

## Call for Papers

### **IEEE Transactions on Vehicular Technology Connected Vehicles Series**

This is the initiation for the Connected Vehicles Series which publishes annually with the first installment in 2015. The purpose is to gather papers on connected vehicles in dedicated special section/issue form to provide a better platform for researchers and practitioners to shape the development of this technology.

There is a phenomenal burst of research activities in connected vehicles, which use advanced information and communication technologies to connect vehicles with various devices, infrastructures, services, and participants. Connected vehicles have been envisioned to provide enabling key technologies to enhance transportation efficiency, reducing incidents, improving safety, and mitigating the impacts of traffic congestions. The potential of connected vehicles has been acknowledged with the establishment of ambitious research programs around the globe. In particular, radio spectrum has been allocated in North America, Europe, and Japan for the dedicated short range communications (DSRC) to facilitate intelligent transportation. The United States Department of Transportation has been taking steps to mandate car makers to enable vehicle-to-vehicle (V2V) communication technologies for light vehicles for safe driving experience.

As we are in the verge of deploying the 1st generation of wirelessly connected vehicles, the aim of this special issue/section is to present a collection of high-quality research papers on the state-of-the-art in the emerging technologies for connected vehicles, the latest development in standardizations and regulations, as well as the potential services and applications for connected vehicles. We are soliciting original contributions that have not been published and are not currently under consideration by any other journals. The topics of interest include, but are not limited to:

- Communications and networking for connected vehicles
- V2V, vehicle-to-infrastructure (V2I) and vehicle-to-X (V2X) communications and networking
- Spectrum assignment and EMC regulations for connected vehicles
- Wireless technologies for connected vehicles (propagation models, RF technologies, antenna design, physical layer design, etc.)
- Link- and Network-layer protocols for connected vehicles (MAC, routing, mobility management, geonetworking, etc.)

- Architectures, algorithms and protocols for data dissemination, processing, and aggregation for connected vehicles
- Networked information processing, decision making, and intelligent control
- Safe driving and accident avoidance
- Railway communications and networking
- Applications and services with connected vehicles
- Security, privacy, and dependability
- Simulation and performance evaluation techniques
- Results from experimental systems, testbeds, and pilot studies
- Assessment of impact of connected vehicles on safety, accident prevention, hazard reduction, intersection assistance, cooperative awareness services, and misbehavior detection and mitigation services
- Intelligent transportation, vehicle traffic modeling, decentralized congestion control, highway automation and platooning, autonomous cooperative driving, location-dependent services

Please submit your paper to Manuscript Central at <http://mc.manuscriptcentral.com/tvt-ieee>

Please note the following important dates.

June Issue:

- **Submission Deadline: October 1**
- **Reviews Completed: November 15**
- **Major Revisions Due (if Needed): January 1**
- **Reviews of Revisions Completed (if Needed): February 1**
- **Minor Revisions Due (if Needed): February 15**
- **Notification of Final Acceptance: March 15**
- **Publication Materials for Final Manuscripts Due: April 15**
- **Publication date: June**

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