



**JB INSTITUTE OF ENGINEERING & TECHNOLOGY**

**UGC Autonomous**

Accredited by NAAC & NBA, Approved by AICTE & Permanently Affiliated to JNTUH

## **Department of Computer Science and Engineering**

### **DETAILED REPORT ON**

### **NATIONAL LEVEL ONE-WEEK FACULTY DEVELOPMENT PROGRAM ON**

### **“Machine Learning Using Python” (18<sup>th</sup> to 23<sup>th</sup> APRIL 2022)**

**JB Institute of Engineering & Technology (A)** has organized a one-week Faculty Development Programme on "**Machine Learning Using Python**" from **April 8<sup>th</sup> to April 23<sup>th</sup>, 2022**. This FDP programme received an overwhelming response with participants from various institutes/colleges approved by AICTE and affiliated to various universities across the arena of India.

**Date: 18<sup>th</sup> April 2022**

#### **Inauguration:**

Dr. P.C. Krishnamachary, Principal, JBIET, along with Mr. Murthy, Director of JB Group of Educational Institutions, Dr. Niraj Upadhyaya, Dean-R&D; Dr. Salaludin, Dean of Academics; Dr. P. Srinivasa Rao, Head of the Department, CSE Department, and Convener of the Faculty Development Programme.

All the dignitaries and delegates are welcomed by Dr. P. Srinivasa Rao, Convener, FDP. In his welcome speech, he highlighted the importance and objectives of organising this faculty development programme. In his speech, he added that Natural Language Processing, often abbreviated as NLP, is the interplay between computers and human language. It's a discipline in artificial intelligence (AI) that strives to make machines understand, interpret, and generate human language in a meaningful and purposeful way.

In his inaugural speech, worthy **Dr. P.C. Krishnamachary, Principal, JBIET**, thanked the management and secretary for conducting the Faculty Development Programme on "**Machine Learning using Python**". He emphasised that technical skills among teachers can be built only through faculty development programs.

**Dr. Md. Salauddin** appreciated **Dr.P.Srinivasa Rao, HOD-CSE and Convener**, for conducting a programme on the latest trends in computer science and engineering.

The Speakers addressed the following topics during the six days sessions:

- Introduction to Machine Learning and Basic Python Programming for Machine Learning.
- Handling missing data, data cleaning and transformation with pandas.
- Exploratory Data Analysis(EDA) using Matplotlib.
- Understanding regression concepts and Hands on classification exercises.
- Linear regression implementation, model evaluation and metrics.
- Basics of classification algorithms and Logistic regression, decision tree and introduction to ensemble methods.
- Clustering techniques and Dimensionality reduction using PCA, practical applications
- Basics of neural networks
- Building a simple neural network using TensorFlow or PyTorch overview of deep learning architectures.

Sessions	Resource Person	Topic
Day 1 – Day 6 18.04.2022 – 23.04.2022	<b>Mr.Srinivas and Mr.Madhukar</b>	Machine Learning Using Python

