

**Call for Papers**  
**Journal of Real-Time Image Processing**  
**Special Issue on Real-Time Computer Vision in Smart Cities**  
Guest Editors: Antonio S. Montemayor, Juan J. Pantrigo, Luis Salgado

**AIMS AND SCOPE**

A smart city is an urban area that creates sustainable economic development and high quality of life by excelling in multiple key areas: economy, mobility, environment, people, living, and government. These key areas are based on theories of regional competitiveness, transport and ICT economics, natural resources, human and social capital, quality of life, and participation of citizens in the governance of cities, respectively. Reaching excellence in these key areas can be achieved through strong human capital, social capital, and/or ICT (Information and Communications Technology) infrastructure.

Specifically, computer vision can contribute to the development of smart cities in various and highly creative ways. New visual applications are born from the urban ecosystem, people counting, visual surveillance, traffic flow computation, vehicle classification, forensic image analysis, augmented advertisement, etc. This special issue aims to provide a selection of such approaches to the development of smart cities through the use of real-time computer vision.

The Special Session on Computer Vision in Smart Cities (CVSC) from the 5th Intl. Work-Conference on the Interplay between Natural and Artificial Computation (IWINAC) is organized to provide an inspiring international forum for latest innovations and developments in this field. This special issue is offering a forum for the authors of the selected papers from the CVSC that specifically address the real-time aspects (e.g. computational complexity reduction as compared to existing algorithms, hardware implementation, software optimization, etc.) to publish the extended versions of their conference papers (should contain at least 50% new and additional materials) as journal papers. This special issue is not restricted to these conference papers and other authors are also encouraged to submit manuscripts to it.

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

- Modeling the environment for real-time visual tasks.
- Real-time indoor and outdoor video surveillance.
- Real-time visual tracking, including multi-target tracking and tracking in crowded scenes.
- Real-time scene understanding: behavior analysis, abnormality detection, context-based target description.
- Real-time forensic image analysis.
- Real-time activity analysis involving people: counting people, abandon object detection, biometric recognition, etc.
- Real-time automatic license plate recognition (ALPR) systems and applications: free-flow, red-light photo enforcement, car parks, etc.

Authors from academia and industry working in the above or closely related research areas are requested to submit original manuscripts that have not been published and are not currently under review by other journals.

Prospective authors should submit the complete manuscript through the Manuscript Tracking System “Editorial Manager” (EM) at <https://www.editorialmanager.com/jrtip/> clearly indicating that the paper should be assigned to this special issue on “Real-Time Computer Vision in Smart Cities”

The guidelines for authors and reviewers are available for download from the journal webpage:  
<http://www.springer.com/11554>

**SPECIAL ISSUE TIMELINE:**

Paper submission deadline: August 31, 2013

End of First round review: November 30, 2013

Revised version due: January 5th, 2014

End of Second round review: February 17, 2014

Camera ready papers due: March 17, 2014

**Guest Editors:**

Antonio S. Montemayor  
Universidad Rey Juan Carlos  
Dept. Ciencias de la Computación  
28933 Móstoles, Madrid, Spain  
Phone: +34 914887190  
Email: antonio.sanz@urjc.es

Juan J. Pantrigo  
Universidad Rey Juan Carlos  
Dept. Ciencias de la Computación  
28933 Móstoles, Madrid, Spain  
Phone: +34 914887393  
Email: juanjose.pantrigo@urjc.es

Luis Salgado  
Universidad Autónoma de Madrid  
Dept. Tecnología Electrónica y de las Comunicaciones  
Escuela Politécnica Superior  
Calle Francisco Tomás y Valiente 11, 28049 Madrid, Spain  
Phone: +34 914972427  
Email: luis.salgadoa@uam.es