

Call for papers

The 18th International IEEE Conference on Intelligent Transportation Systems

Las Palmas de Gran Canaria, Spain, 15 – 18 September 2015

Workshop WS3

Advanced Traffic Signal Systems on the Crossroads between Past and Future

Urban traffic control is one of the most important factors that affect traffic congestion and its externalities (number of accidents, air pollution, noise, etc.) on urban roads. Traffic signal systems, as the core piece of any urban traffic control are going through a transitional phase. Caught between the crossroads of traditional practices and conventional equipment and new technologies and paradigms, field of the traffic signal systems is experiencing a mixture of ideas and intelligent solutions. While the need for recently emphasized performance monitoring is driving the process of retrofitting existing signal systems, new wireless-communication-based technologies are emerging. This is all happening in spite of the fact that the ‘next generation’ of traffic signal systems (a.k.a. adaptive traffic control) has not been utilized to its full potential yet. In such a mixture of operational conditions, Intelligent Transportation Systems researchers and professionals (who design, operate and maintain traffic signal systems) are faced with multitude of challenges, including those on methodological, technological, and institutional sides. This workshop is intended to address such contemporary issues that researchers, industry professionals, and institutional users face in their signal-related activities and decision-making processes. The workshop is envisioned as a forum of ideas coming from a mixture of professionals from academia, industry, and government. Invited speakers will present on a variety of up-to-date research topics and innovative field developments, with orientation towards emerging technologies and practices. Then, the floor will be opened to audience to emerge into discussion with the speakers.

List of Topics: Adaptive traffic control systems, Traffic signals in connected vehicle environment, Performance-measurement-based traffic signals, Traffic signal systems and operations in multimodal environment, Innovative traffic signal control algorithms and methods, Traffic control as a congestion mitigation measure, Freeway ramp metering and control, Traffic signal control for oversaturated operations, Modeling and simulation exercises with advanced traffic signal systems, Incident-responsive traffic signal control, Traffic-responsive signal control, Traffic signals in environment of Big Data and Cloud Computing, Learning reinforcement and other soft-computing methods for urban traffic control.

Organizer

Prof. Aleksandar Stevanovic, Florida Atlantic University

Paper Submission

Submit your paper here: <http://itsc2015.exordo.com>

Complete manuscripts in PDF format must be electronically submitted for peer-review, following the standard IEEE conference proceedings format. Detailed submission instructions can be found here:

<http://www.itsc2015.org/submit-your-paper>.

Important Dates

Here we have the Important Dates: <http://www.itsc2015.org/important-dates>

- Workshop Full paper submission due **May 15**, 2015 (SHARP)
- Notification of acceptance: June 15, 2015
- Final paper submission deadline (Regular Session, Special Session, Industry Track and Workshop papers): July 1, 2015 (SHARP)
- Conference: September 15 to 18, 2015

Journal and Magazine Publication of Selected Papers

Selected papers of exceptional quality will be invited for submission to a special issue of the IEEE Transactions on ITS or the IEEE ITS Magazine. Authors will be asked to revise their papers according to the standards of the Transactions or the Magazine.