



Advances in SLAM and Data Fusion for UAVs/Drones

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Message from the Guest Editors

Dear Colleagues,

Unmanned aerial vehicles (UAVs) equipped with a variety of sensors can safely acquire real-time, high-resolution sensory data of the environment. This data can be applied in various fields, such as construction, agriculture, entertainment, and transportation. For many of these applications, the autonomy of the drone is of critical importance. UAVs need to be equipped with reliable localization, navigation, and exploration capabilities in order to make sense of complex environments by themselves with little/no interventions from operators. The users of UAV technologies are also inundated with overwhelming amounts of data (e.g., large volumes of imagery). Therefore, intelligent algorithms are needed to control the overflow of data by fusing and transforming disparate data into useful and concise information.

Contributions may be from, but not limited to, the following topics:

- unmanned aerial vehicles
- mapping and navigation
- computer vision, photogrammetry, and remote sensing
- control systems
- signal processing
- GNSS, IMU, UWB, BLE, Sonar, Radar, LiDAR and cameras
- 2D/3D image and point cloud processing





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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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