Special Session on

Edge AI: Neuromorphic computing, self-supervised learning, metaverse,

human-centric AI

in conjunction with

International Conference on Intelligent Systems 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 Session on Edge AI aims to explore and discuss cutting-edge advancements in key areas, including neuromorphic computing, self-supervised learning, metaverse technologies, and human-centric AI. The session aims to foster knowledge exchange, promote collaboration, and identify innovative applications and approaches that leverage these technologies for enhancing AI capabilities at the edge.

The scope of the Session on Edge AI encompasses in-depth exploration and analysis of neuromorphic computing, self-supervised learning, metaverse development, and humancentric AI applications. Participants will delve into the latest research, challenges, and practical implementations to uncover novel insights and foster advancements in these interconnected fields at the edge of AI technology.

Subtopics

The topics include, but are not limited to:

- Machine/Deep learning for neuromorphic AI
- Self-supervised learning for video motion prediction
- Self-supervised learning in Medical Science
- Computational Intelligence for Natural Language Processing.
- Self-supervised learning for medical images classification
- Neuromorphic Computing Next Generation of AI
- Artificial Intelligence and Blockchain in Digital Health Record Systems.

- Artificial Intelligence in Health informatics
- Artificial intelligence techniques in medicine
- Knowledge discovery in medicine
- Medical expert systems
- Blockchain Technology in Healthcare System
- AI and IoT in Smart Healthcare System
- AR/VR/MR in Healthcare
- Machine learning-based medical systems
- Medical signal and image processing techniques

- Computer-assisted diagnosis
- Explainable AI in Health Informatics
- Clinical Support System using Explainable AI
- Metaverse and its effects

- Cognitive computing and HCAI engineering
- Human-Centered AI for Data
 Science

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: <u>https://www.springer.com/de/authors-editors/book-authors-editors/manuscript-preparation/5636#c3324</u>
- Submission Link: <u>https://cmt3.research.microsoft.com/ISDA2023</u>

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 Chairs

- Dr. Rupali Gill, Chitkara University, Rajpura, India
- Dr. Durgesh Srivastava, Chitkara University, Rajpura, India

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