

IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS

J-B HI Special Issue on “The Health Technology application for Medical Internet-Things (MIoT)”

The Internet of Things (MIoT) is an amalgamation of medical devices and applications that can connect to health-care information technology (IT) systems using networking technologies. MIoT will promote personalized care and higher standards of care and living through individual data-driven treatment regimens as well as optimized devices tailored to individual physiological requirements. The MIoT sense the patients' health status and then transfer the medical data to doctors and care holders with the help of remote cloud data centers. This data is most often used for disease diagnosis and medical care. The data that was observed for the patient with respect to the treatment that he/she underwent is recorded and with the available medical Database the patient health is being monitored by means of MIoT and based on the information proper treatment is recommended in case of emergency situations. However, the main challenge in MIoT is how to manage with critical applications, where a number of connected devices generate a large amount of medical data. Hence, there is a need for scalable machine learning and intelligent algorithms that lead to more interoperable solutions and that can make effective decisions in emerging MIoT. The goal of this special issue on MIoT for Personalized Health-care System is to present the state-of-the-art research and applications in utilizing MIoT enabled technology for health-care systems. The application of the IoT in the medical field covers almost all aspects, including drug management, remote monitoring, mobile medical treatment of outpatient and inpatient systems, surgical tracking and monitoring, patient management and many other aspects. The main challenge in MIoT is how to manage the large amount of medical data., Wireless sensor network technologies are considered as one of the key research areas healthcare application industries. The pervasive healthcare systems The Internet of Things (IoT) The impact of IoT.

This Special Issue will focus on research targeting at the development of such Wireless sensor network technologies are considered as one of the key research areas healthcare application industries. The pervasive healthcare systems The Internet of Things (IoT) The impact of IoT. This special issue is timely and significant. Because the main challenge in MIoT is how to manage a large amount of medical data. The special issue will be comprised of extensions of some of the best works announced in the workshop, along with papers submitted within the open call, taking also into account the target audience of the JBHI journal.

Topics of interest include, but are not limited to, the following:

- MIoT applications: elderly monitoring, telemedicine, health assistance
- Predictive Modelling for Improving Health-care in MIoT
- Emerging e-Health IoT Applications
- Data mining and exploration of health data in MIoT
- Medical decision support systems in MIoT
- Medical data storage and communication in MIoT
- MIoT for remote health-care and health monitoring
- Wearable Sensor Integration for Health-care
- Security and Privacy in MIoT
- Ontologies, knowledge technologies, semantic web systems in MIoT
- Intelligent algorithms and Cloud Technologies for MIoT
- Wearable sensors devices for health monitoring
- Routing protocols and algorithms for MIoT
- Energy management in WSN-MIoT (reliability, management)
- Network architecture design of smart healthcare system
- Multimodal data processing and analysis for smart health and emotion care
- Machine learning models for smart device health care
- Communication (security, resilience, low energy)
- Mobile New Applications of health care (sensors energy consumption, energy saving)

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Key Dates

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