

**DON BOSCO INSTITUTE OF TECHNOLOGY, MUMBAI 400070**  
**Department of Electronics and Telecommunication Engineering**

**A Report on**

**4-Days National Level Workshop cum Championship on Artificial Intelligence using Deep Learning**

**Speaker:** Mr. Venkat L.Raju, Finland Labs

**Date & Time:** 17, 18, 19 & 25 August, 2018 from 9:00 am to 5:00 pm

**Venue:** EXTC Lab 7 (IVP), 1st Floor, B Wing

**No. of Participants:** 42

**Course Coordinators:** Dr. Satish Chavan & Mrs. Pratibha Dumane

**Day 1: 17/08/2018 (Friday): Basics of Python**

At the outset, Dr. Satish Chavan welcomed the Speaker and introduced him to the participants. The speaker began his session with a brief overview about Data Sciences, Artificial Intelligence (AI), different types of machine learning and its several applications.

The speaker covered the basic concepts of Artificial Intelligence and Python Programming. Sessions using Spyder, Jupyter, etc. were conducted for programming in Python. The advantages of using Python over other contemporary languages were discussed. Various topics like Variable assignments, Operations, Indexing, Lists, Looping, Dictionaries, Sets, Tuples, Methods & Functions, etc. were covered.

**Day 2: 18/08/2018 (Saturday): Basics of Machine Learning in AI**

Topics covered included Basics of Learning in AI, Session on Pandas including installation of libraries for Tensorflow, Keras, Spyder, Matplotlib, Numpy, etc. More emphasis was given on programming for different types of applications.

**Day 3: 19/08/2018 (Sunday) and Day 4: 25/08/2018 (Saturday): Deep Learning-Regression and Classification and Evaluation**

Introduction to Deep Learning, Linear Regression & Classification, Bagging and Boosting, Introduction to Perceptron, Decision Trees, Random Forest, Gradient Descent Algorithm were covered in detail. Feature extraction for Convolutional Neural Networks was covered in detail for use in deep learning. Many applications were discussed for machine learning like cat-dog classification, stock market regression etc.

Students attempted a quiz based on multiple choice questions.

**Report Prepared by: Dr. Satishkumar Chavan & Mrs. Pratibha Dumane**

