Multi-sensor Integration for Navigation and Environmental Sensing

Guest Editor:

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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:

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

Special Issue

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Message from the Editor-in-Chief

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