





Special Issue Reprint

# Path Planning, Trajectory Tracking and Guidance for UAVs

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Edited by Heng Shi Jihong Zhu Zheng Chen Minchi Kuang

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This Special Issue presents a collection of research focused on path planning, trajectory tracking, and guidance systems for Unmanned Aerial Vehicles (UAVs), pivotal for enhancing their autonomous operations. The articles explore methodologies for determining optimal flight paths, executing planned trajectories, and making real-time adjustments to ensure precise tracking and effective obstacle avoidance. Emphasizing the importance of planning safe and efficient routes, the research addresses challenges posed by complex environments and external factors such as wind and turbulence. Contributions include advanced algorithms for UAV navigation, autonomous decision-making strategies, and control systems that allow for both individual and swarm operations. The findings collectively advance our understanding of how to optimize UAV performance and safety, providing valuable insights into the future of autonomous aerial systems. This compilation serves as a critical resource for researchers and practitioners looking to leverage the latest developments in UAV technology.





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