



**POORNIMA**  
**INSTITUTE OF ENGINEERING & TECHNOLOGY**

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**REPORT  
ON**

**National Level  
Online Faculty Development Programme**

**On**

**Machine Learning Using Python**

Date-May 19<sup>th</sup> to May 22<sup>th</sup> 2020

Organized By-

Department of Computer Engineering

Poornima Institute of Engineering & Technology

ISI-2. RIICO INSTITUTIONAL AREA, SITAPURA, JAIPUR – 302022

RAJASTHAN, INDIA

[www.piet.poornima.org](http://www.piet.poornima.org)

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**Department of Computer Engineering**

**WELCOME**

**YOU**

**ALL**

**National Level Online**

**Faculty Development Programme**

**On**

**Machine Learning Using Python**

**(May 19<sup>th</sup> to May 22<sup>th</sup> 2020)**

# National Level Online Faculty Development Programme

Date-May 19 <sup>th</sup> to May 22 <sup>th</sup> 2020		Time-10:00 AM-12:00Noon
Mode- Online (Google Meet)		Participants Registered-520
Resource Person	Mr. Deepak Moud, HOD, CS, PIET Ms. Pooja Sharma, Asst. Professor, CE, PIET	Selected Participants for FDP-114
Mode of FDP: Presentation and Hands on Google Colab.		

## Detailed Report

Department of Computer Engineering, Poornima Institute of Engineering & Technology has conducted **National Level Online Faculty Development Programme on Machine Learning Using Python** from **May 19th to May 22th 2020**.

### **The Objective of FDP was**

- To understand Machine learning & types of learning
- To implement Supervised learning algorithms –Regression Problems
- To implement supervised learning algorithms –Classification Problems.
- To evaluate performance of Machine learning model.
- To make prediction on real time data.

FDP addressed the Introduction of machine learning, types of learning, & implementation of supervised machine learning algorithms using python. This workshop got great response from all over **India and 520** registrations took place only in 12 hours. **Candidates of 185** cities across **PAN India have registered from 400 institutions**. This FDP was designed to understand Machine learning & types of learning and to implement supervised learning algorithms –Regression /Classification on real data. **Eventually 114 participants have been trained by Mr. Deepak Moud and Ms. Pooja Sharma Assistant Professor, Department of Computer Engineering, PIET**. Mr. Sandeep Tuli, Dy. HOD (CE) coordinated with all participants regarding their daily FDP attendance & distribution of E-Certificates.

**Dr. Dinesh Goyal, Director, PIET** inaugurated the FDP, in his inaugural address, he welcomed all the participants & stressed upon the importance of machine learning & use of innovative practices in the field of computer engineering. He also shared the success stories of institution in terms of NAAC & NBA accreditation programme.

On **Day-01** of FDP Ms. Pooja Sharma explained the introduction of ML, types of ML, applications & need of data preprocessing in machine learning experiments. She also discussed real time examples & case studies of machine learning. In second session Mr. Deepak Moud explained implementation of data preprocessing using python in Google Colab. He started with importing of all necessary libraries of python, import dataset, handling missing data & categorical data, train & test split and in last about the feature scaling. He has also shared first assignment with all.

On **Day-02** of FDP Ms. Pooja sharma discussed Regression analysis, use cases. She has first started with linear regression & its application then explained how to find best fit line using least square method. Then she implemented linear regression for analysis of salary using experiences using python in Google colab. In second session Mr. Deepak Moud explained Classification concept of supervised machine learning & started decision tree algorithm. He explained how to calculate information gain & construct decision tree, then he implemented decision tree algorithm using python in Google colab. He has also solved & discussed assignment with participants.

On **Day-03** of FDP Mr. Deepak Moud discussed KNN algorithm & use cases. He has first started with how to find Euclidean distance & then explained KNN algorithm with example. Then he implemented KNN algorithm using python in Google colab. In second session Ms. Pooja sharma explained Naïve Bayes Classifier of supervised machine learning & discussed real time applications like text classification etc. She explained how to calculate probability of unknown data tuple, then she implemented Naïve Bayes algorithm using python in Google colab.

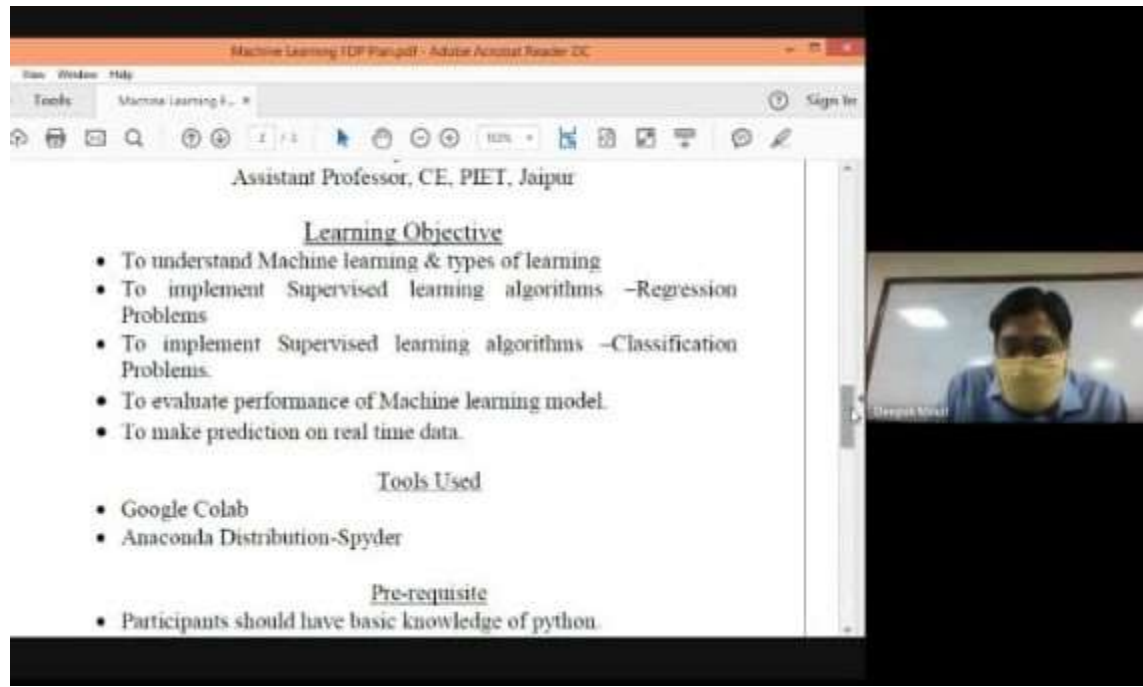
On **Day-04** of FDP Mr. Deepak Moud discussed Random Forest algorithm & explained how it can increase accuracy of classifier then he implemented random forest algorithm using python in Google colab. In second session Ms. Pooja Sharma explained Support Vector machine concept of

supervised machine learning & she has taught how linear & non Linear SVM works & classify the data. She implemented SVM algorithm & types of kernel function using python in Google colab. All FDP contents has been shared with participants.

At last all participants shared their feedback & their excellent learning throughout the FDP. All participants were asked to attempt online quiz that was designed based upon four days FDP content. Dr Dinesh Goyal, Director, PIET thanked all participants for their four days continuous learning & asked them to enroll in different other activities of PIET also. He has praised all the efforts made by trainers & organizing committee for their excellent efforts to make FDP successful. All participants were awarded with E-Certificate at the end of FDP for successful participation in FDP.

### **FDP PHOTOGRAPHS**





Machine Learning PDF Pagepdf - Adobe Acrobat Reader CC

Tools: Machine Learning P... Sign In

Assistant Professor, CE, PIET, Jaipur

Learning Objective

- To understand Machine learning & types of learning
- To implement Supervised learning algorithms –Regression Problems
- To implement Supervised learning algorithms –Classification Problems.
- To evaluate performance of Machine learning model.
- To make prediction on real time data.

Tools Used

- Google Colab
- Anaconda Distribution-Spyder

Pre-requisite

- Participants should have basic knowledge of python.

Stream Moud





The image shows a presentation slide titled "Understanding Machine Learning with an Analogy" displayed in a Microsoft Edge browser window. The slide content is as follows:

### Understanding Machine Learning with an Analogy

**Task: How will you choose the best mangoes?**

- Bright yellow mangoes are sweeter
- Soft mangoes are juicier
- Green mangoes are tastier than the yellow ones.

But every time you make a new observation from your experiments, you have to modify the list of rules manually.

This is where Machine Learning comes into the picture

The slide also features an image of a hand selecting a mango from a basket. In the bottom right corner of the browser window, a video call participant named "Pooja Sharma" is visible against a purple background with white butterfly icons.

A close-up video call of a man with glasses, identified as Dr. Dinesh Goyal. He is wearing a light blue shirt. The background shows an office environment with a glass door and some papers on a shelf.

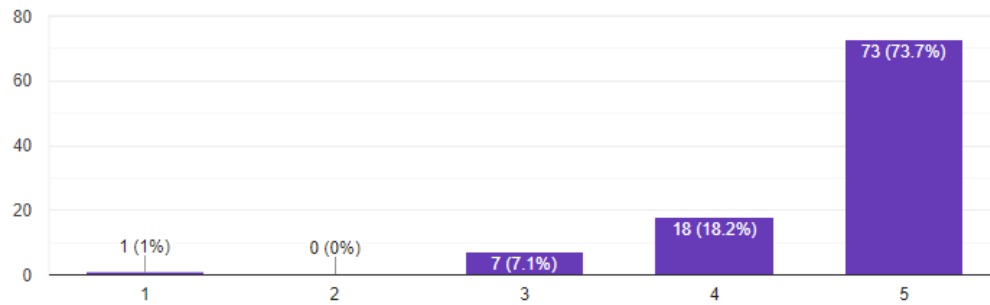
# Feedback summary

## Nation Level FDP On Machine Learning Using Pyhton (19 May-22 May , 2020) Feedback

The Workshop broadened my understanding of concepts and principles in the field of Machine Learning

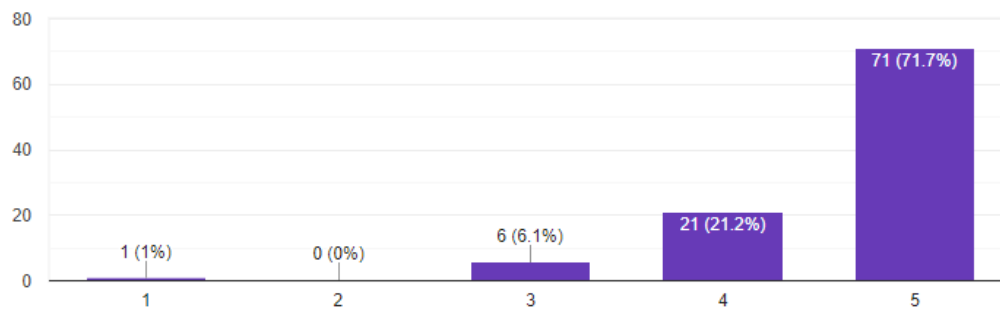


99 responses



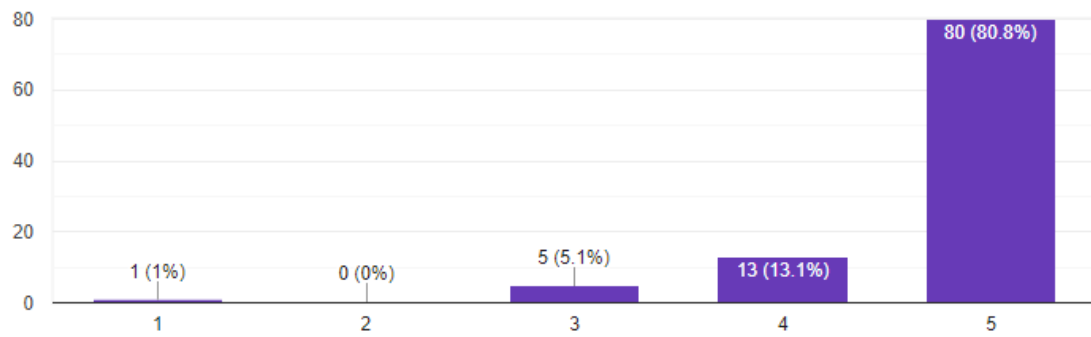
The Practical sessions increased my understanding in machine learning using pyhton

99 responses



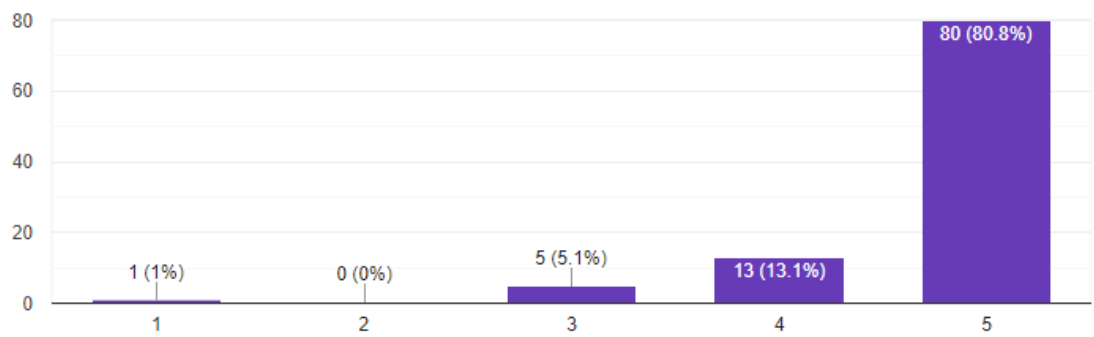
### The instructors' knowledge of the subjects was good

99 responses



### FDP handouts Were clear and well-organized

99 responses



## Overall feedback of FDP

98 responses

Gud

Excellent and informative sessions of fdp

nice sessions

First of all I thank for the fdp... I never attend fdp like this because all the four days you give same effort and explain all the concept very easily and clearly.. Especially in practical session sir. Again and again you are explain each. Overall this fdp is very good sir thank you again sir.

Really work hard, well organized. Wish you all the best for future.

Excellent session

Very informative

Very nice

Nation Level FDP On Machine Learning Using Pyhton (19 May-22 May , 2020) Quiz

## Overall feedback of FDP

98 responses

Planned and executed in a very nice way.

-

Overall FDP is very nice , improve knowledge , provide a good platform for ML. Over all its very Valuable Program.

Excellent, well Planned and successfully organized..

Good informative and hands on sessions

Very informative & excellent

Informative and useful session. Well organized.

Wonderful session

Excellent session

Nation Level FDP On Machine Learning Using Pyhton (19 May-22 May , 2020) Quiz

## Overall feedback of FDP

98 responses

EXCELLENT

This is best hand on workshop i have ever attended.

Session was very informative and practical overall both Deepak sir and Pooja mam doing good

Totally enjoyed and learned a lot in a comfortable environment, such a wonderful opportunity for me to attend this FDP.

The style and the knowledge of the presenters was totally amazing.

An awesome work. Content was relevant and well presented.

Thanks a lot to entire team of Poornima I want to attend more FDP in future.

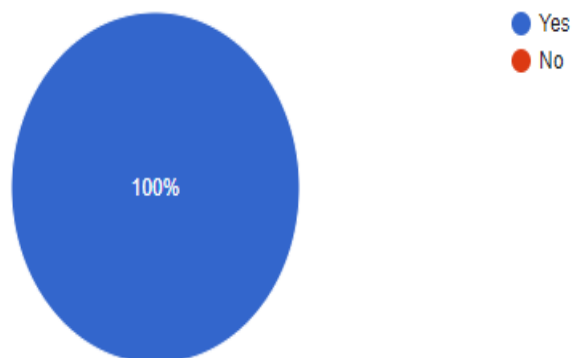
Very nice and Informative. Clearly understood the concept as a new learner of ML

It was good

## Nation Level FDP On Machine Learning Using Pyhton (19 May-22 May , 2020) Quiz

The balance between lectures and hands-on sessions was optimal.

99 responses



FDP handouts Were clear and well-organized

## CIRTFIFICATE DISTRIBUTION



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**This certificate is awarded to**

**J RAMKUMAR**

of

**VLB JANAKIAMMAL COLLEGE OF ARTS AND SCIENCE,  
COIMBATORE**

For

**Successfully Completing**

**National Level**

**Online Faculty Development Programme**

on

**Machine Learning Using Python**

From

**May 19<sup>th</sup> to May 22<sup>nd</sup> 2020**

**Organized By-**

*Department of Computer Engineering*

*Poornima Institute of Engineering & Technology*

**Sponsored By-**

*Indian Society for Technical Education*



PIET-FDP-ML-029

*Deepak Moud*  
**Convener-FDP**  
PIET, Jaipur  
**(Deepak Moud)**

*Doyal*  
**Patron-FDP**  
PIET, Jaipur  
**(Dr. Dinesh Goyal)**