

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

SPECIAL SESSION ON

Transforming Healthcare with Generative Artificial Intelligence Models: From Prediction to Precision

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

This special session aims to bring together researchers, academicians, and professionals from the interdisciplinary fields of generative artificial intelligence, healthcare, and data science to explore cutting-edge innovations, methodologies, and applications of generative AI (GAI) models in revolutionizing healthcare systems. The session will focus on how generative AI techniques such as generative adversarial networks (GANs), variational autoencoders (VAEs), and large language models (LLMs) can be leveraged to improve disease diagnosis, treatment planning, personalized medicine, and medical data synthesis. By facilitating the generation of high-fidelity synthetic medical data, enhancing diagnostic imaging, and supporting intelligent decision-making, GAI models offer a transformative approach to healthcare delivery. This session will serve as a collaborative platform for researchers and professionals to share insights, latest findings, and practical experiences in applying GAI models to address real-world healthcare challenges.

RECOMMENDED TOPICS:

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

- GAI models for Early Disease Detection and Risk Assessment
- GAI Models for Personalized Treatment Planning

- Real-Time Health Monitoring with Generative Time-Series Modeling
- Deep GAI models for Medical Image Reconstruction and Enhancement
- Natural Language Generation from Electronic Health Records
- GAI models for Clinical Decision Support and Diagnostics
- Ethical and Legal Implications of Synthetic Healthcare Data
- GAI models in Infectious Disease Forecasting and Simulation
- Future Trends in GAI Applications for Precision Medicine
- GAN for Multimodal Healthcare Data Fusion
- VAEs and Transformers in Biomedical Text and Image Generation

SUBMISSION PROCEDURE:

Researchers and professionals are encouraged to submit original research papers for the special session on **“Transforming Healthcare with Generative Artificial Intelligence Models: From Prediction to Precision”** by the deadline of **30th July 2025**. Submitted manuscripts must be unpublished and should not be under consideration for publication elsewhere.

Prospective authors are advised to follow the manuscript preparation guidelines available on the official conference website: <https://www.ica2s.com>. All submissions will undergo a rigorous double-blind peer-review process to ensure the quality, relevance, and originality of the contributions.

NOTE: Authors submitting to this special session must select the appropriate **Session Name** while submitting the paper through submission portal (<https://cmt3.research.microsoft.com/ICA2S2025>)

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