

**Special Session on**  
**Emerging Machine Learning Techniques for Health Care Applications**  
**in conjunction with**  
**15<sup>th</sup> International Conference on Soft Computing and Pattern Recognition (SOCPAR)**  
**December 13-15, 2023**

**Website:** <http://www.mirlabs.org/socpar23>

**Hybrid Mode – Online & Offline**

**Onsite Venues:** <http://mirlabs.org/socpar23/venue2.php>

### **Objectives and Scope**

The objective of this special session on the emerging machine learning (ML) techniques for health care applications is to explore and leverage the potential of novel machine learning algorithms, models, and methodologies to address the challenges in healthcare. The primary goal is to develop innovative approaches that can analyze and interpret healthcare data, improve disease diagnosis, prognosis, treatment planning, and patient outcomes, leading to more accurate, efficient, and personalized healthcare delivery. It will bring together all professionals working in healthcare and ML technology on a single platform. The scope of the session includes but is not limited to biomedical engineering, biomedical signal and image processing, medical physics, drug engineering, clinical engineering, artificial intelligence (AI) tools and techniques, patient safety, disease surveillance and prevention, disease diagnosis and management, e-health and issues concerning data security, privacy, reliability and management, data mining and knowledge exchange etc.

We cordially invite researchers and scientists from machine learning technologies all around the globe to participate and submit their research work to our special session.

### **Subtopics**

The topics include, but are not limited to:

- Healthcare data analysis
- Disease diagnosis and prognosis
- ML techniques for novel-COVID-19 prediction
- Classification and clustering techniques for health care
- Healthcare decision support systems
- Medical image processing
- Recommendation system for intelligent health care
- Personalized medicine and treatment planning
- Chatbot and virtual assistant for health care
- Ethical considerations and responsible AI/ML practices in health care
- Real-time monitoring and predictive analytics

## 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/socpar23/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 Chairs

- **Dr. Anjula Mehto**, Thapar Institute of Engineering and Technology, India
- **Dr. Anu Bajaj**, Thapar Institute of Engineering and Technology, India

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