Special Issue

Autonomous Drone Navigation in GPS-Denied Environments

Message from the Guest Editors

Drones have important applications in indoor environments, where there is no access to GPS for precise positioning. Indoor drone navigation faces specific challenges to achieve precise, robust position and attitude control, particularly given the small distances to walls and obstacles. While there is extensive work in the literature regarding localization and mapping, indoor navigation remains an important open topic with distinct challenges, given the reliance on visual–inertial information to achieve precise, robust positioning and 6-DOF motion control. The Special Issue focuses on software, hardware, and analytical and computational techniques that support drone navigation in indoor environments, including, but not limited to, the following: image processing, sensor fusion, online–offline sensor calibration, localization, mapping, position and attitude estimation, path planning, and the 6-DOF motion control of drones in indoor environments.
Suggested article types:

- Review Articles: detailed review of the state of the art in indoor drone navigation.
- Articles: novel research contributions

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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