



11th International Conference on Control, Automation, Robotics and Vision

ICARCV 2010

<http://www.icarcv.org>

7 - 10 December 2010, Singapore



IEEE Control Systems Society



Organiser

-School of Electrical & Electronic Engineering,
Nanyang Technological University

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-IEEE Computational Intelligence Society
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CALL FOR PAPERS

The 11th International Conference on Control, Automation, Robotics and Vision, ICARCV 2010, will be held in Singapore from 7 to 10 December 2010. The conference is organised by the Nanyang Technological University of Singapore. ICARCV focuses on both theory and applications mainly covering the topics of control, automation, robotics and vision. In addition to the technical sessions, there will be invited sessions, keynote addresses and plenary panel sessions.

The Proceedings of ICARCV are included in the IEEE Xplore and indexed by EI Compendex as well as ISI Proceedings.

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 network systems; Delay systems; Neural networks; Fuzzy systems; Control of biological systems; Precision motion control; Control applications; Control engineering education.

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

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; Computational intelligence in robotics; Mechanism design and applications.

Vision: Image/video analysis; Feature extraction, grouping and segmentation; Scene analysis; Pattern recognition; Learning in vision; Human-computer interaction; Tracking and surveillance; Biometrics; Biomedical Image analysis; Computational intelligence in vision; Activity/behaviour recognition; Applications.

Best Paper Award: Selection of the best paper will be made at the Conference based on both the technical content and presentation. The winner will be chosen by the Technical Program Committee in consultation with the International Advisory Committee.

Paper Submission:

Papers must be written in English and should describe original work in detail. Please download the template from the conference website and submit the full papers online <http://www.icarcv.org> by **15 April, 2010**. Upon acceptance, authors will be required to register and present their papers.

Invited Sessions:

Prospective organizers of Invited Sessions are invited to submit proposals focusing on topics of ICARCV 2010 to the Invite Session Chairs, **Professors Lihua Xie (Control), Chien Chern Cheah (Robotics and Automation) and Eric Sung (Vision) by 15 April, 2010**. Invited sessions are to provide a forum for focused discussions on new topics, or innovative applications of established approaches.

Keynote Speakers:

Professor Miroslav Krstic, *University of California, San Diego, USA*
Professor Bruno Siciliano, *University of Naples Federico II, Italy*
Professor Zhengyou Zhang, *Microsoft Research, USA*

Important Dates:

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| Deadline for Full Paper submission | 15 April 2010 (Extended) |
| Notification of Acceptance | 1 July 2010 |
| Deadline for Camera Ready Manuscript Submission | 1 September 2010 |
| Deadline for Authors' Registration | 1 September 2010 |

Website - <http://www.icarcv.org>

Email - secretariat@icarcv.org

