

# 34<sup>th</sup> IEEE International Symposium on Industrial Electronics (ISIE 2025)

## Special Session on

### “Machine Vision, Control and Navigation”

#### Organized by

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## Call for Papers

### Theme:

This special session centers on advancements in machine vision, control, and navigation, addressing a range of challenges within the manufacturing sector, including visual inspection and complex navigation tasks. Their relevance grows as machine vision technologies integrate into emerging fields like the Industrial Internet of Things and smart manufacturing. Applications include search, classification, automation, rescue, surveillance, mapping, and audio-visual tasks using devices like cameras, scanners, sensors, and control systems. While our primary interest belongs to automatic systems in all their aspects, this session invites papers that explore effective strategies, innovations, and the critical role of machine vision in control and navigation technologies across various applications.

Topics of interest include, but are not limited to:

1	Machine Vision and Autonomous Navigation
2	Multi-Camera Vision Systems
3	Laser, Ultrasonic and UWB Scanning Systems
4	Deep Learning in Machine Vision
5	Control of Industrial Robotics
6	Novel Image Sensor Technologies
7	Multi-Scanner Technologies and Data Fusion
8	Target Detection and Tracking
9	Human-Robot Interaction in Industry
10	3D Vision and Sensing for Manufacturing

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### Submission Procedure:

All the instructions for paper submission are included in the conference website: <https://ieee-isie-2025.org/>

### Deadlines:

Full paper submission: March 31, 2025  
 Paper acceptance notification: April 15, 2025  
 Camera-ready paper submission: May 14, 2025

**Please send this completed document to:**

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