Vehicular COMMUNICATIONS

Editor in Chief

Mohammed Atiquzzaman
University of Oklahoma

Guest Editors

Rami Langar
University of Pierre and Marie Curie (UPMC), France
rami.langar@upmc.fr

Bechir Hamdaoui
Oregon State University, USA
hamdaoui@eecs.oregonstate.edu

Mario Gerla
University of California, Los Angeles (UCLA), USA
gerla@cs.ucla.edu

Raouf Boutaba
University of Waterloo, Canada
rboutaba@uwaterloo.ca

Important dates

Paper submission:
August 15th 2015

Acceptance notification:
November 15th 2015

Final papers:
December 15th 2015

Call for Papers

A Special Issue of Vehicular Communications on

"Vehicular Cloud Networking"

Vehicular ad-hoc networks (VANETs) have gained a significant attention during the last decades both from industrial and academia communities to increase road safety and traffic management. However, vehicles are normally constrained by resources, including computation, storage, and radio spectrum bandwidth. Many emerging applications demand complex computation and large storage, including in-vehicle multimedia entertainment, vehicular social networking, etc. It becomes increasingly difficult for an individual vehicle to efficiently support these applications.

A very promising solution is to share the computation and storage resources among all vehicles or physically nearby vehicles. As such, a new paradigm has emerged called "Vehicular Clouds" and consist of a group of vehicles whose corporate computing, sensing, communication and physical resources can be coordinated and dynamically allocated to authorized users.

The aim of this Special Issue is to publish papers studying this emerging paradigm of cloud-based vehicular networks. Contributed submissions to this Special Issue may present novel ideas, models, methodologies, system design and architecture, experiments and benchmarks for performance evaluation pertaining to vehicular cloud networks. This Special Issue also welcome relevant research surveys.

Topics of interest include (but are not limited to):

- Service architectures in Vehicular Clouds: Network as a Service (NaaS), Storage as a Service (STaaS), and Cooperation as a Service (CaaS).
- Vehicular Clouds: System architectures, platforms, and testbeds.
- Cloud-assisted vehicle communications.
- Mobile vehicular social networks.
- Mobility analysis and vehicle traffic analysis in Vehicular Clouds.
- Networking to reduce energy consumption in Vehicular Clouds.
- V2V or V2I protocols in Cloud-based vehicular networks and communications.
- Wireless access virtualization and resource management in cloud-based vehicular networks.
- Security and privacy issues in Vehicular Clouds.

Submission Format and Guideline

All submitted papers must be clearly written in excellent English and contain only original work, which has not been published by or is currently under review for any other journal or conference. A detailed submission guideline is available as "Guide to Authors" at http://www.elsevier.com/wps/find/journaldescription.cws_home/622893/authorinstructions.

All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select as "SI - Cloud Net-Boutaba" when they reach the "Article Type" step in the submission process. The EES website is located at: http://ees.elsevier.com/vehcom/

Requests for additional information should be addressed to the guest editors.