



International Conference on Data Mining and Information Security (ICDMIS 2025)

Organized by
Eminent College of Management and Technology (ECMT)

Technically Sponsored by:
Scientific Innovation Research Group (SIRG), Egypt
Scientific Research Group in Egypt (SRGE), Egypt
SETIT Research Lab. Sfax University –Tunisia
CI2S lab, Argentina

Date: 7th – 8th October, 2025 (Hybrid Mode)

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

SPECIAL SESSION

Special Session Title: Explainable and Ethical AI for Next-Generation Healthcare: Models, Methods, and Challenges

SESSION ORGANIZERS:



Dr Gunjan Chhabra

School of Science and Technology,
Swami Rama Himalayan
University, Dehradun
Email: gunjanchhabra@srhu.edu.in

SESSION DESCRIPTION:

Artificial Intelligence (AI) is reshaping the healthcare industry, offering transformative potential in diagnosis, treatment planning, patient monitoring, drug discovery, and administrative efficiency. However, the adoption of AI in healthcare brings forth critical challenges related to transparency, trust, accountability, and ethical use.

This special session aims to spotlight the latest advances in **Explainable AI (XAI)** and **Ethical AI** in the healthcare domain. The goal is to explore frameworks and methodologies that ensure AI systems are not only technically robust but also transparent, fair, and aligned with ethical and legal standards.

By promoting **interpretability** and **human-centric AI**, the session will encourage dialogue between researchers, practitioners, healthcare professionals, and policymakers to bridge the gap between cutting-edge AI research and real-world, responsible deployment in healthcare systems.

RECOMMENDED TOPICS:

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

- Explainable AI techniques for clinical decision support
- Interpretable models for medical imaging, diagnostics, and prognosis
- AI transparency in Electronic Health Record (EHR) systems
- Ethical considerations in AI-based treatment recommendations
- Bias detection and mitigation in healthcare data and AI models
- Privacy-preserving AI in patient data analytics
- Regulatory frameworks and governance models for ethical AI in healthcare
- Human-AI collaboration in diagnosis and care delivery
- Fairness and equity in AI-assisted healthcare services
- Trustworthy AI systems for real-time monitoring and critical care
- Case studies and real-world implementations of XAI in hospitals
- Evaluation metrics for explainability and ethical compliance

PUBLICATION AND SUBMISSION PROCEDURE

The conference aims to carry out a double-blind review process. The papers submitted by the authors will be assessed based on their technical suitability, the scope of work, plagiarism, novelty, clarity, completeness, relevance, significance, and research contribution. The conference proceedings will be published in Springer LNNS Series, Scopus series.

NOTE: While submitting the paper in this special session, please specify [Explainable and Ethical AI for Next-Generation Healthcare: Models, Methods, and Challenges] at the top (above paper title) of the first page of your paper.

* * * * *