

**Value Added Course in Electronics and
Communication Engineering with
Specialization in
“Introduction to Machine Learning using
Python”
Held On
10/11/2019 to 15/11/2019**



**Department of Electronics and Communication
Engineering,
KG Reddy College of Engineering & Technology**
Chilkur(Village), Moinabad(Mandal), Hyderabad RR Dist-501504


Coordinator


Principal
Principal
KG Reddy College of Engineering & Technology
Chilkur (V), Moinabad (M).
R.R.Dist., Telangana.



SUMMARY REPORT ON INTRODUCTION TO MACHINE LEARNING USING PYTHON

About Course

The value added course on Introduction to Machine Learning using Python is concluded its work successfully by department of Electronics and Communication (ECE) in KG ready college of Engineering and technology (KGR CET), Hyderabad, Telangana. This course is a forum to bring together students to discuss innovative ideas and diverse topics of this course on next generation of information technologies. Department has taken a new step for students to improve the quality of study through this course and become most wide scale , extensive, spectacular event in computer science engineering. The six days course was held in two locations of the department (a) Department E-learning room for theory class and (b) Department laboratory for practical class.

Machine Learning using Python is very important aspects, Python like many other programming languages, has different versions. And sometimes when we create software, the software needs to run on a specific version of the language because our software expects a certain behaviour that is present in older versions but changes in newer versions. Likewise, we may need to use specific versions of the libraries for similar reasons. But Python 2.7 and even a more modern Flask app that runs on version 0.12 and Python 3.4.

Exploring data sets and developing deep understanding about the data is one of the most important skills every data scientist should possess. People estimate that time spent on these activities can go as high as the project time in some cases. Python has been gaining a lot of ground as preferred tool for data scientists lately, and for the right reasons. Ease of learning, powerful libraries with integration of C/C++, production readiness and integration with web stack are some of the main reasons for this move lately.

In this course, it will use NumPy, Matplotlib, Seaborn and Pandas to perform data exploration. These are powerful libraries to perform data exploration in Python. The idea is to create a ready reference for some of the regular operations required frequently. It can iPython Notebook to perform data exploration, and would recommend the same for its natural fit for exploratory analysis.

This course is absolutely practical oriented course which is helped to student for making their carrier through python in industry. The students of Final year 2nd semester have been benefited in many ways from this course. Total 31 students have joined in this course as their own interest and completed this course. The trainer taught to students very nice with real time example and sharing his knowledge to develop technical skill in industry.

Scope of the Course

The role of Python and Machine Learning environment is to be emphasized in computer science and engineering, to enhance and motivate the new technology for wide range of applications. Python can pretty much do the same tasks as R: data wrangling, engineering, feature selection web scrapping, app and so on. Python is a tool to deploy and implement machine learning at a large-scale. Python codes are easier to maintain and more robust than R. Years ago; Python didn't have many data analysis and machine learning libraries. Recently, Python is catching up and provides cutting-edge API for machine learning or Artificial Intelligence. Most of the data science job can be done with five Python libraries: