IEEE Transactions on Intelligent Transportation Systems
Special issue on:

Connected vehicles in Intelligent Transportation Systems

Scope

Connected Vehicles is one of many applications that can be integrated in the Intelligent Transportation Systems, encompassing all aspects of road transport, traffic management, mobility management and vehicle communication. Recently it has been further enhanced by the concept of Internet of Vehicles (IoV).

Connected Vehicles enables any vehicle, anywhere, to act as a smart node, collecting and sharing information on vehicles, roads and the surroundings. This information can then be distributed to other vehicles, vehicle-to-vehicle (V2V) communication, and road users, vehicle-to-human (V2H) communication, for an improved road experience. Information can also be forwarded towards traffic control systems, vehicle-to-infrastructure (V2I) communication, for improved traffic management and road safety.

Implementation of connected vehicles in intelligent transportation systems will revolutionize the way we drive. There are however many issues that need to be resolved to achieve maximum potential including privacy and security issues, data processing and storage, development of standards and regulations across all platforms, establishing new communication protocols and system architectures and the creation of new services and applications.

This Special Session on "Connected vehicles in Intelligent Transportation Systems" is focused on intelligent transportation systems using vehicle communications and their applications, protocols, standards, and advanced technologies. The topics of interest include, but are not limited to:

Connected vehicles and Internet of Vehicles (IoV)
Vehicle to Vehicle (V2V) communication
Vehicle to Infrastructure communication
Design and development of communications protocols and infrastructure and standards for connected vehicles
Control, Modeling, Simulation and experiments for connected vehicles
Testing, evaluation and verification
Vehicle location prediction
Event detection based on V2V and V2I connectivity
Peer-to-Peer data sharing
Context-Aware Internet of Things Services for intelligent transportation
Context Aware Computing and Internet of Things Services in intelligent transportation
Authentication and secure V2V communication in IoV

Papers discussing new application, techniques, areas and resulting in new developments at the interface of intelligent transportation and connected vehicles are welcome. Only papers with solid

mathematical modeling and strong and optimal experimental results with proof of concept are considered in this SI.

Submission Guidelines

Prospective authors are invited to submit contributions reporting on their current research on the above topics. Each paper will be analyzed by at least three reviewers of IEEE T-ITS in order to assess its technical quality, relevance, results and contributions. Manuscripts must be submitted electronically at http://mc.manuscriptcentral.com/t-its by selecting "Special Issue on Connected vehicles in Intelligent Transportation Systems".

Important Dates:

Tentative schedule for the Special Issue is as follows:

- First submission deadline: June 01st, 2017
- Notification of first decision: September 15th, 2017.
- First revision submission deadline: October 15th, 2017.
- Notification of final decision: December 1st, 2017. .
- Final manuscript (camera ready) submission deadline: February 1st, 2018.
- Issue of Publication: July 2018.

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