

International Journal of Sensors, Wireless Communications and Control

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Special Issue: The Application of Computer Vision Technologies in Urban and Vehicular Environments

Aims & Scope:

The aim of this special issue is to present recent advances of computer vision technologies in urban and vehicular environments. On the one hand, digital camera systems are regularly deployed at static and strategic locations in cities and road infrastructures for traffic monitoring applications. On the other hand, digital camera systems also equip various dynamical systems such as mobile mapping systems, private vehicles or outdoor robots. In particular, mobile mapping systems are employed for massively collecting urban imagery. This collected imagery is usually post-processed and exploited for cartographic applications, notably, the 3D modeling of wide-scale environments with a high geometric accuracy and a high level of detail. Moreover, great efforts are made to develop low-cost camera systems for equipping the next generation of vehicles and outdoor robots. The acquired imagery is intended to be processed in real-time for supporting car driving and navigation applications.

Consequently, this special issue will consider both static and dynamical applications of computer vision technologies in urban and vehicular contexts. Notably, this special issue will pay a particular attention to new vision-based challenges related to the GPS-less vehicle geo-localization, the real-time map building (e.g., depth map or occupancy map), the automatic path and trajectory planning, the analysis of driver behaviors, the monitoring of road traffic conditions, the development of driver-less cars.

Subtopics:

Topics of interest of this special issue include, but are not limited to:

- Intelligent Transport Systems
 - Autonomous navigation
 - Advanced Driver Assistance Systems
 - Image-based geo-localization
 - Collision avoidance systems
- Urban and vehicular monitoring & mapping systems
 - Driver behavior recognition
 - Road traffic monitoring
 - Car park monitoring
 - Cooperative surveillance systems
 - Wireless sensor networks and their applications

Manuscript Preparation Guidelines:

Instructions for Authors and other relevant information for submission of manuscripts are available at <http://benthamscience.com/journal/index.php?journalID=iswcc>. All manuscripts should be submitted to karim.hammoudi@esigelec.fr.

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This list is indicative and not restrictive. Contributors from other research entities are also invited to submit their papers. Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. All papers will be refereed through a peer review process.

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Schedule:

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Peer Review Due: **31st August 2015**

Revision Due: **15th October 2015**

Notification of acceptance by the Guest Editor: **30th November 2015**

Final manuscripts due: **3rd January 2016**