Special Issue

Innovative Approaches to Biodiversity and Ecology Monitoring: Artificial Intelligence (AI) and Drone Technology

Message from the Guest Editor

The goal of this Special Issue is to collect papers (original research articles and review papers) that provide insights into the application of AI techniques in analyzing drone imagery for biodiversity and ecological studies. This Special Issue will welcome manuscripts that link the following themes:

- AI Techniques in Image Processing: Studies focusing on the development and application of machine learning algorithms for analyzing drone imagery.
- Biodiversity Monitoring: Research demonstrating the use of drones and AI to assess species richness, abundance, and distribution patterns.
- Habitat Mapping and Assessment: Papers exploring how AI can enhance habitat classification and ecological modeling using drone data.
- Ecological Applications: Case studies showcasing practical applications of drone imagery and AI in conservation, land management, and ecological restoration.
- Data Integration and Analysis: Contributions discussing methods for integrating drone imagery with other data sources (e.g., satellite imagery, field surveys) to enhance ecological insights.

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

Guest Editor

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Deadline for manuscript submissions

25 November 2025

Drones

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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