



Indoor Navigation: Indoor Positioning System Using Sensing Technologies

Guest Editor:

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Message from the Guest Editor

Traditional outdoor navigation technologies, such as Global Navigation Satellite Systems, are ineffective indoors due to weak signal reception, posing a challenge for context-aware services vital for social networking, advertising, recommendation systems, and healthcare. Indoor positioning systems address this challenge by leveraging a variety of sensing technologies, including Wi-Fi, Bluetooth, RFID, Ultra-Wide Band, and IMU sensors. The complexity of indoor environments, combined with human motion patterns and uncertain sensor data, necessitates modeling indoor positioning with powerful mathematical models (typically non-linear and non-Gaussian) to accurately predict pedestrian locations.

Sensor fusion plays a pivotal role by integrating data from multiple sensors, improving accuracy and reliability. This Special Issue explores innovative approaches in indoor navigation and positioning using advanced sensing technologies. Researchers are invited to contribute their cutting-edge findings, focusing on solutions that combine various sensing technologies to enhance the effectiveness of indoor positioning systems.





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Message from the Editor-in-Chief

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