Special Issue

Human Activity Recognition Based on Sensors: Challenges and Perspectives

Message from the Guest Editor

Human activity recognition (HAR) is an increasingly active and interdisciplinary field of research that focuses on identifying and analyzing human actions through various sensing technologies.

HAR leverages a variety of artificial intelligence techniques, including machine learning and deep learning, to process data collected from multiple sensing modalities. These include wearable sensors (e.g., accelerometers, gyroscopes, and physiological sensors), vision-based systems (e.g., cameras and depth sensors), and ambient sensors (e.g., motion detectors and pressure sensors). The fusion of these technologies enables a more accurate and context-aware understanding of human behavior in real-world environments.

As HAR continues to evolve, new research directions are emerging, such as self-supervised learning for activity recognition, multimodal sensor fusion, and real-time activity tracking using edge computing. This Special Issue aims to compile cutting-edge research in the field of human activity recognition, highlighting recent advancements, innovative methodologies, and emerging applications that are shaping the future of this technology.

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Message from the Editor-in-Chief

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