Special Session Proposal

Session Title: AI Based applications in Biomedical Imaging and Internet of Things Acronym

A brief summary of the session contents describing the potential impact of the proposed session :

With the development of smart medical sensors, instruments, systems and the health care technologies, "smart health monitoring" is getting remarkable consideration from the academia, and healthcare industry. Accelerated by a tremendous increase of this healthcare data with the advent of current pandemic, it is becoming an indispensable part of today's healthcare data analytics. The motivation behind AI is to improve the work productivity in the fast paced life. In current scenario, AI-helped clinical screening and analysis for screening and diagnosis of the disease. Researchers in machine learning including those working in computer vision, image processing, biomedical analysis, and related fields when tied with experienced clinicians can play a significant role in understanding and working on complex medical data which ultimately improves patient care. Developing a novel AI-Based approach specific to medical data is a challenge and need of the hour. This special session is seeking for papers on recent research, methodologies, and systems for the design, development, instrumentations, and measurement techniques on AI-enabled application in biomedical imaging and IoT for providing insights into smart healthcare services. Authors are solicited to submit complete unpublished papers in the following topics.

List of topics:

The topics relevant to the special session include (but are not limited to) the following topics:

- Computer-aided detection and diagnosis
- Advanced AI/ML techniques applied to biomedical data.
- Deep learning for medical image analysis
- Biomedical image classification
- Mechanisms for Wireless Symptom and Disease monitoring Systems
- Wearable Sensors and Patient Monitoring
- IoT based Drug Delivery System
- Pervasive Healthcare
- IoT in Clinical Applications
- IoT based Health Care Monitoring Systems
- AI-enabled health data classifiers and patient outcome predictors for smart healthcare
- AI/DL-enabled healthcare data fusion
- Decision making and actuation based on data from pervasive sensing.
- Embedded machine learning algorithms on microcontrollers.

Target audience: All UG/ PG / Research Scholars/ PhD Candidates, Faculty
Name, address and affiliations of the session's organizers: Dr. Dimple Nagpal Assistant Professor Lovely Professional University, Phagwara, Punjab