



ANNUAL CONFERENCE OF THE IEEE INDUSTRIAL ELECTRONICS SOCIETY

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Special Session on Machine Vision, Control and Navigation

Organized and co-chaired by:

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Call for Papers

Technical Outline of the Session and Topics:

This special session focuses on advancements in the field of machine vision, control, and navigation, addressing various challenges across manufacturing, from visual inspection to intricate navigation tasks. The increasing integration of machine vision technologies is ready to significantly impact emerging domains such as spatial web and smart manufacturing. Machine vision finds diverse applications, including search, classification, automation, rescue operations, surveillance, mapping, audiovisual tasks, and others, where cameras, scanners, ultra-wideband devices, and machine control systems play crucial roles. Thus, identifying the most effective approaches to machine vision is crucial. While our primary interest belongs to automatic systems in all their aspects, it's important to recognize the interconnection between control, navigation, and these systems. We welcome contributions, applications, and innovations spanning any of these fields in this special session.

Topics of the Session include, but are not limited to:

- Machine Vision and Autonomous Navigation
- Multi-Camera Vision Systems
- Laser Scanning Systems
- Ultrasonic and UWB Scanning Systems
- Deep Learning in Machine Vision
- Visual Inspection in Industry
- Control of Industrial Robotics
- Target Detection and Tracking
- Novel Image Sensor Technologies
- Multi-Scanner Technologies and Data Fusion

Author's schedule:

Deadline for submission of special session papers	April 15, 2024
Notification of acceptance	June 10, 2024
Deadline for submission of final manuscript	July 01, 2024

Early submission is highly encouraged for early decision notifications!



All the instructions for paper submission are included in the conference website:
www.iecon-2024.org