INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:
Human-Centred Multimodal and Generative AI for Intelligent Healthcare

Name, Title and Affiliation of Chair:
Dr. Riadh Bouslimi
Higher School of Digital Economy (ESEN), University of Manouba, Tunisia
BESTMOD Laboratory (LR99ES04)

Details of Session (including aim and scope):
Artificial intelligence is increasingly supporting healthcare through the integration of heterogeneous clinical data and the development of systems that can assist prediction, interpretation and decision-making. This invited session aims to bring together researchers working on human-centred, multimodal and generative AI approaches for intelligent healthcare.

The session will focus on methods that combine structured and unstructured medical information, including clinical time-series, electronic health records, medical narratives and medical imaging. Particular attention will be given to temporal and sequential learning, multimodal data fusion, clinical natural language processing, large language models, retrieval-augmented generation, explainable and interpretable AI, uncertainty-aware modelling, trustworthy AI and human-AI collaboration.

The scope also includes clinical decision-support systems, disease progression forecasting, medical image analysis, automatic radiology report generation, robustness and generalisability, validation of AI models, and responsible deployment of generative AI in healthcare. Contributions presenting novel methodologies, rigorous evaluations, clinically relevant applications, benchmark studies and interdisciplinary perspectives are especially welcome. The session seeks to encourage discussion on how intelligent systems can remain reliable, transparent and aligned with the needs of healthcare professionals and patients.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):
BESTMOD Laboratory (LR99ES04), Tunisia
Higher School of Digital Economy (ESEN), University of Manouba, Tunisia
Additional international researchers and research centres working on human-centred AI, medical AI, multimodal learning, clinical NLP and generative AI will be invited to contribute.

Website URL of Call for Papers (if any):
To be announced on the HCIS-27 / KES International conference website.

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