Navigation, Control and Mission Planning Advances for Safe, Efficient and Autonomous Drones

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Message from the Guest Editors

In UAV swarms and formations, the challenges extend to the need for mission-level architectures to coordinate the path planning and path following using centralised or decentralised navigation, control and communication systems, including ground station–vehicle communications.

The state-of-the-art methods used to address challenges in single and distributed drone systems are often based on advances in the navigation and control theory, increasingly based on machine learning, or a combination of those two approaches, such as artificial intelligence (AI)-enhanced navigation and control. Advances in new technologies such as the Internet of things and Detect and Avoid are also increasingly exploited to enhance navigation and control safety and performance.

This Special Issue will therefore bring together papers which describe recent research in the navigation, control and mission planning of drones, including ground, air, marine or space vehicles. Papers with theoretical, simulation and practical experimental results in this field are all encouraged. This includes review papers, tutorials, as well as original research papers.

Special Issue

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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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