



INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:

Medical Time Series Forecasting and Automated Radiology Report Generation

Name, Title and Affiliation of Chair:

Dr. Riadh Bouslimi, Associate Professor in Computer Science, Higher School of Digital Economy, University of Manouba, Tunisia

Details of Session (including aim and scope):

This session will explore cutting-edge AI and machine learning applications in the medical field, focusing on improving diagnostic processes for Traumatic Brain Injury (TBI). The aim is to automate radiology report generation and enhance clinical predictions through medical time series forecasting.

The scope includes:

- Medical time series forecasting, using techniques such as ARIMA and LSTM, to predict patient outcomes, hospital admissions, and disease progression.
- Automated generation of radiology reports by analyzing medical images (CT and MRI scans), reducing diagnosis time and increasing accuracy.
- Development of a hybrid model that integrates time series forecasts with image analysis results to provide comprehensive insights for healthcare professionals.

The session will also discuss challenges such as handling irregular data and ensuring real-time, interpretable results, aiming to push the boundaries of AI in medical diagnostics.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

BestMOD Research Laboratory, ISG Tunis
Dr. Riadh Bouslimi, Associate Professor, Higher School of Digital Economy, University of Manouba
Collaborators from the medical imaging and AI research community

Website URL of Call for Papers (if any):

Not available at this stage

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