Special Session on

Hybrid AI techniques and IOT based applications

in conjunction with

23rd International Conference on Intelligent System Design and Applications (ISDA)

December 11-13, 2023

Website: http://www.mirlabs.org/isda23

Hybrid Mode – Online & Offline

Onsite Venues: **http://mirlabs.org/isda23/venue2.php**

Objectives and Scope

The objective of this special session on "Hybrid AI techniques and IOT based applications" is to address issues related to routine life problems. It will bring together all researchers, practitioners, students, industries and academicians working on various applications by using Artificial intelligence and IOT on a single platform. The focus of this session is to provide a unique possibility to engineers, scientists, researchers, doctors and other professionals working in the field of AI and IOT to share their research and experiences. AI and IOT is perhaps one of the most emerging fields now a days. Researchers working in different areas such as medical applications for detection of diseases, naturopathy, radiography, psychology, music therapy, audio and speech signal processing and classification, stress detection and emotion recognition, image processing, electric vehicles etc. make use of AI and IOT at large level as AI helps to automate training and testing processes on the data generated by IOT systems without the need for human intervention. The Internet of Things (IoT) based on the Internet and sensing equipment makes all physical objects to form an interconnected network. In order to quickly respond to people's daily requirements and provide the smart applications based on artificial intelligence technology, the IOT things provide real time and voluminous data for various scenarios and hence the number of IoT devices will further increase in future. The integration of mobile edge computing (MEC) and IoT is imperative, especially in industries needing real-time data computing such as smart home, public security, automobile transportation, smart health, emotional care, etc. We cordially invite researchers and scientists worldwide working on applications based on AI and IOT to participate and submit their research work to our special session. This special session focuses on the state-of-the-art developments, new architecture and novel algorithms of the AI and IoT based application for smart health and emotion care applications. Potential topics include but not limited to High-performance computing architectures/algorithms/models for AI and IoT.

Subtopics

The topics include, but are not limited to:

- Machine learning and Deep learning models for smart intelligent systems.
- AI techniques for Music emotion recognition and emotional intelligence.
- Modelling and optimization in 5G-enabled edge and IoT for smart applications.
- Wearable computing, robotics for smart health and emotion care.
- Network architecture design of IOT applications.
- Multimodal data processing and analysis.

- Modeling and simulation in health informatics.
- Music emotion recognition, emotional intelligence and music therapy.

Paper publications

- Proceedings will be published in Lecture Notes in Networks and Systems, Springer (https://www.springer.com/series/15179)
- Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago
- Papers maximum length is 10 pages
- Papers must be formatted according to Springer format (Latex/word) available at: https://www.springer.com/de/authors-editors/book-authors-editors/manuscript-preparation/5636#c3324
- Submission Link: http://www.mirlabs.org/isda23/submission.php

Important Dates

Paper submission due: **September 30, 2023**
Notification of paper acceptance: **October 31, 2023**
Registration and Final manuscript due: **November 10, 2023**
Conference Date: **December 13-15, 2023**

Special Session Chair

- **Dr. Deepti Chaudhary**, University Institute of Engineering and Technology, Kurukshetra University, India
- **Dr. Priyanka Jangra**, University Institute of Engineering and Technology, Kurukshetra University, India
- **Dr. Ajith Abraham,** Machine Intelligence Research Labs, USA

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