Special Issue

Recent Developments in Artificial Intelligence and Interdisciplinary Research for UAV Application

Message from the Guest Editors

To advance the application of new AI technologies in UAVs, this Special Issue aims to provide a platform for researchers to share their latest findings. In addition to technical advancements in image analysis, communication systems, and multimodal data processing, we encourage submissions that address the economic and social dimensions of UAV industries. By bridging technical innovation with socio-economic research, we hope that this Special Issue will also foster interdisciplinary collaboration. This Special Issue including, but not limited to, the following topics:

- UAV image super-resolution.
- UAV image-based object detection/segmentation/classification.
- UAV image-based multimodal fusion.
- UAV object tracking.
- Lightweight perception model for UAV platform.
- VLM-based human-UAV interactions.
- Adversarial attacks on and defenses for UAV timeseries data.
- Software engineering and software security for UAVs.
- LLM-based UAV communications.
- Economic- and social-dimension research into UAV industries.

We look forward to receiving your original research articles and reviews.

Guest Editors

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Deadline for manuscript submissions

25 October 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.

Editor-in-Chief

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