limited to these fields):

1. Sustainable transportation, mobility, and logistics systems
2. Mechatronics for efficient and intelligent transport systems
3. Mechatronics for security and safety in transport systems
4. Telematics, big data mining, machine learning, and deep leaning
5. Smart, autonomous, connected, and cooperative driving systems
6. Transport system and infrastructure modeling, prediction, management, and control
7. V2X communication systems and their applications
8. Human-machine interaction including human behaviors in intelligent vehicles
9. Mechatronics for effective communication, decision making and optimization
10. Surveillance and monitoring technologies for transportation

PAPER SUBMISSION GUIDELINES

Paper submission should conform to the information for authors available at https://mc.manuscriptcentral.com/t-its.

IMPORTANT DATES

First submission deadline: March 30th, 2020
Notification of first decision: June 30th, 2020
First revision submission deadline: August 31st, 2020
Notification of final decision: December 30th, 2020
Final manuscript (camera ready) submission deadline: January 29th, 2021
Issue of Publication: March 30th, 2021

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SUBMISSION AND REVIEW OF PAPERS

Submitted papers should be original and not be under consideration elsewhere for publication. The authors should follow the journal guidelines, regarding the manuscript content and its format when preparing their manuscripts. All papers will be reviewed by at least three independent reviewers for their suitability in terms of technical novelty, scientific rigor, scope, and relevance to this special issue