CALL FOR PAPERS



Special Session on Recent Developments in Sliding Mode Control and Its Applications

IECON 2018 - The 44th Annual Conference of the IEEE Industrial Electronics Society October 21-23, 2018, Washington D.C, USA



TOPIC OF THE SPECIAL SESSION

Sliding mode control (SMC) merits attention by many researchers due to its attractive abilities such as the robustness to parameter variations, fast dynamic response, guaranteed stability and simplicity in the implementation. Higher-order sliding surface function and formation of nonlinear sliding surface function methods are emerged as alternative solutions to the conventional SMC achieving the finite time convergence. SMC approaches developed in continuous- and discrete-time domains have been successfully applied in power electronics, electric drives, mechatronic systems, manipulators, vehicles and spacecraft. Hence, the purpose of this Special Session is to create a platform for researchers, engineers and practitioners to present their latest theoretical and technological developments in the sliding mode control.

Topics of the Session

- SMC design in continuous- and discrete-time
- Terminal SMC design methods
- Adaptive SMC design methods
- Sliding mode observers
- Chattering reduction methods
- Applications of recent SMC methods for power electronics converters, electric drives, mechatronic systems, manipulators, vehicles and spacecraft

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Author's schedule:

- Deadline for submission of special session papers May 1, 2018
- Notification of acceptance July 15, 2018
- Deadline for submission of final manuscripts August 1, 2018