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CALL FOR PAPERS

The 18th International Conference on Control, Automation, Robotics and Vision (ICARCV 2024), will be held in Sofitel Dubai the Obelisk, Dubai, UAE, 12-15 Dec 2024. The conference is organised by Nanyang Technological University, Singapore, and technically co-sponsored by IEEE Control Systems Society. **The conference will be held fully in physical mode this time.**

ICARCV has a history of more than 30 years. It 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, plenary speeches, keynote speeches, and plenary panel sessions.

Proceedings of past ICARCVs have been indexed by ISI Proceedings, EI Compendex and included in the IEEE Xplore. To encourage research sharing, we will also allow authors to submit extended abstracts, up to 3 pages per abstract, based on journal papers, accepted within 12 months before Dec. 12, 2024, from top tier journals, to be presented in the conference, which, however, will not be indexed in 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; Multi-agent systems; Delay systems; Neural networks; Fuzzy systems; Control of biological systems; Precision motion control; Control applications; Control engineering education; Marine systems; Data analytics; AI in control.

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; fault diagnosis and detection.

Robotics: Modeling and identification; multi-robot systems; 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.

Emerging Technologies: Internet of things; Cyber-physical systems; Smart buildings, Smart grid; Energy management systems; Big data; Electric vehicles and intelligent transportation.

Paper and Invited Session Proposal Submission:

Full Papers and Extended Abstracts must be written in English. Please download the template from the conference website <https://icarcv2024.org> and all submissions must be conducted online through PaperCept (<https://controls.papercept.net/conferences/scripts/start.pl>). **Proposals for invited sessions** can 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. In accordance with IEEE requirements, only PDF files will be accepted.

For more details, please visit ICARCV 2024 Website: <https://icarcv2024.org>

For enquiries, please contact: information@icarcv2024.org

Important Dates:

Deadline for Full Paper & Invited Session Proposal submission	15 June 2024
Deadline for Extended Abstracts	30 June 2024
Notification of Acceptance	15 August 2024
Deadline for Camera Ready Manuscript Submission	15 Sept 2024
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