Special Issue

Wearable Sensor Technology in Gait Analysis and Medical Applications

Message from the Guest Editors

Gait analysis using wearable sensors is expected to play an increasingly important role in various clinical fields, as this technology provides a cheap and accessible means to efficiently collect large amounts of human gait data in an unconstrained environment compared to motion capture systems, electromyography, or other systems requiring costly equipment and trained engineers only available in movement analysis research laboratories. Over the last decade, several reports have pinpointed the importance of the early detection of patients with gait impairments and at risk of falling. This Special Issue aims to present current findings and perspectives on the effectiveness of wearable sensor-based gait assessments, enhancing our knowledge of them as simple screenings to predict major adverse outcomes, highlighting the importance of gait impairments.

Keywords:

- gait
- wearable sensor
- accelerometry
- inertial sensor
- wearable device
- fall risk

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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