



CALL FOR PAPERS

Special Session on “Artificial Intelligence for HealthCare Data Analytics (AIHCDA)”

Session Chair(s):

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Dr. E.A.Gopalakrishnan, Associate Professor, CEN, Amrita School of Engineering, Coimbatore, Amrita Vishwa Vidyapeetham, India. ea_gopalakrishnan@cb.amrita.edu.

Dr. Soman K.P, Professor and Head, CEN, Amrita School of Engineering, Coimbatore, Amrita Vishwa Vidyapeetham, India. kp_soman@amrita.edu.

Theme of Session:

The main aim of this special session is to focus on Artificial Intelligence for HealthCare Data Analytics.

Artificial intelligence (AI) has been into healthcare sectors such as disease diagnosis, treatment, patient care and prediction. The adoption of AI into healthcare is improving significantly across the globe. In developing countries like India, AI for smart healthcare is highly essential, especially during the pandemic situations like COVID-19, which we are facing most recently. Even in the case of developed countries at the global level, the number of doctors to the patient ratio is highly imbalanced. Moreover, the data from the medical domain is enormous, which must be analyzed to obtain health related information. In such scenarios, AI based solutions serve as an efficient assisting systems for healthcare community. This is feasible with the recent Industry 4.0 revolution, which encompasses the combination of traditional manufacturing and industrial platforms and practices with the latest smart technology such as Internet of Things, Blockchain, quantum computing, machine learning, deep learning, generative deep models, etc., Natural Language Processing (NLP) is a subfield of Artificial Intelligence that powers computers to



comprehend natural language texts to solve complex problems. Recent advancements in AI motivated the NLP research community to develop models with unprecedented performance. Recently, NLP techniques are widely applied to mine compelling insights from healthcare data. This special session is devoted to cover novel research in machine learning and deep learning-based healthcare applications using text, signal and image data.

Topics of Interest:

We invite original (un-published) research contributions based on the above-mentioned theme including following topics **but not limited to**:

- Signal processing for Healthcare.
- Image processing for Healthcare.
- Machine learning and Deep learning for Healthcare.
- Transfer learning for Healthcare.
- IoT in Healthcare.
- Security in Healthcare.
- Edge computing in Healthcare.
- Federated learning in Healthcare.
- Imitation learning in Healthcare.
- Explainable AI in Healthcare.
- Big data and streaming analytics in Healthcare.
- Healthcare with Software-Defined Networks.
- Adaptive decision making unit for Healthcare.
- Data Analytics for the Spread of a Pandemic.
- NLP in healthcare



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- Healthcare text analytics
- Health Information extraction
- Named Entity Recognition and Relation Extraction related to Healthcare
- Healthcare Text classification
- Healthcare Text summarization
- Healthcare Question answering
- Part-of-Speech Tagging in Healthcare
- NLP techniques for DNA sequence analysis
- Healthcare Linguistic Resources
- Parsing biomedical literature
- Topic models for medical texts
- Coreference resolution in biomedical texts
- Semantic representation for healthcare documents

Paper Submission Process:

Please submit your paper (in word/pdf format) at

email: sowmiamrita@gmail.com

with 'Name of Special Session: Artificial Intelligence for Health Care Data Analytics (AIHCDA)' mentioned in the subject line.

Program Committee:



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**For any further queries related to this special session, please contact the session chairs at:
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