

2023 SEVENTH INTERNATIONAL CONFERENCE ON IMAGE INFORMATION PROCESSING November 22 – 24, 2023 Jaypee University of Information Technology Waknaghat, District Solan, Near Shimla, Himachal Pradesh, INDIA



ICIIP-2023

Conference Website: <u>https://www.juit.ac.in/iciip_2023/index.php</u>

Special Session on "Emerging Medical Image Data Analytics Technologies"

Special Session Chair: Dr. Pradeep Kumar Singh, Senior Member IEEE, ACM

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Co-Session Chair:- Dr. Shubham Joshi, Symbiosis Institute Technology, Symbiosis International (Deemed) University, Pune Email ID: <u>shubham.joshi@sitpune.edu.in</u>

Submission ID through EDAS should be shared at { <u>pradeep_84cs@yahoo.com</u>} with Subject Line : ICIIP-2023 Special Session Paper "EMIDAT"

Objective: The objective of this special session is to bring together researchers, scientists, and practitioners from around the world to discuss and showcase the latest advancements, challenges, and innovations in the field of Medical Image Data Analytics. This special session aims to provide a platform for the exchange of ideas, collaboration, and knowledge dissemination among experts working on various aspects of medical image analysis and data-driven healthcare solutions.

Unpublished, original contributions are encouraged for submission with less than 15% of similarity score from all sources and less than 5% similarity score from single source.

Sub-Topics (but not limited to):

Deep Learning and Convolutional Neural Networks (CNNs) for Medical Image Analysis:

- Applications of CNNs in medical image classification, segmentation, and detection.
- Transfer learning and domain adaptation for medical image data.
- Explainable AI in medical image analysis.

Multi-Modal Medical Image Fusion and Integration:

- Integration of multiple modalities (e.g., MRI, CT, PET, ultrasound) for enhanced diagnostic accuracy.
- Fusion techniques for combining spatial and functional information in medical images.
- Challenges and opportunities in multi-modal data analytics.
- Medical Image Registration and Alignment
- Clinical Decision Support Systems (CDSS) and Disease Diagnosis
- Development and evaluation of CDSS using medical image data.
- Computer-aided diagnosis (CAD) systems for early disease detection.

• Clinical validation and deployment of CDSS in healthcare settings.

Big Data Analytics and Healthcare Data Integration:

- Handling and processing large-scale medical image datasets.
- Data integration and interoperability for comprehensive patient profiles.
- Privacy and security considerations in medical data analytics.

Machine Learning for Personalized Medicine:

- Patient-specific treatment planning based on medical image data.
- Predictive modeling for disease progression and treatment outcomes.
- Ethical and regulatory aspects of personalized medicine.

AI-driven Radiomics and Radiogenomics:

- Extraction of quantitative features from medical images for predictive modeling.
- Integrating radiomic and genomic data for precision medicine.
- Clinical applications and challenges of radiomics and radiogenomics.

Medical Image Data Quality and Preprocessing:

- Noise reduction, artifact correction, and image enhancement techniques.
- Quality assessment and assurance in medical image datasets.
- Preprocessing pipelines for robust analysis.

Submission Guidelines:

Authors are invited to submit original research papers, review articles, and case studies related to the above sub-topics. Submissions should adhere to the IEEE conference paper format. All submitted papers will undergo a peer-review process by experts in the field. Accepted papers will be presented at the special session during the conference.

Link to Submit Papers: -

Authors must ensure that their manuscript is in compliance with Manuscript Preparation Guidelines and can submit MAXIMUM of 2 papers to ICIIP 2023 using the EDAS Submission link: <u>https://edas.info/N31251</u>

Authors can use <u>MS Word A4</u> or <u>LaTeX</u> template for preparing their manuscript and check the PDF for compliance within EDAS conference system and for its further submission.

For more information (Refer to Conference Website): ICIIP - 2023 (juit.ac.in)

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Important Dates:

Paper Submission Deadline: [September 30, 2023]

Notification of Acceptance: [October 15, 2023]

Camera-Ready Paper Submission: [October 30, 2023]

Conference Dates: [November 22 - 24, 2023]