



ComSIA-2024
International Conference on Computing and Communication
Systems for Industrial Automation & Control
Organized by School of Open Learning, University of Delhi & Shaheed Rajguru
College of Applied Sciences for Women, University of Delhi
10-11th May 2024.

******* CALL FOR PAPERS *******

SPECIAL SESSION ON

Artificial Intelligence Based Medical applications using Big Data

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

Deep learning has in recent years attracted a lot of attention in both academia and industries, as it has been proved to be very useful in a wide range of domains, ranging from Big data Analytics, computer vision, natural language processing, speech recognition to game playing. Deep Learning algorithms have great potential for research in the automated extraction of complex data representations. Deep Learning algorithms can develop a layered, and hierarchical architecture of

learning and representing data. Deep Learning in Big Data Analytics has become a high-focus of data science. Big Data has now become important as several organizations are collecting massive amount of domain-specific information that can be used to solve problems related to national intelligence, cyber security, fraud detection, marketing, and medical informatics. Deep Learning Big Data allows extraction of high-level, complex abstractions as data representations through a hierarchical learning process. A key benefit of Deep Learning is Big Data analysis that it can learn from massive amount of unsupervised data. This makes it a valuable tool for Big Data Analytics where huge amount of raw data are uncategorized. The current state of art in clinical laboratories and health ministries focuses on the medical applications using deep learning. Deep Learning provides promising results in reshaping the healthcare industry with data driven analytical models and techniques. Using DL algorithms various patterns and risk factors can be identified for the experimental results retrieved from various electronic medical records and lab results. Anomaly detection, prediction of diseases, human activity recognition, tissue classification, cell clustering, drug design, and parameter monitoring are some of the areas and applications in which the deep learning-based methods can provide intelligent results with more accuracy

Applying deep learning techniques for data-driven solutions in health information allows automated analysis of both structured and unstructured data without the intervention of a human, this method can be more advantageous in supporting the problems arising from medical and health related information.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- Deep learning methods for applications in object detection and identification, object tracking, human action recognition, cross-modal and multimodal data analysis
- High performance Computing systems for applications in Healthcare and recommendation systems.
- Hyperspectral data analysis and intelligent systems
- Microarray data analysis, Sequence analysis, genomics based analytics, Disease network analysis, Techniques for big data Analytics and health information technology
- Deep Learning and Cross-Media Methods for Big Data Representation
- Mobile edge computing for Large-scale multimodal data acquisition techniques
- Personal Big data driven approaches to collect and analyze large volumes of information from emerging technologies (e.g., IoT, remote sensors, wireless sensor networks, RFIDs, mobile)
- Mobile edge computing techniques for healthcare applications
- Swarm intelligence big data computing for healthcare applications
- Hybrid DL methods for bioinformatics and healthcare applications

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **[Artificial Intelligence Based Medical applications using Big Data] on or before [15th January 2024]**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at https://comsia.in/paper_submission.html. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify [**Artificial Intelligence Based Medical applications using Big Data**] at the top (above paper title) of the first page of your paper.

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