LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING



(AUTONOMOUS)

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L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

Department of Computer Science and Engineering *Report on "FDP on AI and Machine Learning"*

Type of Event : Faculty Development Programme (FDP)

Date/ Duration : 17 – 21 December, 2018 (1 Week)

Resource Person(s) : Prof. Rajeev Srivastava (IIT BHU)

Ashish Shardana (NVIDIA)

Dr. Partha Pratim Roy (IIT Roorkee)
Dr. Biju Ravichandran (MATLAB)
Dr. R. Balasubramanian (IIT Roorkee)

Dr. Atul Gupta (IIITDM Jabalpur)
Prof. Kusum deep (IIT Roorkee)

Name of the Coordinator(s): Dr. B. Srinivasa Rao, Professor, Dept. of IT

Dr. S. Naganjaneyulu, Professor, Dept. of IT Dr. O. Rama Devi, Professor, Dept. of CSE

Target Audience: Faculty of all Engineering Programs & MCA

Total no of Participants : 39 (CSE- 19, IT-10, ECE-6, ME-1 and MCA -2)

Objective of the FDP:

The main objective of the FDP on AI & Machine Learning is to connect prestigious institutions and industry professionals with educational institutions to provide forum for learning latest tools in Artificial Intelligence and Machine Learning to all engineering faculty, who will in turn educate student community and to facilitate research schemes using the advanced software tools in the field of Machine Learning.

Expected Outcomes of the Faculty Development Programme:

After completion of this FDP participants will able to:

 Understand the Introduction of AI and Machine Learning, Machine Learning Applications in Computer Vision

- Understand the Industrial Overview on AI and Machine Learning
- Understand the Fundamental Concepts of AI, Agents, Environments, General Model, Problem Solving Techniques, uninformed search techniques
- Understand the Search Techniques and Knowledge Representation 3. Informed Search Techniques and adviseral search Heuristic search, adversarial search and game trees, Solution of constraint satisfaction problems using search.
- Understand the Introduction to Machine Learning
- Understand the Mathematical elements of Machine Learning, Supervise and Unsupervised Learning, Regression Algorithms
- Understand the Machine Learning Structures
- Implement Classification Algorithms Logistic, Bayes, NN Classifiers
- Implement K-Means, DBSCAN, and Hierarchical Clustering
- Implement Optimization Algorithms
- Implement Binary and Real coded GAs, Differential Evolution, Particle Swarm Optimization
- Implement Grey Wolf Optimization, Harmony Search Algorithm, Bi-Geographical Based Optimization

Feedback/ Suggestions:

- 1. Some of the Strong Points:
 - o Good Conceptual Knowledge and Hands-on-sessions.
 - o Allotted classes were done regularly.
 - o Resource persons were good.
 - o Excellent course content.
 - o Good theory and Lab sessions.
 - o Useful for researchers.

2. Some of the Week Points:

- o Audio is not clear sometimes.
- o Sometimes laps in clarity.
- o Need more hands-on-sessions.
- o Some technical problems.
- o PPT slides are not clearly visible.

Photographs:



Faculty participated to the One Week FDP on "AI & Machine Learning"



Group Photo of the Faculty who were participated to the One Week FDP