

Special Issue

Artificial Intelligence (AI) and Machine Learning (ML) in UAV Technology

Message from the Guest Editors

Uncrewed aerial vehicles (UAVs) have witnessed a significant surge in applications across various industries over the past few decades. Integrating intelligence (AI) and machine learning (ML) with UAV technology significantly enhances the capability of UAVs in various aspects, such as object recognition, autonomous navigation, obstacle avoidance, real-time decision, and teaming. This Special Issue aims to spotlight the significant, on the one hand, basic research on enhancing/enabling UAV capabilities with AI and ML, and, on the other hand, applied research on the broader adoption and application of UAVs across diverse fields with the help of AI and ML. Topics for submission include, but are not limited to:

- AI/ML-driven UAV Perception and Object Detection/Tracking
- AI/ML-driven UAV Localization and Navigation
- AI/ML-driven Decision Making in UAV Operations
- AI/ML-driven UAV Trajectory and Motion Planning
- AI/ML-driven UAV Control
- AI/ML-driven Swarm Coordination for UAVs
- AI/ML-assisted Geospatial Mapping with UAVs
- AI/ML-assisted Precision Agriculture with UAVs
- AI/ML-assisted Environmental Monitoring with UAVs

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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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