



The 13th International Conference on Control, Automation, Robotics and Vision

ICARCV 2014

http://www.icarcv.org/2014 December 10 - 12, 2014, Marina Bay Sands, Singapore

CALL FOR PAPERS

The 13th International Conference on Control, Automation, Robotics and Vision, ICARCV 2014, will be held in Singapore in December 2014. The conference is organised by Nanyang Technological University, Singapore, and technically co-sponsored by (to be confirmed) IEEE Control Systems Society, IEEE Robotics and Automation Society and IEEE Systems, Man and Cybernetics Society.

ICARCV focuses on both theory and applications mainly covering the topics of control, automation, robotics and computer vision. In addition to the technical sessions, there will be invited sessions, panel sessions and keynote addresses.

Proceedings of past ICARCVs have been indexed by ISI Proceedings, EI Compendex and included in the IEEE Xplore.

The topics of interest include, but are not limited to:

Control: Adaptive control; Robust control; Process control; Complex systems; Co-operative control; Identification and estimation; Nonlinear systems; Intelligent systems; Discrete event systems; Hybrid systems; Networked control systems; Sensor networks; Delay systems; Neural networks; Fuzzy systems; Control of biological systems; Precision motion control; Control applications; Control engineering education; Marine systems; Data analytics.

Automation: Man-machine interactions; Process automation; Intelligent automation; Factory modeling and simulation; Home, laboratory and service automation; Network-based systems; Planning, scheduling and coordination; Nano-scale automation and assembly; Instrumentation systems; Biomedical instrumentation and applications; Building energy efficiency.

Robotics: Modeling and identification; Robot control; Mobile robotics; Mobile sensor networks; Perception systems; Micro robots and micro-manipulation; Visual servoing; Search, rescue and field robotics; Robot sensing and data fusion; Localization, navigation and mapping; Dexterous manipulation; Medical robots and bio-robotics; Human centered systems; Space and underwater robots; Tele-robotics; Mechanism design and applications.

Vision: Image/video analysis; Image-based modeling; Stereo and Structure from motion; Feature extraction, grouping and segmentation; Scene analysis; Object recognition; Learning and Statistical methods; Human-computer interaction; Tracking and surveillance; Biometrics; Vision for robots; Activity/behavior recognition; Medical Image Analysis; Face and Gesture.

Paper Submission:

Papers must be written in English and should describe original work in details. Please download the template from the conference website and submit the full papers online at http://www.icarcv.org/2014 by 30 April, 2014. Proposals for invited sessions will be submitted online at the same web address. Upon acceptance, authors are required to register and present their papers at the conference. Papers which make outstanding contributions to the relevant topics will be considered for best paper awards.

Keynote Speeches

Towards Semantic Visual SLAM

Prof. Ian Reid, School of Computer Science, University of Adelaide, Australia

On Robot Motion Planning, Learning, and Control Inspired from Human Motor Control Prof. Frank Park, School of Mechanical and Aerospace Engineering, Seoul National University, South Korea

Control and Coordination of Multi-Robot Teams

Professor Magnus Egerstedt, Department of Electrical and Computer Engineering, Georgia Institute of Technology, USA

Important Dates:

Deadline for Full Paper Submission

Deadline for Invited Session Proposal Submission

Notification of Acceptance Deadline for Camera Ready Manuscript Submission

Deadline for Authors' Registration

For further information, please refer to

Website - http://www.icarcv.org/2014 Email - secretariat@icarcv.org

Organizer

-School of Electrical & Electronic Engineering, Nanyang Technological University

Technical Sponsors

-IEEE Control Systems Society Systems, Man and Cybernetics Society

-IEEE Robotics and Automation Society

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30 April 2014

30 April 2014

1 July 2014

1 September 2014

1 September 2014