

Special Issue on
Communications and Networking for Connected Vehicles

CALL FOR PAPERS

New wave of urbanization, ever more stringent emission standards, and high pressure on improving efficiency of private and public transport have made the development of more sustainable transportation systems one of the fundamental societal challenges of the next decade. Connected vehicles have been envisioned to provide enabling key technologies to enhance transportation efficiency, reducing incidents, improving safety, and mitigating the impacts of traffic congestion. The seamless integration and convergence of vehicular communication networks, information and transportation systems, and mobile devices and networks will face a number of technical, economic, and regulatory challenges. It is of paramount importance to (i) design vehicular communication systems that enable road users and other actors to exchange information in real time with high reliability; (ii) enable pervasive sensing to monitor the status of vehicles and the surroundings; (iii) develop data analytics tools for processing large amounts of data generated by the connected vehicles; and (iv) develop middleware platforms for data management and sharing.

The aim of this special issue is to present a collection of high-quality research papers on recent developments, current research challenges, and future directions in the use of networking and communications, to realize vehicular mobility systems that are safer, more connected, and efficient. We are soliciting original contributions that have not been published and are not currently under consideration by any other journals.

Potential topics include but are not limited to the following:

- ▶ V2V, V2I, and V2X communications and networking
- ▶ Spectrum assignment and EMC regulations for connected vehicles
- ▶ Wireless technologies for connected vehicles
- ▶ Link- and network-layer protocols for connected vehicles
- ▶ Architectures, algorithms, and protocols for data dissemination, processing, and aggregation for connected vehicles
- ▶ Data management techniques and services for connected vehicles
- ▶ Cross layer design and optimization for vehicular networks
- ▶ Networked information processing, decision making, and intelligent control
- ▶ Applications and services with connected vehicles
- ▶ Results from experimental systems, testbeds, and pilot studies
- ▶ Security, privacy, and dependability

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/wcmc/cncv/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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Submission Deadline

Friday, 8 December 2017

Publication Date

April 2018