









ICICC-2025

8th International Conference on Innovative Computing and Communication

ORGANISED BY: SHAHEED SUKHDEV COLLEGE OF BUSINESS STUDIES, UNIVERSITY OF DELHI, NEW DELHI IN ASSOCIATION WITH NATIONAL INSTITUTE OF TECHNOLOGY PATNA & UNIVERSITY OF VALLADOLID SPAIN

On **14-15 FEBRUARY 2025.**

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

SPECIAL SESSION ON

Al-Driven Multidisciplinary Analytics: Innovations in Predictive Maintenance, Business Optimization, Education, and Sentiment Analysis

SESSION ORGANIZERS:

- Dr. Deepti Khanna, Associate Professor, Department of Information Technology (MCA), Jagan Institute of Management Studies, Rohini, Delhi, India, deepti.khanna@jimsindia.org.
- Dr Arpana Chaturvedi, Associate Professor Dept of IT/AI/ML, New Delhi Institute of Management, Delhi, India, arpana.chaturvedi@ndimdelhi.org

EDITORIAL BOARD: (Optional)

NA

SESSION DESCRIPTION:

The session on AI-Driven Multidisciplinary Analytics: Innovations in Predictive Maintenance, Business Optimization, Education, and Sentiment Analysis will explore the transformative impact of artificial intelligence across various industries and sectors. This session aims to bring together professionals from academia, research, and industry to foster interdisciplinary collaboration and knowledge sharing.

The focus will be on the following key areas:

• **Predictive Maintenance**: Highlighting AI applications in forecasting machinery breakdowns, optimizing maintenance schedules, and enhancing operational efficiency in industries like manufacturing, energy, and transportation.

- **Business Optimization**: Exploring how AI-driven analytics can streamline business processes, improve decision-making, enhance supply chain management, and create data-driven solutions to real-world business challenges.
- **Education**: Discussing AI's role in revolutionizing the education sector through personalized learning, adaptive assessment, and intelligent tutoring systems, while also addressing the ethical implications of AI in education.
- **Sentiment Analysis**: Understanding how AI can process and analyze human emotions through text, social media, and other data sources, providing valuable insights for marketing, customer service, and brand management.

This session aims to create a collaborative environment where participants can exchange original research findings, innovative ideas, and practical applications of AI. By bridging the gap between theory and real-world implementation, the session seeks to drive the development of new tools, technologies, and methodologies that address current societal and industrial needs, ultimately enhancing quality of life through AI-driven innovations.

RECOMMENDED TOPICS:

Recommended Topics for the Session on AI-Driven Multidisciplinary Analytics:

1. AI in Predictive Maintenance:

- o Machine learning models for failure prediction in industrial systems
- o Real-time monitoring and anomaly detection in machinery and equipment
- o AI-driven optimization of maintenance schedules and resource allocation
- o Case studies in manufacturing, automotive, and aerospace industries
- o Challenges in implementing predictive maintenance in legacy systems

2. Business Optimization through AI:

- o AI-driven decision support systems for business strategy
- o AI in supply chain management and logistics optimization
- o Predictive analytics for customer behavior and market trends
- o Automation of business processes using AI and machine learning
- o AI applications in financial risk management and fraud detection

3. AI in Education:

- o Personalized learning experiences using AI and adaptive learning platforms
- o AI-driven assessment tools for improving learning outcomes
- o The role of natural language processing (NLP) in automated grading and feedback
- o Ethical implications and challenges of using AI in education
- o AI-based intelligent tutoring systems and virtual teaching assistants

4. Sentiment Analysis and AI-Driven Social Insights:

- Techniques in sentiment analysis: NLP, deep learning, and hybrid approaches
- o Sentiment analysis for brand management and customer feedback analysis
- o Social media sentiment analysis for trend prediction and opinion mining
- o Applications of AI in political sentiment analysis and public opinion
- o The impact of AI-based sentiment analysis on business intelligence and marketing

5. Cross-Domain AI Applications:

- o AI for sustainability: Predictive maintenance in green technologies
- o Multidisciplinary approaches to AI-driven business and education innovations
- o AI in healthcare: Predictive analytics in patient care and health management

- o Intersections of AI with IoT for predictive analytics and optimization
- o Collaborative AI platforms for enhancing research and innovation across sectors

6. Challenges and Future Directions:

- o Ethical, privacy, and security concerns in AI-driven analytics
- o Regulatory and compliance challenges in AI adoption across industries
- o Addressing bias in AI models for fair and equitable applications
- o Future trends and innovations in AI for predictive analytics
- o Case studies showcasing the successful integration of AI in multiple domains

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on [session name] on or before [30th November 2024]. 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://iciccconf.com/paper_submission. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting 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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