Series Call for Papers

Intelligent Autonomous Transport System with 6G

We have recently experienced an incredible surge of interest in connected and autonomous vehicles and related enabling technologies, which are expected to revolutionize future Intelligent Transportation Systems (ITS). This surging demand and popularity of ITS with the Internet of Vehicles technology has led to a tremendous rise in the number of connected vehicles. Driven by this massive number of connected vehicles, and the stringent requirements of the autonomous vehicles and data-intensive applications such as ultralow latency, high reliability, and high security, intelligent transportation systems are rapidly moving to the 6G networks. The 6G supported ITS is expected to be a transformative factor for both society and the economy by delivering unprecedented, seamless, reliable, efficient massive connectivity to millions of users and connected vehicles.

Artificial Intelligence (AI) has been used widely with autonomous vehicles and connected transportation systems to improve efficiency and performance. Various Machine Learning (ML) and Deep Learning (DL) techniques have been recently employed to support dynamic decision making, adaptive resource allocation, intelligent traffic control, and intrusion and misuse detections. Artificial Intelligence will be a crucial feature and one of the main drivers of 6G supported Intelligent Autonomous Transport Systems, and research in this direction is expected to gain momentum in the coming years. This series aims to provide the scientific community with a comprehensive overview of innovative technologies, advanced architectures, and potential challenges for 6G supported Intelligent Autonomous Transport System.

This Series solicits articles addressing numerous topics within its scope including, but not limited to, the following:

- Novel architectures for 6G enabled Intelligent Autonomous Transport Systems
- Resource management in 6G enabled Intelligent Autonomous Transport Systems
- Block chain, security, vulnerability scanning technologies in Intelligent Autonomous Transport Systems
- Mapping, localization, and controlling of 6G enabled Intelligent Autonomous Transport Systems
- AI for intelligent vehicular misuse/intrusion detection
- Mobile edge intelligence and computing with 6G enabled Intelligent Autonomous Transport Systems
- Communication architectures and implementations in 6G enabled Intelligent Autonomous Transport Systems
- 6G supported Intelligent UAV networks
- Real-time traffic management and control in 6G enabled Intelligent Autonomous Transport Systems
- Integrating space and terrestrial networks

- Field trials, tests, and deployment challenges.
- Breakthrough technologies and concepts in 6G enabled Intelligent Autonomous Transport Systems
- Future perspectives of 6G enabled Intelligent Autonomous Transport Systems

Submission Guidelines

Paper submission should conform to the information for authors available at https://mc.manuscriptcentral.com/t-its. Papers can be submitted anytime during the year. They will receive a review process, and, if accepted, they will be published in the first slot available for this Series.

Publication Date

Periodically

Series Editors

Shahid Mumtaz

Instituto de Telecomunicaces, Aveiro, Portugal.

Email: dr.shahid.mumtaz@ieee.org

Muhammad Ikram Ashraf

Nokia Bell Labs, Espoo, Finland.

Email: ikram.ashraf@nokia-bell-labs.com

Varun G Menon

SCMS School of Engineering and Technology, India.

Email: varunmenon@ieee.org

Taimoor Abbas

Huawei Technologies, Lund, Sweden.

Email: taimoor.abbas@ieee.org

Anwer Al-Dulaimi

EXFO Electro-Optical Engineering, Canada.

Email: anwer.aldulaimi@ieee.org