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Recent Advance and Application of Wearable Inertial Sensors in Motion Analysis

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Message from the Guest Editors

Motion analysis has received a forward momentum from widespread of wearable inertial measurement units (IMUs). Moreover, the combination of inertial sensors with artificial intelligence and machine learning techniques is opening the frontiers for new challenges. IMUs are now exploited, for example, in the sports field to improve performance and prevent injuries; in collaborative robotics to optimize the cooperation between the operator and the robot, both in terms of safety and performance; in e-health and wellness applications; and in tele-rehabilitation and activity recognition.

The present Special Issue is designed to comprehensively collect new advances and applications of wearable inertial sensors in different fields.

Keywords:

- characterization of systems, techniques and methods for motion and gait analysis
- clinical reports using wearable sensors
- wearable sensors, methods and/or techniques for medical decision making and activities modeling
- health monitoring
- fall risk
- rehabilitation
- biomechanics of sport
- machine learning techniques
- gesture recognition
- industry
- human-robot collaboration



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Special Issue



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Message from the Editor-in-Chief

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