

Special Issue

Advances in Perception and Artificial Intelligence for Autonomous Vehicles

Message from the Guest Editors

Recent strides in Perception and Artificial Intelligence (AI) have transformed robotics, particularly in the realm of autonomous vehicles (AVs). This Special Issue invites submissions related to the following topics:

- Large Language Models (LLMs) in Autonomous Driving
- AI-driven or AI-accelerated Perception Models for Navigation
- Multi-Agent Reinforcement Learning (MARL) for Autonomous Systems
- Generative AI for Driving Scenarios
- Safety, Ethics, and Interpretability
- Sensor Fusion for Autonomous Driving

This Special Issue aims to compile a curated collection showcasing state-of-the-art AI and deep learning perception methods, highlighting their transformative potential in AVs autonomy and navigation. Additionally, it aims to chart new directions for multi-disciplinary research, fostering collaboration between AI technologists and roboticists. The insights derived from accepted submissions will provide practical guidance for the industry, steering the next wave of innovations in smart transportation, AVs, and robotics. We look forward to receiving your original research articles and reviews.

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2025)



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About the Journal

Message from the Editor-in-Chief

Drones is the only international open-access journal about the science, policy and technology of drones and its applications. Nowadays, the proliferation of drones is a reality for local policy makers, regulatory bodies, mapping authorities, startups and consolidated companies. There are many uses and benefits of drones: from the emergence of new sensors and the evolution of new platforms; to the development of specific software and the emergence of new applications. *Drones* publishes reviews, regular research papers, communications and short notes, without restriction on the length of papers. *Drones* seeks to provide a central forum for scholars engaged in drones' research and applications.

There is a need for high quality papers in this area and the *Drones* Editorial Board are widely recognized international leaders. *Drones* journal guarantees a serious peer review and a rapid publication across the whole discipline of drones.

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