



**GEETHANJALI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
(Autonomous)  
Cheeryal (V), Keesara (M), Medchal Dist., 501 301

**Department of CSE(AI&ML)**

Five days **Faculty Development Programme (FDP)** on “**Strategic Approaches and Emerging Trends in Artificial Intelligence, Machine Learning and Deep Learning**”

11<sup>th</sup> to 15<sup>th</sup> February, 2025.

**Chief Patron**

Sri. G. R. Ravinder Reddy, Chairman

**Patrons**

Dr. S. Udaya Kumar, Director

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**Conveners**

Dr. G. Bindu Madhavi, Associate Professor & HOD-CSE (AIML)

Dr. V. Madhusudan Rao, Professor & Dean, School of Computer Science and Informatics

**Coordinators**

Dr. P V Shalini, Associate Professor, CSE (AIML)

Dr. S. Kaushik, Associate Professor, CSE (AIML)

**Report**

The Five Days Faculty Development Programme (FDP) on “Strategic Approaches and Emerging Trends in Artificial Intelligence, Machine Learning, and Deep Learning” was held from 11th to 15th February, 2025. This comprehensive program aimed at enhancing the knowledge and skills of faculty members in the rapidly advancing fields of AI, ML, and DL. The FDP provided an in-depth exploration of the latest advancements in these technologies and their application across various domains. Distinguished experts from academia and industry led the sessions, offering participants valuable insights into current trends, challenges, and opportunities within these cutting-edge fields.

Throughout the week, the participants engaged in a series of lectures, hands-on workshops, and interactive discussions. Key topics covered included AI-based decision-making systems, the fundamentals of machine learning algorithms, and the practical applications of deep learning in industries like healthcare, finance, and automation. The FDP also highlighted the strategic importance of AI and ML in solving complex real-world

problems and fostering innovation in academic research and industry practices. Additionally, faculty members were introduced to tools and software commonly used in AI and ML, providing them with the necessary resources to incorporate these technologies into their curriculum and research projects.

The program concluded with a networking session, encouraging collaboration among participants from various educational institutions. Feedback from the attendees indicated a high level of satisfaction with the knowledge gained and the relevance of the topics discussed. Many participants expressed their intent to integrate AI, ML, and DL into their teaching and research, recognizing the need for academic institutions to adapt to the evolving technological landscape. The FDP was a successful initiative that empowered faculty members to remain at the forefront of AI and machine learning advancements, thereby ensuring that they are well-equipped to guide students through the complexities of these transformative fields.

### **Glimpse of the FDP:**

The Five Days Faculty Development Programme (FDP) on “Strategic Approaches and Emerging Trends in Artificial Intelligence, Machine Learning, and Deep Learning” from 11th to 15th February 2025 equipped faculty members with the latest insights, tools, and applications of these technologies to enhance their teaching and research. A total of over 50 participants, both internal and external, gained knowledge of these cutting-edge technologies.

### **DAY 1 (11-02-2025 ) Room No: 310, Block-1**

Inaugural session





**Resource Person: Dr. Venkateswara Rao Kagita, Assistant Professor, NIT Warangal**

Topics Covered:

- Introduction to Machine Learning
- Machine Learning Algorithms
- Machine Learning Algorithms Practical Sessions



**DAY 2 (12-02-2025 ) Room No: 311, Block-1**

**Resource Person: Dr. B Uma Maheshwara Sharma, Assistant Professor, NIT Calicut**

Topics Covered:

- Introduction to neural network algorithms
- Large Language Models (LLMs), recent advances in LLMs
- Transformers: Self and Multi Headed attention



**DAY 3 (13-02-2025 ) Room No: 311, Block-1**

**Resource Person: Dr. B Uma Maheshwara Sharma, Assistant Professor, NIT Calicut**

Topics Covered:

- Pre-training strategies, advanced attention mechanisms
- Parameter Efficient Fine Training (PEFT)
- Quantization, Pruning & Distillation



## DAY 4 (14-02-2025 ) Room No: E105 Lab, Block 5

**Resource Person: Mr. Kiran Kumar Kandula, Data Scientist, Fortune 50 Industry.**

### Handson Session - Topics Covered:

- Introduction to NLP
- Using Generative AI for NLP applications



**DAY 5 (15-02-2025 ) Room No: 311, Block-1**

**Resource Person: Dr. P. V. Subba Reddy Associate Professor, NIT Warangal**

Topics Covered:

- Quantum Algorithms
- Quantum Applications



This FDP took place over five enriching days, filled with engaging sessions, workshops, and interactive discussions. From the very first day, participants were immersed in a learning environment that encouraged growth and knowledge-sharing. Expert speakers and facilitators

led insightful sessions, addressing various aspects of professional development, skill-building, and cutting-edge trends in academia and industry.

Over the course of the program, participants not only gained valuable insights but also had the opportunity to network with peers and experts in their respective fields. Each day was marked by thought-provoking sessions, group activities, and practical applications that made the learning experience both theoretical and hands-on.

As the program came to a close, a final session was conducted to reflect on the key takeaways and learnings from the entire week. The event concluded with a vote of thanks, where heartfelt gratitude was expressed to the distinguished speakers, facilitators, and all the participants for their active engagement and contribution. Special appreciation was given to the organizing team, who worked tirelessly behind the scenes to ensure the smooth execution of the event.

The vote of thanks acknowledged the collaborative spirit that made the FDP successful and highlighted how the experience had enriched everyone's professional journey. Participants left the program feeling inspired, empowered, and equipped with valuable tools to apply in their respective fields. All participants received their certificates of participation at the end of the event.

#### **ORGANIZING COMMITTEE:**

- 1) Dr. K. Pranitha Kumari, Assoc. Professor.
- 2) Dr. K. Arpitha, Assoc. Professor.
- 3) Dr. B. Adithya, Assoc. Professor.
- 4) Mr. SK Akbar, Assoc. Professor.
- 5) Mr. K. Siva Rama Krishna, Assoc. Professor.
- 6) Mr. K. Naresh Babu, Sr. Asst. Professor.
- 7) Ms. Preeti Prasada, Sr. Asst. Professor.
- 8) Mr. N. Poornachandrarao, Asst. Professor.
- 9) Ms. T. Kranthika, Asst. Professor.
- 10) Mr. Ch. Naveen Kumar Reddy, Asst. Professor.
- 11) Ms. B. Nagamani, Asst. Professor.
- 12) Mr. G. Rama Krishna, Asst. Professor.