Special Issue

Advanced Flight Dynamics and Decision-Making for UAV Operations

Message from the Guest Editors

Unmanned Aerial Vehicles (UAVs) have rapidly evolved in both civil and military applications, demanding increasingly sophisticated control systems and decision-making frameworks. As UAV missions become more complex—ranging from autonomous surveillance and infrastructure inspection to cooperative multi-agent systems—there is a growing need to enhance their flight dynamics modeling, real-time adaptability, and intelligent autonomy. This Special Issue focuses on cutting-edge advancements in flight dynamics, control algorithms, and decision-making mechanisms that enable UAVs to operate safely, efficiently, and autonomously in dynamic environments. The aim of this Special Issue is to bring together state-of-the-art research that pushes the boundaries of UAV flight control and autonomy. Contributions should align with the scope of *Drones*, emphasizing novel methodologies, rigorous simulations, experimental validations, and practical approaches that contribute to the scientific and technological advancement of UAV systems. We welcome original research articles, comprehensive reviews, and case studies that address theoretical developments or applied solutions.

Guest Editors

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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.

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