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# **New Frontiers in Sensor-Based Activity Recognition**

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### **Message from the Guest Editors**

Sensor-based human activity recognition is a basic building block in numerous health-care applications and intelligent systems. In recent years, every smartphone performs activity recognition for its users, which is later used as a service to numerous third-party fitness and other applications. Moreover, there are many wearable devices whose goal is fitness tracking and activity recognition. At the beginning, most of the approaches were using classical machine learning, recognizing a limited set of activities which are contained in a single dataset. As the methods progressed and the computing power increased, the research started tackling an increased number of activities. This shift has also allowed for the application of deep learning methods, especially CNNs and LSTMs.

In this Special Issue, we welcome papers on novel approaches and significant applications of sensor-based human activity recognition. We particularly encourage exploring new directions of research. Examples are unsupervised, semi-supervised, and transfer learning techniques to deal with scarcity of labelled data, unknown activities and personalization of models, and approaches that we have not even thought of.













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