Special Issue

Drone-Enabled Smart Sensing: Challenges and Opportunities

Message from the Guest Editors

This focus aligns with the mission of the journal *Drones* by advancing the research in UAV technologies and their transformative impact across industries. The suggested themes for this Special Issue include (but are not limited to) the following: DSS applications in industry:

- Smart sensing and digital twin approaches applied in industry applications with drones;
- Policy-based challenges and opportunities related to advancing industry applications with drones;

DSS algorithms:

- Digital twin modeling approaches, analysis, and control with drones with an emphasis towards smart sensing;
- Autonomous drone navigation and path planning with drones using real-time sensing feedback;
- Optimal sensor placement and coverage control with drones for parameter estimation;
- Machine learning-enhanced modeling and control with drones for efficient prediction and computation of the physical system.

DSS architectures and hardware:

- Real-time data processing and edge computing hardware (e.g. IoT, FPGA, GPA);
- Mobile sensor network communication strategies;
- Performance and evaluation, including benchmarking and security/ robustness considerations.

Guest Editors

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Deadline for manuscript submissions

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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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