



ICAIN-2026

International Conference on Artificial Intelligence and Networking

26th -28th November 2026
Organized by
Universal Innovator & UI-Educon
In association with
**Indian Institute of Information Technology,
Allahabad**

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

SPECIAL SESSION ON

Transforming Healthcare and Telemedicine through Bioinformatics Using Artificial Intelligence and Machine Learning (An Integrated Approach for Data-Driven Diagnosis, Prediction, and Personalized Care)

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

The evolution of Artificial Intelligence and Machine Learning has significantly expanded the boundaries of bioinformatics and biomedical computing. Artificial Intelligence and Machine Learning is capable of creating intelligent systems that mimic human cognitive functions, has propelled the field of bioinformatics, which leverages computational and biological information to address critical biological challenges. Additionally, Artificial Intelligence and Machine Learning has influenced biomedical

applications, particularly in the development and utilization of medical equipment through modern engineering technology.

Artificial Intelligence and Machine Learning has been instrumental in attempting some of the scariest problems in bioinformatics, such as protein structure prediction, homology search, multiple alignment, genomic sequence analysis, and gene-finding etc. Similarly, these techniques played a crucial role in biomedical applications, aiding in drug discovery, automating electronic medical records (EMRs), single-cell RNA sequencing, early disease diagnosis, and healthcare analytics.

This special session aims to highlight the transformative innovations in Artificial Intelligence, Machine Learning and their impact on addressing contemporary issues in bioinformatics and biomedical applications. Specifically, recent advancements in Artificial Intelligence and Machine Learning technologies, including novel deep learning architectures, natural language-based models, transfer learning techniques, and fusion-based approaches, will be explored. Moreover, the focus will be on their application in critical areas of bioinformatics.

This research topic welcomes authors who are developing Artificial Intelligence or Machine Learning - based solutions for challenges in bioinformatics and biomedical applications, surrounding a wide range of possibilities, including but not limited to:

RECOMMENDED TOPICS:

- Artificial Intelligence and Machine learning techniques for Risk factor analysis in diseases
- Deep learning for medical image analysis and processing
- Predictions of autism spectrum disorders using Artificial Intelligence & Machine Learning
- Deep learning for health informatics and bio-medical engineering
- Identification of transposable elements
- Image processing and analysis for medical images using deep learning
- Analysis of treatment effects in biomedicine
- Drug discovery
- Predictions and evaluation of important gene expression
- Deep Learning Techniques for Automated disease diagnosis and treatment in Bioinformatics
- Ethical AI for Bioinformatics and Health Informatics

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this particular theme session on **Transforming Healthcare and Telemedicine through Bioinformatics Using Artificial Intelligence and Machine Learning on or before [30th August 2026]**. 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://www.icain-conf.com/downloads>. All submitted papers will be reviewed on a double-blind, peer-review basis.

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