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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About the Journal

Message from the Editor-in-Chief

Drones is an international open access journal focusing on advancing research in drone science, policy, technology, and applications. Today, drones have become indispensable for policymakers, regulatory authorities, mapping agencies, start-ups, and established firms. Their expanding societal and economic relevance is reflected in the rapid development of new sensors, upgraded platforms, specialized software, and novel applications. The journal provides a central forum for scholars in drone research and applications to exchange findings and innovations. With growing demand for high-quality research, our Editorial Board comprises international leaders and experts across relevant scientific areas. We offer rigorous peer review and rapid publication of papers from across all areas of drone science. We welcome you to submit your next paper to *Drones* and to contribute to the continued advancement of and innovations in the field of drones.

Editor-in-Chief

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