IJIMAI journal

International Journal of Interactive Multimedia and Artificial Intelligence

2021 JCR IF 4.936
SCIENCE CITATION INDEX EXPANDED
CLARIVATE ANALYTICS

Special Issue

Data-driven Behavior Analytics of Wearable Devices and Sensors

Eds.: Jerry Chun-Wei Lin. Western Norway University of Applied Sciences (Norway) jerrylin@ieee.org
Ilona Heldal. Western Norway University of Applied Sciences (Norway) Ilona.Heldal@hvl.no

About the Special Issue

The amount of data about user behavior, health, and performance has increased tremendously due to the widespread use of wearable devices and monitors. Wearable devices and sensors are capable of collecting a variety of data, including physiological information, data about mobility, during problem solving or playing, or data about the environment. Analyzing this data provides insight into individual behavior patterns as well as health and performance. Wearable technologies and monitors equipped with data-driven behavioral analysis software have the potential to transform many different research fields, such as engineering, education, healthcare, or sports. The goal of this special issue is to explore the latest advances and challenges in data-driven behavioral analytics from ubiquitous devices and sensors such as accelerometers, heart rate monitors, eye-trackers, and GPS trackers by bringing together researchers and practitioners presenting their projects from a variety of interdisciplinary fields. The overarching goal of this special issue is to improve our knowledge of the potential uses of wearable devices and sensors in behavioral analysis. This can incorporate empirical research, but also new theories and methods, or addressing, e.g., barriers and ethical issues associated with the collection and analysis of personal data, policy or regulatory implications of considering new data sources and associated methodologies to handle these.

Suggested Topics

This special issue will concentrate on the following subjects in different domains and areas, but not limited to:

- Predictive analytics for disease diagnosis and treatment using wearable devices and sensors.
- Real-time monitoring of vital signs using wearable devices and sensors.
- Privacy and security issues in the use of wearable devices and sensors in healthcare.
- Data-driven personalized learning using wearable devices and sensors.
- User behavior and performance analysis using wearable devices and sensors.
- Adaptive education systems using wearable devices and sensors.
- Energy-efficient smart homes using IoT devices and sensors.
- Integration of smart home systems with renewable energy sources.
- Intelligent transportation systems using IoT devices and sensors.
- Intelligent traffic management using data analytics and machine learning.
- Urban planning and design using data-driven approaches.
- Ethical issues, policy implications associated with handling wearable devices and sensors.

Important Dates

31 December 2023
Paper Submission Deadline

31 March 2024
Notification of the first round review

31 May 2024
Revision due

30 September 2024
Acceptance Notification

Author guidelines and online paper submission form available at www.ijimai.org

unir
LA UNIVERSIDAD EN INTERNET