

1. Title of the special session

Role of Internet of Things and Artificial Intelligence in Smart Healthcare

2. Objective of the special session-

Wearable sensors, mobile devices, wireless communications, and intelligent algorithms based on artificial intelligence and machine learning are the components that make up smart health care system. The purpose of smart healthcare is to monitor and manage one's health, and the development of smart health care systems is accelerating at an exponential rate. In each of the aforementioned domains, recent years have seen great advancements in their respective disciplines.

One of the most promising technological therapies that are now developing to solve the global health equity gap is remote patient monitoring that is based on Internet of Things (IoT) technology. The Internet of Medical Things (IoMT) is a subset of the Internet of Things (IoT) that focuses on different applications within the medical field. Thanks to IoMT technology, electro-physiological signals such as ECG, BP, SpO₂, and glucose levels, in addition to user behaviors such as sitting, standing, walking, and so on, may all be detected and remotely monitored in real time. Automated decision support systems may assist medical professionals in generating an early prognosis by using the data that is collected from parameters that are continually monitored. This will mark the beginning of a significant shift away from the conventional practice of diagnosing and treating illnesses toward a more preventive approach of health management and prognosis.

A growing number of people are turning to classification algorithms that make use of machine learning in order to analyze patient data and deliver diagnosis. The Internet of Things (IoT) has the potential to bring about a revolution in the healthcare sector by improving the quality of care provided to patients, increasing productivity, and reducing costs. When you construct an intelligent system, you give yourself the opportunity to get crucial knowledge in real time that no one else has. Using artificial intelligence and machine learning algorithms that are applied to data in real time, it is now able to predict severe illness and prescribe further steps to be taken by patients.

3. Topics of the special session

- Machine learning and artificial intelligence in IoT enabled healthcare systems
- Wearable sensors in Internet of Medical Things
- IoT based disease monitoring systems
- Optimized deep learning models for Internet of Medical Things
- Federated learning models for smart healthcare systems
- Security issues and their remedies in Internet of Medical Things
- Architecture and algorithms for Internet of Medical Things
- Image Processing in Internet of Medical Things
- Cloud Data Storage and Data Aggregation for smart health care systems

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