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Intelligent Vehicular Systems and Control

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SMC 2017 CALL FOR PAPERS

Special Session: Intelligent Systems and Control for Semi-autonomous and Autonomous Vehicles

2017 IEEE International Conference on Systems, Man, and Cybernetics, October 5–8, 2017, Banff Center, Banff, Canada
http://www.smc2017.org

The 2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2017) will be held in Banff Centre one of the most modern conference facility in North America, with majestic mountain view. SMC 2017 is the flagship conference of the IEEE Systems, Man, and Cybernetics Society. It provides an international forum for researchers and practitioners to report most recent innovations and developments, summarize state-of-the-art, and exchange ideas and advances in all aspects of systems science and engineering, human machine systems, and cybernetics. Advances in these fields have increasing importance in the creation of intelligent environments involving technologies interacting with humans to provide an enriching experience and thereby improve quality of life.

Scope

This special Sessions provide a focused discussion of new or innovative topics which are of interests to the Technical Committee of Intelligent Vehicular Systems and Control. With the current advancement in driverless cars, both semi-autonomy and full-autonomy become critical for the smart mobility solutions, where people routinely share vehicles, move efficiently and safely, avoid congestion, and know how to move through every part of the journey, whatever form of transportation is used. While semi-autonomous features such as those implemented as ADAS (advanced driver assistance systems) are important for the current vehicles, designing a virtual driver to mimic a human driver's vehicle control is critical for driverless cars. Using semi- or full autonomy to advance mobility solutions likely need more advanced system and control approaches including computational intelligence, besides perception. This special session aims to showcase current research trends in the aforementioned areas.
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Areas

Potential topics include but not limited to the following: driver model; driver monitoring, decoding of driver state and intentions; driver assistance and active safety systems; corporative vehicle controls; vehicle system control; vehicle ride, handling, and stability controls; vehicle path planning and trajectory control; vehicle control architecture and embedded software; vehicle parameter identification; vehicle system integrations; vehicle personalization and adaptation; green technology and fuel economy; semi-autonomous system (driver-in-the loop vehicle control systems); autonomous systems (driverless vehicle control system); perception systems and sensor fusion; fuel economy-based speed and motion management; electrified vehicle systems.

Important Dates

February 15, 2017	Deadline for submission of proposals for Special Sessions
March 15, 2017	Acceptance/rejection notification of proposals for Special Sessions
April 7, 2017	Deadline for submission of contributions for Regular and Special Sessions
April 7, 2017	Deadline for submission of proposals for Tutorials and Workshop Sessions
April 30, 2017	Acceptance notification for Tutorials and Workshop Sessions
May 25, 2017	Acceptance notification for Regular and Special Session papers
May 30, 2017	Submission deadline for Late Breaking, Industrial papers and Workshop papers
June 30, 2017	Acceptance notification for Late Breaking, Industrial and Workshop papers
July 9, 2017	Final camera-ready papers due for Regular, Special Sessions, Late Breaking/ Sessions, and Demo Paper Sessions
August 5, 2017	Deadline for early registration
October 5-8, 2017	Conference dates