Special Issue

Multi-sensor Integration for Navigation and Environmental Sensing

Message from the Guest Editor

This Special Issue will focus on next-generation algorithms and estimation methodologies for a low-cost autonomous multi-sensor integrated system for precise real-time seamless indoor/outdoor navigation and environmental sensing. Topics of particular interest include but are not limited to:

- Multi-sensor integration for mobile and UAS mapping;
- Integration of monocular/stereo/event camera-based visual-inertial odometry (VIO)/simultaneous localization and mapping (SLAM);
- Integration of solid-state LiDAR-inertial odometry (LIO)/SLAM;
- Real-time autonomous tightly-coupled GNSS/LVIO integration for challenging GNSS signal, weather, and illumination conditions;
- Integration of fifth-generation (5G) millimeter wave (mmWave)/LVIO for GNSS-denied environments;
- Deep-learning-based algorithms for classification and semantic segmentation of LiDAR/Photogrammetric point cloud of the surrounding environment.

Guest Editor

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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