



**J.B. INSTITUTE OF ENGINEERING AND TECHNOLOGY
(UGC AUTONOMOUS)**

Approved by AICTE & Permanently affiliated to JNTUH

**DEPARTMENT OF ARTIFICIAL
INTELLIGENCE AND MACHINE
LEARNING**

&

**DEPARTMENT OF CSE
(ARTIFICIAL INTELLIGENCE AND
MACHINE LEARNING)**

**GUEST LECTURES DELIVERED
BY AI&ML FACULTY**

1. Mr. S. Sathish Kumar, Assistant Professor



J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)
Hyderabad



MIC-driven activity on

“AI for Atmanirbhar Bharat: HEI Pre-Summit Engagements towards
India AI Impact Summit 2026”

**TOPIC: EMPOWERING MARGINALIZED COMMUNITIES USING AI-DRIVEN SOCIAL WELFARE AND
MICRO-ENTREPRENEURSHIP PLATFORMS**

ORGANIZED BY DEPT. OF CSE

RESOURCE PERSON: Mr. S. Sathish Kumar, Assistant Professor , AIML, JBIET

05.02.2026

Objectives

- Understand challenges faced by marginalized communities in India
- Learn how AI improves social welfare delivery
- Explore AI-enabled micro-entrepreneurship platforms
- Study Indian case studies
- Discuss ethics, challenges, and future scope



The Department of Computer Science & Engineering in collaboration with Department of Artificial Intelligence and Machine Learning at J B Institute of Engineering & Technology (JBIET) organized a thought-provoking workshop titled “EMPOWERING MARGINALIZED COMMUNITIES USING AI-DRIVEN SOCIAL WELFARE AND MICRO-ENTREPRENEURSHIP PLATFORMS” on February 5th from 1:30 PM to 2:45 PM at the 135 Lab of CSE. The session was delivered by Mr. S. Sathish Kumar, Assistant Professor from the Department of AI&ML, who served as the Resource Person.

The workshop was structured around understanding the real-world challenges faced by marginalized communities in India and examining how Artificial Intelligence can be leveraged to address these issues effectively. Mr. Sathish Kumar emphasized the transformative role of AI in improving social welfare delivery systems, including applications in public health monitoring, education accessibility, rural development analytics, and digital governance.

Participants explored AI-enabled micro-entrepreneurship platforms that empower individuals from underserved communities through digital marketplaces, predictive business insights, and automation tools. The session also highlighted relevant Indian case studies where AI solutions have contributed to financial inclusion, precision agriculture, and skill development initiatives.

A significant portion of the workshop was dedicated to discussing ethical considerations, implementation challenges, data privacy concerns, and the future scope of AI-driven inclusive innovation. The interactive session encouraged students to critically analyze how Industry 4.0 tools can be responsibly deployed to create sustainable social and economic impact.

2. Dr. Akheel Mohammed, Associate Professor



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Hyderabad



MIC-driven activity on

“AI for Atmanirbhar Bharat: HEI Pre-Summit Engagements towards India
AI Impact Summit 2026”

**TOPIC: IMPLEMENTING PRIVACY-PRESERVING FEDERATED LEARNING ARCHITECTURES FOR SECURE
MULTI-INSTITUTIONAL DATA COLLABORATION**

ORGANIZED BY DEPT. OF AIDS

RESOURCE PERSON: DR. AKHEEL MOHAMMED ASSOCIATE PROFESSOR, AIML DEPARTMENT

09.02.2026





The Department of Artificial Intelligence & Data Science (AIDS) in collaboration with Department of Artificial Intelligence and Machine Learning at J B Institute of Engineering & Technology (JBIET) successfully organized an MIC-driven activity under the theme “AI for Atmanirbhar Bharat: HEI Pre-Summit Engagements towards India AI Impact Summit 2026.” The session was conducted on 09-02-2026 and focused on the advanced topic, “Implementing Privacy-Preserving Federated Learning Architectures for Secure Multi-Institutional Data Collaboration.”

The workshop was delivered by Dr. Akheel Mohammed, Associate Professor, Department of AI&ML, who served as the Resource Person. The session aimed to provide participants with deep insights into secure and decentralized machine learning frameworks that enable collaborative model training without sharing sensitive raw data.

Dr. Akheel Mohammed began by explaining the growing need for privacy-preserving AI systems, especially in sectors such as healthcare, finance, education, and governance, where data confidentiality is paramount. He elaborated on the fundamentals of Federated Learning (FL), highlighting how distributed clients can collaboratively train global models while retaining data locally. The discussion covered key architectural components including central aggregation servers, local model updates, communication protocols, and optimization strategies.

The session further explored practical challenges in implementing federated learning systems, such as data heterogeneity, communication overhead, system scalability, and security vulnerabilities. Advanced techniques like differential privacy, secure multi-party computation, homomorphic encryption, and robust aggregation methods were discussed to ensure secure multi-institutional data collaboration.

Participants gained exposure to real-world use cases where federated learning supports national-scale AI initiatives while aligning with the vision of Atmanirbhar Bharat. The session emphasized how Indian Higher Education Institutions (HEIs) can collaborate on research and innovation without compromising institutional data privacy, thereby strengthening indigenous AI capabilities.

3. Mr. S. Sathish Kumar, Assistant Professor



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MIC-driven activity on

“AI for Atmanirbhar Bharat: HEI Pre-Summit Engagements towards India AI Impact Summit 2026”

TOPIC: ARTIFICIAL INTELLIGENCE SOLUTIONS FOR ACCESSIBILITY IN EDUCATION, WORKPLACES, AND PUBLIC SERVICES FOR PERSONS WITH DISABILITIES

ORGANIZED BY DEPT. OF ECM

RESOURCE PERSON:

Mr. S. Sathish Kumar, Assistant Professor , AIML, JBIET

13.02.2026

Objectives


- To introduce you to the core AI technologies transforming accessibility for Persons with Disabilities.
- To demonstrate how these AI solutions are applied in real-world scenarios.
- To highlight the critical challenges and ethical responsibilities we face.



GPS Map Camera



Google

Hyderabad, Telangana, India 

87jx+34h, Hyderabad, Telangana 500075, India

Lat 17.330059° Long 78.298594°


Friday, 13/02/2026 01:52 PM GMT +05:30



GPS Map Camera



Google

Hyderabad, Telangana, India 

87jx+34h, Hyderabad, Telangana 500075, India

Lat 17.330109° Long 78.29871°

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Hyderabad, Telangana, India 🇮🇳
87jx+34h, Hyderabad, Telangana 500075, India
Lat 17.330139° Long 78.298628°
Friday, 13/02/2026 02:18 PM GMT +05:30

The Department of Electronics and Communication Engineering (ECM) **in collaboration with Department of Artificial Intelligence and Machine Learning at J B Institute of Engineering & Technology (JBIET)** organized an MIC-driven activity under the theme **“AI for Atmanirbhar Bharat: HEI Pre-Summit Engagements towards India AI Impact Summit 2026.”** The workshop was conducted on **13-02-2026** and focused on the topic **“Artificial Intelligence Solutions for Accessibility in Education, Workplaces, and Public Services for Persons with Disabilities.”**

The session was delivered by **Mr. S. Sathish Kumar**, Assistant Professor, Department of AI&ML, who served as the Resource Person. The workshop aimed to create awareness about how Artificial Intelligence can be leveraged to design inclusive systems that enhance accessibility and equal opportunities for persons with disabilities.

Mr. Sathish Kumar began by highlighting the challenges faced by individuals with visual, hearing, speech, and mobility impairments in accessing education, employment, and essential public services. He explained how AI-driven technologies such as speech-to-text systems, text-to-speech engines, computer vision-based assistive tools, real-time language translation, gesture recognition, and intelligent chatbots can significantly improve accessibility and independence.

The session also explored practical AI applications in smart classrooms, adaptive learning platforms, workplace automation tools, and digital governance systems. Real-world examples demonstrated how machine learning models and Industry 4.0 technologies are enabling inclusive design frameworks that comply with accessibility standards while maintaining efficiency and scalability.

A key part of the discussion focused on ethical AI development, addressing concerns related to bias in training data, privacy protection, affordability, and equitable access to assistive technologies. Participants were encouraged to think critically about designing responsible and human-centered AI solutions that align with the vision of Atmanirbhar Bharat and inclusive technological growth.

The interactive session concluded with a dynamic Q&A, where students engaged in discussions on research opportunities, startup ideas in assistive tech, and interdisciplinary collaboration. The workshop successfully reinforced JBIET's commitment to innovation-driven learning and inclusive AI development for societal transformation.

4. Mr. S. Sathish Kumar, Assistant Professor



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Hyderabad**



MIC-driven activity on

**“AI for Atmanirbhar Bharat: HEI Pre-Summit Engagements towards
India AI Impact Summit 2026”**

**DEVELOPING COMPREHENSIVE ETHICAL FRAMEWORKS FOR GOVERNANCE OF
ARTIFICIAL INTELLIGENCE IN HIGH-STAKES DECISION-MAKING DOMAINS**

ORGANIZED BY DEPT. OF EEE

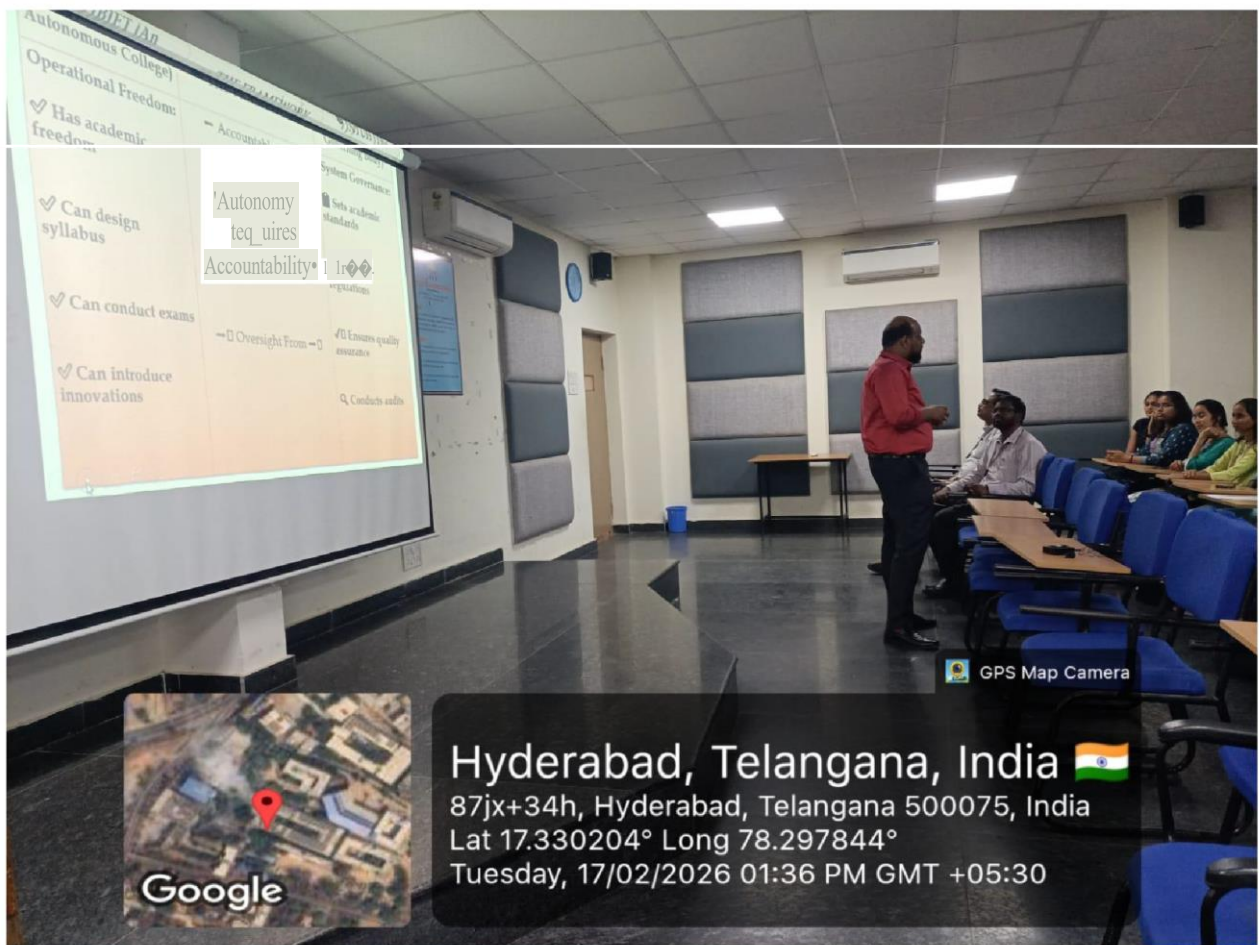
RESOURCE PERSON:

Mr. S. Sathish Kumar, Assistant Professor , AIML, JBIET

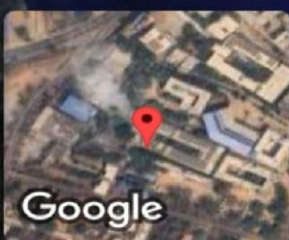
17.02.2026

Objectives

- Understand High-Stakes AI in Engineering Systems
- Analyze Risks and Ethical Challenges in AI-Controlled Systems
- Design a Basic Governance Framework for Safe AI Deployment



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87jx+34h, Hyderabad, Telangana 500075, India
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Tuesday, 17/02/2026 01:36 PM GMT +05:30



Hyderabad, Telangana, India 
87jx+34h, Hyderabad, Telangana 500075, India
Lat 17.330212° Long 78.297839°
Tuesday, 17/02/2026 01:32 PM GMT +05:30

The Department of Electrical and Electronics Engineering (EEE) **in collaboration with Department of Artificial Intelligence and Machine Learning at J B Institute of Engineering & Technology (JBIET)** organized an MIC-driven activity under the theme **“AI for Atmanirbhar Bharat: HEI Pre-Summit Engagements towards India AI Impact Summit 2026.”** The session was conducted on **17-02-2026** on the topic **“Developing Comprehensive Ethical Frameworks for Governance of Artificial Intelligence in High-Stakes Decision-Making Domains.”**

The workshop was delivered by **Mr. S. Sathish Kumar**, Assistant Professor, Department of AI&ML, who served as the Resource Person. The session focused on the growing importance of ethical AI governance, particularly in high-stakes domains such as healthcare, finance, defense, energy systems, judiciary, and public administration, where AI-driven decisions can significantly impact human lives and societal outcomes.

Mr. Sathish Kumar began by outlining the risks associated with unregulated AI systems, including algorithmic bias, lack of transparency, accountability gaps, data privacy violations, and security vulnerabilities. He emphasized the necessity of establishing structured ethical frameworks that ensure fairness, explainability, robustness, and compliance with national and international regulatory standards.

The session explored core components of AI governance, including model interpretability techniques (such as Explainable AI methods), risk assessment models, auditing mechanisms, human-in-the-loop systems, and policy-driven AI deployment strategies. Real-world case studies were discussed to illustrate the consequences of biased or opaque AI systems in critical infrastructure and decision-making environments.

Special emphasis was placed on aligning AI governance with the vision of Atmanirbhar Bharat by encouraging indigenous development of responsible AI systems that prioritize societal well-being and national security. Participants were encouraged to integrate ethical considerations during the design phase of AI models rather than treating governance as a post-deployment requirement.

The workshop concluded with an engaging interactive session where students and faculty discussed research opportunities in AI ethics, regulatory technologies (RegTech), and trustworthy AI frameworks. The event reinforced JBIET’s commitment to promoting responsible innovation and preparing future engineers to develop AI systems that are not only intelligent but also ethical, transparent, and socially accountable.

5. Dr. G. Amit Gupta, Associate Professor



JB INSTITUTE OF ENGINEERING & TECHNOLOGY

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One-Day Seminar on Intellectual Property Rights: Protecting Innovation and Creativity

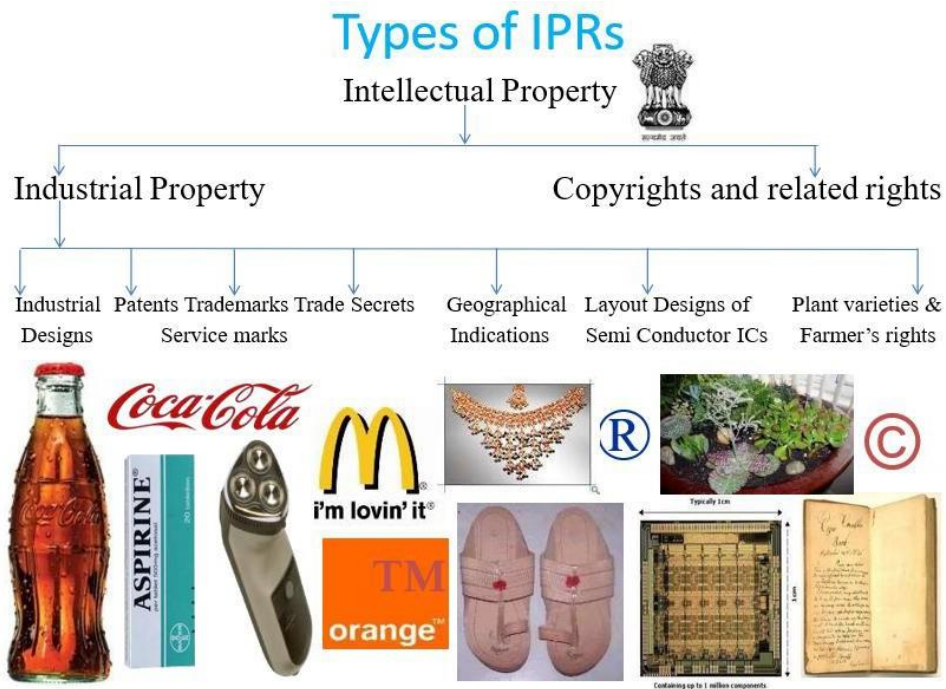
Dr. Amit Gupta

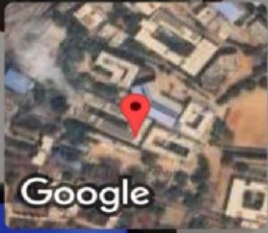
Associate Professor




Department of Artificial Intelligence & Machine Learning

27-02-2026






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Hyderabad, Telangana, India 

87jx+34h, Hyderabad, Telangana 500075, India
Lat 17.330007° Long 78.298493°
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GPS Map Camera

Hyderabad, Telangana, India 

87jx+34h, Hyderabad, Telangana 500075, India
Lat 17.329976° Long 78.298536°
Friday, 27/02/2026 12:28 PM GMT +05:30

The **Department of Artificial Intelligence and Machine Learning** at **J B Institute of Engineering & Technology (JBIET)** organized a **One-Day Seminar** on the topic **“Intellectual Property Rights: Protecting Innovation and Creativity”** on **27-02-2026**. The seminar aimed to create awareness among students and faculty about the importance of Intellectual Property Rights (IPR) in safeguarding innovations, research contributions, and creative works in the modern technological landscape.

The seminar was delivered by **Dr. Amit Gupta, Associate Professor, Department of Artificial Intelligence & Machine Learning**, who served as the **Resource Person**. The session focused on the significance of protecting intellectual assets generated through research, innovation, and technological development.

Dr. Amit Gupta began the session by introducing the concept of **Intellectual Property Rights (IPR)** and explaining the different forms of intellectual property such as **patents, copyrights, trademarks, industrial designs, and trade secrets**. He highlighted how intellectual property protection encourages innovation, promotes knowledge sharing, and ensures that creators receive recognition and economic benefits for their work.

The seminar further discussed the **importance of patents in technological research**, particularly in engineering and AI-driven innovations. Participants were introduced to the **patent filing process, patentability criteria, prior art search, and documentation requirements** necessary for securing intellectual property protection. Real-world examples were presented to illustrate how organizations and researchers successfully protect their innovations through patents and other IPR mechanisms.

Special emphasis was placed on the **role of intellectual property in academic research and startups**, encouraging students and faculty members to actively consider patenting their innovative ideas and research outputs. The resource person also discussed the growing relevance of IPR in emerging technologies such as **Artificial Intelligence, Machine Learning, data science, and digital innovations**, where protecting algorithms, models, and software solutions has become increasingly important.

The seminar concluded with an **interactive discussion session**, where participants raised questions regarding patent filing procedures, ownership of intellectual property in academic institutions, and strategies for protecting research outcomes. The event successfully enhanced participants' understanding of intellectual property systems and reinforced **JBIET's commitment to promoting innovation, research excellence, and protection of intellectual assets**.