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Special Session Call for Papers

SMC2011 Special Session on Shared Control

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Introduction/Call for Papers

Shared control can be seen as an intelligent system that continuously shares control authority with a human controller, so that they determine the input to the controlled system together. The idea behind shared control is to keep the human operator in the direct manual control loop, while providing the continuous support of an automation system that aims to avoid criticalities of the controlled system in the environment. Furthermore, two basic types of shared control can be distinguished to combine actions of human and automation: input-mixing shared control, which influences the input to the controlled system directly; and haptic shared control which influences the physical interaction with the control interface and thereby indirectly the input to the controlled system.

Prospective authors are invited to submit original papers to the Special Session.

Indicative Topics/Areas

Haptics and Teleoperation; Adjustable Autonomy; Assistive Technology; Brain-Machine Interface Systems; Human Centered Design; Human-Machine System Design;

And, in particular within the topic of Intelligent Vehicle Systems, articles on: Vehicle stability control systems (ESC, RSC, etc.), their enhancements, and their interaction with drivers; Driver-assist systems; Driver adaptive controls; Active safety systems and their integrations; Integrated driving dynamics and control; Semi-autonomous systems (driver-in-the-loop vehicle controls).

Important Dates

April 1, 2011: Deadline for submission of full-length papers to special sessions.

June 1, 2011: Acceptance/Rejection Notification.

July 5, 2011: Final camera-ready papers due in electronic form.

Submission

Please contact the Special Session organizer for arrangement of submission in the first instance. All submissions may well need to be uploaded to SMC11 main conference online submission system.

All submitted papers of Special Sessions have to undergo the same review process (three completed reviews per paper). The technical reviewers for each Special Session paper will be members of the SMC 2011 Program Committee and qualified peer-reviewers to be nominated by the Special Session organizers.

Organized by IEEE SMC TC on Intelligent Vehicular Systems and Control