

## Call for Papers

# International Journal of Mobile Networks and Applications

## Special issue on

## Network Protocols and Algorithms for Vehicular Ad Hoc Networks



Vehicular Ad Hoc Network (VANET) is an emerging area of wireless ad hoc networks that facilitates ubiquitous connectivity between smart vehicles through Vehicle-to-Vehicle (V2V) or Vehicle-to-Roadside (V2R) and Roadside-to-Vehicle (R2V) communications. This emerging field of technology aims to improve safety of passengers and traffic flow, reduces pollution to the environment and enables in-vehicle entertainment applications. The safety-related applications could reduce accidents by providing drivers with traffic information such as collision avoidances, traffic flow alarms and road surface conditions. Moreover, the passengers could exploit an available infrastructure in order to connect to the internet for infomobility and entertainment applications.

The increasing necessity of this network is an impetus for leading car manufacturers, research communities and governments to increase their efforts toward creating a standardized platform for vehicular communications. However, VANET's unique characteristics and special requirements excite new challenges to the research community. To address these challenges in both safety- and comfort-oriented applications, there is a pressing need to develop new protocols and algorithms for channel characterization and modeling, Medium Access Control (MAC), obstacle modeling, adaptive geographical routing to sparse and dense traffic conditions. This special issue aims to theme innovative research achievements in the field of vehicular networks and communications. We are seeking original and unpublished papers. Specific topics include, but are not limited to:

- Radio obstacle modeling in urban vehicular environments
- Channel characterization, modeling and simulation
- Efficient packet forwarding optimization
- Congestion control and resource management
- Medium access protocols and channel assignments
- Adaptive beaconing protocols

- Mobility management
- Mobility models
- Efficient geographical routing adapted to bipolar traffic conditions
- Delay tolerant routing protocols
- Message dissemination for safety-related applications
- Cooperative vehicular communications
- Test-beds, case studies, experimental systems and evaluations
- Security and privacy issues

## Submission

Prospective authors should follow guidelines of the International Journal of Mobile Networks and Applications and the instruction for authors can be found at the journal site: <http://www.springer.com/engineering/signals/journal/11036>. Manuscripts should be submitted on line through <http://www.editorialmanager.com/mone/> using the Special Issue: SM 130 -Network Protocols and Algorithms for Vehicular Ad Hoc Networks. A copy of the manuscript should also be emailed to the guest editors ([jlloret@dcom.upv.es](mailto:jlloret@dcom.upv.es), [db.rawat@ieee.org](mailto:db.rawat@ieee.org), [kayhan@ieee.org](mailto:kayhan@ieee.org), [f.xia@ieee.org](mailto:f.xia@ieee.org)) as pdf files.

## Important Dates

Paper Submission Due: January 30, 2013  
 Notification Deadline: April 30, 2013  
 Revised paper Submission: June 30, 2013  
 Final Paper Submission: August 30, 2013  
 Publication Date: End of 2013

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