Special Issue

Next-Gen Drone Safety: Intelligent Systems, LLM Analytics and Operational Risk

Message from the Guest Editors

This Special Issue aims to gather high-quality original research and review articles that explore and evaluate novel methodologies combining AI technologies, specifically LLMs, with structured human-factors frameworks for UAV safety enhancement. We welcome submissions related to the application, validation, and advancement of AI-driven approaches for incident analysis and human-factor identification in UAV operations. The topics submitted to the special issue include, but are not limited to:

- Comparative evaluations of AI-assisted UAV incident analysis versus traditional methods;
- AI methodologies for extracting human-factor insights from UAV narrative reports;
- Case studies demonstrating AI applications in UAV accident investigations;
- Systematic AI-driven approaches to proactive UAV risk management;
- Field Validation Frameworks for AI-Based UAV Safety Systems;
- AI-based UAV safety monitoring system design;
- Intelligent safety control and advanced AI technology for multiple UAVs;
- AI-based fault-tolerant flight control systems in complex environments;
- Safe Autonomous navigation using intelligent technologies.

Guest Editors

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Deadline for manuscript submissions

18 March 2026

Drones

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Impact Factor 4.8
CiteScore 7.4

mdpi.com/si/251043

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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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