

# Special Issue

## Collaborative Integrated Sensing and Localization in Autonomous Systems

### Message from the Guest Editors

Autonomous systems, including ground vehicles, drones, marine robots, and industrial machines, significantly rely on precise sensing and localization to operate effectively within intricate and dynamic environments. Recent advancements in sensor fusion, edge intelligence, and wireless communication allow these systems to work together and share situational awareness in real time. This Special Issue highlights the most recent methods and technologies that facilitate collaborative sensing and localization among autonomous platforms. It will unite innovations that enhance the accuracy, scalability, robustness, and efficiency of localization in multi-agent and heterogeneous settings. We invite contributions on topics such as the following:

- Multi-sensor fusion techniques for real-time localization;
- Cooperative SLAM among vehicles and drones;
- V2V, D2D, and hybrid communication frameworks;
- Edge and distributed computing for localization and mapping;
- AI-driven context-aware sensing in dynamic environments;
- Localization in GPS-denied or signal-degraded conditions;
- Experimental validation in urban, aerial, underwater, or indoor environments.

### Guest Editors

Dr. Tanveer Ahmad

Prof. Dr. Xuejun Li

Dr. Muhammad Usman Hadi

### Deadline for manuscript submissions

31 May 2026



## Journal of Sensor and Actuator Networks

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[jsan@mdpi.com](mailto:jsan@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

I encourage you to contribute research and comprehensive review articles for publication in Journal of Sensors and Actuator Networks (JSAN), an international, open access journal which provides an advanced forum for research findings in areas of sensors and actuators. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sensors and actuators and fostering applications of sensor-based measurements and effective actuator incorporation.

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### Editor-in-Chief

Prof. Dr. Lei Shu

1. College of Smart Agriculture (Artificial Intelligence), Nanjing Agricultural University, Nanjing 210031, China

2. School of Engineering, College of Science, University of Lincoln, Lincoln LN6 7TS, UK

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