

ICAIN-2025 International Conference on Artificial Intelligence and Networking

Organized by University of Stirling - RAK Campus, UAE

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SPECIAL SESSION ON

Al-Powered Sentiment and Emotion Analysis: Advances in LLMs, Gen-Al, and ChatGPT

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

The rapid advancements in Artificial Intelligence (AI), Large Language Models (LLMs), and Generative AI (Gen-AI) have significantly transformed sentiment and emotion analysis. Traditional Natural Language Processing (NLP) techniques are now being augmented with ChatGPT, transformer-based models, and AI-driven frameworks to achieve more accurate, context-aware, and scalable sentiment detection. This provides an overview of current sentiment analysis developments, focusing on techniques and models using deep learning and machine learning. The approaches and models are classified based on the formats of their outputs, learning paradigms, and input representations. Furthermore, we assess and compare the performance of various methodologies and models across many standard tasks and datasets.

In conclusion, we discuss the challenges and possible avenues for further research on sentiment analysis, including aspect-based sentiment analysis.

This special session will explore cutting-edge AI methodologies in sentiment analysis, opinion mining, and emotion detection, focusing on LLMs, fine-tuned transformer architectures, and generative and images), and real-world applications in business, social media, and e-commerce.

RECOMMENDED TOPICS:

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

- LLMs and Gen-AI for Sentiment & Emotion Analysis
- ChatGPT & Transformer-based Models in Opinion Mining
- LLMs in Customer Support: AI-driven Sentiment-Aware Chatbots
- Multi-modal Sentiment Analysis (Text, Audio, Image Integration)
- Challenges in AI-driven Sentiment Prediction & Text Classification
- AI-powered Fake Review and Opinion Spam Detection
- Neurosymbolic AI Approaches for Sentiment Understanding
- Healthcare and Mental Health Applications of AI-based Emotion Analysis
- Interactive AI Chatbots for Emotionally Intelligent Conversations
- AI-generated Fake News and Deepfake Sentiment Manipulation
- Sentiment Analysis in Low-Resource Languages Using LLMs
- AI-based Sentiment Analysis in Audio and Speech Processing
- Affective Computing: AI for Human-Emotion Interaction
- Hybrid AI Approaches Combining Knowledge Graphs and LLMs for Sentiment Analysis
- Contrastive Sentiment Learning in Cross-Domain NLP
- Prompt Engineering for Sentiment & Emotion Classification
- AI-powered Real-time Sentiment Monitoring for Crisis Management
- Emerging Trends in AI-based Affective Computing

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this particular theme session on **[session name]** on or before [30th May 2025]. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at https://www.icain-conf.com/downloads. All submitted papers will be reviewed on a double-blind, peer-review basis.

NOTE: While submitting a paper in this special session, please specify [Session Name] at the top (above paper title) of the first page of your paper.

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