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Special Issue Reprint

Innovative Technologies and Services for Unmanned Aerial Vehicles

Edited by: Tao Hong and Fei Qi

This Special Issue Reprint compiles cutting-edge research on Unmanned Aerial Vehicles (UAVs), highlighting transformative advancements that broaden their capabilities across diverse sectors. Bringing together contributions from researchers, practitioners, and industry experts, this collection fosters interdisciplinary dialogue while delivering rigorous peer-reviewed insights into UAV technology and services. It covers a comprehensive range of critical topics, such as the following: autonomous navigation and control systems (including advanced algorithms for obstacle detection, path planning, and formation flying); innovative sensing/imaging technologies (hyperspectral imaging, LiDAR, thermal imaging for data acquisition); efficient communication/networking solutions (reliable, secure connectivity, network coordination, swarm intelligence for networked UAVs); payload design and service delivery (medical supply transport, infrastructure inspections); energy efficiency research (energy harvesting, optimization algorithms, sustainable power sources); and regulatory/ethical considerations for safe, responsible UAV deployment. Featuring original research articles, reviews, and case studies, this Reprint captures the latest breakthroughs pushing UAV application boundaries. It serves as an invaluable resource for professionals and researchers seeking to keep up to date with industry progress, inspiring further innovation and collaboration to advance UAV technology's real-world impact.

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