

# **MUFFAKHAM JAH COLLEGE OF ENGINEERING & TECHNOLOGY**

(Sultan-ul-Uloom Education Society)

NATIONAL STUDENT CONFERENCE ON

AI & DATA SCIENCE FRONTIERS: INNOVATIONS & MULTIDISCIPLINARY ENGINEERING APPLICATIONS - NSCADF'25

# April 22<sup>nd</sup>, 2025

**Organized By Computer Science & Artificial Intelligence Department** 

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# **ABOUT THE CONFERENCE**

The National Student Conference on AI & Data Science Frontiers: Innovations & Multidisciplinary Engineering Applications -NSCADF'25 provides a platform for students to showcase research on AI and Data Science applications in CSE, IT, ECE, EEE, Mechanical, and Civil Engineering. The conference fosters interdisciplinary discussions on Machine Learning, IoT, Smart Infrastructure, Automation, and more. Focusing on student-driven research, it offers peer review, expert mentorship, and industry collaboration, preparing young innovators to tackle real-world engineering challenges with AI and Data Science.

# **ABOUT MUFFAKHAM JAH COLLEGE OF ENGINEERING & TECHNOLOGY**

Vision: To be part of the universal human quest for development and progress by contributing high calibre, ethically and socially responsible engineers who meet the global challenge of building a modern society in harmony with nature.

Muffakham Jah College of Engineering and Technology (MJCET), established in 1980 by the Sultan-ul-Uloom Education Society (SUES), is a premier institution offering B.E. programs in various branches, including CSE, CSE (AI), CSE (AI & ML), CSE (DS), CSE (AI & DS), ECE, Civil, and Mechanical Engineering, along with four M.E. programs in CSE, Embedded Systems & VLSI Design, CAD/CAM, and Structural Engineering. MJCET houses five research centers, with 67 scholars pursuing PhDs on campus. Affiliated with Osmania University, Hyderabad, and approved by AICTE, it was accredited by NBA for four core branches. Additionally, MJCET has been awarded an A+ grade by NAAC and ranked in the 150-200 band by NIRF in the Innovation category for 2023. Recognized among the top 100 private engineering colleges in India and the top five in Hyderabad, MJCET continues to excel in academic and research excellence.

Established in 2020-2021, the Computer Science & Artificial Intelligence department currently offers three undergraduate programs-B.E. CSE (AI), B.E. CSE (DS), and B.E. CSE (AI & ML), each with an intake of 60 students. The department is committed to providing a strong foundation in computer science through core courses while ensuring students gain rich exposure to cutting-edge technologies in the ever-evolving job market.

# **CALL FOR PAPERS**

Submission of high-quality papers is encouraged, not limited to the specified areas. We welcome a broad spectrum of contributions, ranging from theoretical insights to practical applications, including case studies, works in progress, and conceptual explorations. Additionally, a virtual meeting platform is available for all registered authors who wish to submit their work but are unable to attend the conference in person.

The scope of this conference is broad, and the following topics are covered (but not limited to):

### Track 1. Computer Science & Engineering

- Algorithms for AI and Machine Learning
- Cloud & Edge Computing
- AI enabled Software Engineering
- Big Data Analytics
- IT Systems Automation
- Cybersecurity and AI
- Social Media Analytics
- AI for Blockchain Applications
- AI & Data Science for Healthcare & Agriculture

# **Track 2: Electronics and Communication** Engineering

### Track 4: Civil Engineering

- Expert Systems for Smart Infrastructure.
- AI Models for Geotechnical and Structural Engineering
- IoT for Smart Cities and Urban Planning
- Smart Construction Materials
- Al Perspective for Disaster Management and Climate Resilience in **Civil Engineering**

### Track 5. Electrical Engineering

- Electric Power Systems, Smart Grid & Micro Grid
- Power Electronics and its applications
- Automation & Control Drone Technology
- AI & ML applications to Electrical Engineering

Dr. Mohammed. Abdul Raheem, Assoc.Professor, ECE Department Mr. Mohammed Abdul Khader, Assistant Professor, CS&AI Department

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- 5G technology & Big Data Applications
- VLSI, Signal & Image Processing and IoT
- Micro & Nano Materials
- Robotics & Automation
- Microwave & Wearable Technologies

### **Track 3: Mechanical Engineering**

- Application of AI in Nano Technology
- AI –Enabled Sustainable Green Manufacturing
- Role of Data Science in Renewable Energy Sources
- Autonomous Vehicles
- Mathematical Modelling and Optimization

Electric Vehicles

### Track 6. Basic Sciences and Humanities

- Role of AI in Pedagogy
- Prediction of Environmental effect of chemicals using AI models
- Optimization techniques for Mathematical Modelling using ML
- Quantum Computing in Physics
- Prompt Engineering for innovative teaching and learning methods.

### All accepted and presented papers will be published in Conference Proceedings with ISBN

Paper Submission Deadline	30 <sup>th</sup> March 2025
Paper Acceptance	10 <sup>th</sup> April 2025
Conference Date	22 <sup>nd</sup> April 2025
Paper Template Link	https://tinyurl.com/2e6tajz5
Paper Submission Link	https://forms.gle/jqF7vdvbjnFEbPQx5
Registration Fees (To be paid only after paper acceptance)	Rs. 500/-

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