

ARCAI 2026 Special Sessions Proposal Form

Format: Maximum 4 pages. All pages are formatted to letter paper size with margins of one inch on every side. All texts use single space, Times New Roman, and a font size of 11.

Success of SS: At least 6 accepted & registered papers with authors from at least 2 independent institutions (other than the organizers institutions) should be required for each SS.

Submission: This form should be submitted to icarcai.info@gmail.com once completed.

Special Session on “Intelligent Control of Robots”

Organized by

Principal Organizer(s): (Names with email address and affiliation)

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➤ Technical Outline of the Session and Topics (100-150 words):

Outline of the Session

This session focuses on advanced intelligent control technologies for robotic systems. The session further discusses key control strategies, including neural network adaptive control for robotic manipulators and sliding mode intelligent control for mobile robots. It also investigates reinforcement learning-based robot motion planning. Additionally, this session analyzes disturbance rejection methods and system robustness optimization schemes. Finally, it explores technologies of multi-robot cooperative intelligent control.

Topics of the Session

- Autonomous navigation control of mobile robots
 - Neural network adaptive control for manipulators
 - Sliding mode intelligent control of mobile robots
 - Reinforcement learning for robot motion planning
 - Disturbance rejection and robustness optimization
 - Multi-robot cooperative intelligent control
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