

## Special Issue

# Integrated Cognitive Sensing and AI-Enabled Communications for Autonomous Systems

### Message from the Guest Editors

This Special Issue seeks to gather novel contributions from researchers focusing on integrating cognitive sensing and AI-enabled communications in AS. The topics of interest that include, but are not limited to:

- Multimodal perception for AS
- Machine learning and deep learning of dynamic representations for AS
- Integrated framework to formulate environmental awareness, self-awareness and connectivity in AS
- Sensor fusion in AS
- Anomaly detection in AS
- Incremental learning for AS
- Reinforcement learning for decision making in AS
- Active inference for Bayesian decision making in AS
- Simultaneous imaging, mapping and localization in AS
- AI techniques for radio environment awareness in autonomous vehicular networks
- Reinforcement learning for network decision making in autonomous vehicular networks
- Joint design of AI-based sensing and communication in autonomous vehicular networks
- Position-aided radio signal prediction in autonomous vehicular networks
- Position-aided traffic prediction for resource allocation in autonomous vehicular networks
- Protection against jamming and spoofing in autonomous vehicular networks

### Guest Editors

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### Deadline for manuscript submissions

closed (25 February 2025)



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### Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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