



JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Add- on Course on Machine Learning with Python

Event : Add-on Course on Machine Learning with Python
Category : **Add-on Course**
Area : Machine Learning with Python
PO's Covered : PO2, PO3, PO5, PO6, PO7, PO 10
PSO Covered : PSO2
Date & Time : 1st September to 20th September 2021 & 2:00 PM to 4:00 pm
Venue : AF-02
Expert : Mr. Peeyush Sanam
Chief Training Officer
UpFlairs Pvt Ltd, Jaipur

Contact: +91 9251494002
E-mail: info@upflairs.com



Company Profile : Upflairs is an upsurging edtech company with a mission to provide industry relevant skill development programs through innovative content delivery using Virtual Reality to enhance the learning experience through the audio-visual simulations and AI driven assistance, making it more ENGAGING and EFFECTIVE for the learners. The vision of the company is to transform the technical education delivery methodologies and building up a more intuitive model. Team Upflairs has started moving to the goal of Enriching young minds by up-skilling their mettle and making them "Ready for Job".

Company Address : 251, Mangalam Aangan, Ajmer Road, Jaipur (302026)

Company Contact : +91 9251494002 / +91 9782548030 **E-mail: info@upflairs.com**

Departmental Organizer:

1. Mr. Abhishek Jain (Assistant Professor, CSE Deptt.)
2. Mr. Sachin Gupta (Assistant Professor, CSE Deptt.)

Session Description : The session starts at 1:45 PM by welcoming guest Mr. Peeyush Sanam by Course coordinators Mr. Abhishek Jain & Mr. Sachin Gupta. Mr. Peeyush Sanam is Chief Training Officer in UpFlairs Pvt. Ltd, Jaipur. The Session started by introducing the basics of Python language to students. The expert explained the students about the importance of Python language in development of various types of software now days.

Mr. Peeyush Sanam explained the meaning of machine learning to students. He further explained the Machine Learning is the field of study that gives computers the capability to learn without being explicitly programmed. ML is one of the most exciting technologies that one would have ever come across. As it is evident from the name, it gives the computer that makes it more similar to humans: The ability to learn. Machine learning is actively being used today, perhaps in many more places than one would expect. He also asks various questions to students related to Machine learning and how it works. Then the speaker started the hands-on session on creating the **application** with students. The students have hands-on experience creating a machine learning with python in the guidance of the expert.

The Course ends with the demonstration of machine learning with python created by Mr. Peeyush Sanam, he runs the applications & demonstrated different features of it to all the students and encourages the students to create more softwares using Python language. At the end Dr. Vijeta Kumawat, Deputy Head, Dept. of CSE, JECRC College Jaipur presented a Vote of Thanks to the speaker Mr. Peeyush Sanam.

Audience : 2nd Year Students, CSE Branch, JECRC Jaipur

Attendance : Attached

Module Covered:

MACHINE LEARNING with Python		
Duration – 20 Days/40 Hours		
1	Introduction & Setup	<ul style="list-style-type: none"> • Introduction with Machine Learning & Data Science • Data Science vs Data Engineering vs Data Analysis vs AI • Basic Linux/Windows Commands • Installing & Setting up Python on System • Understanding its Command Line & Scripts
2	Python Overview	<ul style="list-style-type: none"> • Simple Python Program • Python Revisit: Keywords, Data Types, Operators • Conditional/Looping/Error Handling in Python • Comprehensions • Python User Defined Functions • Python Generators • Lambda Expressions • Python Modules: Usage and Installation • Understanding the OOP of Python • Introduction with Python GUI Development
3	Data in Python	<ul style="list-style-type: none"> • <i>Types of DATA?</i> • <i>The key steps of Data Analysis</i> • The file handling in python • Dealing with Excel/Json/CSV/txt files • <i>Connecting an SQL based Database</i> • <i>Basic SQL Operations using python</i> • Exercise – 0

4	Numpy	<ul style="list-style-type: none"> • Python Numpy Arrays • Creating, Accessing, Manipulating Numpy Array • Numpy Data Types • Array Attributes • Data Operations • Arithmetic and Statistical Methods • Sort, Search, Count • File Handling with Numpy • Exercise - 1
5	Pandas	<ul style="list-style-type: none"> • The Series and DataFrame • Creating, Accessing, Manipulating Pandas Data • Series and DataFrame Attributes & Basic Functions • Iteration on Data • Statistical Functions; String Functions • Logical Indexing; Sorting & Reindexing • Merging, Joining & Concatenation of Data • Exercise - 2
6	Pandas - 2	<ul style="list-style-type: none"> • Understanding Kaggle/Hackerearth Platforms • <i>Pandas File Handling</i>
		<ul style="list-style-type: none"> • Grouping Data • Function Application • Missing Data & Treatment • Date & Time Functionality • Exercise - 3
7	<i>Data Visualization</i>	<ul style="list-style-type: none"> • How Data is Beautiful? • Visualization Libraries in Python • MATPLOTLIB PYPLOT: line, scatter, pie, box, area etc • The Subplots and axes in matplotlib; Showing Images • Pandas Visualization: Basic Plots • Easy and advanced Data Visualization from Seaborn • Categorical, Distributive, Regression, Matrix, Grid Plots • Exercise - 4
8	<i>Machine Learning - Regression</i>	<ul style="list-style-type: none"> • Understanding the concept of Machine Learning • The Flow of Machine Learning • Types of Learning and their sub-categories • Linear Regression: The Line Equation; Fitting Data in Model • Performance Evaluation of Model

		<ul style="list-style-type: none"> Polynomial Regression: The Non-linearity in Data
9	Mini Project	<ul style="list-style-type: none"> Project 1: "Cars24 Kind Application to Sell Used Cars"
10	Machine Learning - Classification	<ul style="list-style-type: none"> What is a Classification problem? Logistic Regression: Concept Dealing with missing data in real-time information Performance Evaluation of Classification Models
	Mini Project	<ul style="list-style-type: none"> Project 2: "Survival Prediction Model"
11	Machine Learning - Classification	<ul style="list-style-type: none"> The Information Theory Decision Trees Classifier Random Forest Classifier Concept of Cross-Validation
12	Capstone Project	<ul style="list-style-type: none"> Capstone 1: "Potential Client Prediction for YAATRA Package"
13	Capstone Project	<ul style="list-style-type: none"> Project continued...
14	Natural Language Processing - Introduction	<ul style="list-style-type: none"> What is NLP? Linguistic to Natural Language NLTK in Python Text to Speech and Speech to Text Modules in Python Morphological Analysis; Syntactic Analysis Word Clouds Exercise - 9
15	Chatbot	<ul style="list-style-type: none"> What are chatbots Understanding Regular Expressions Creating Query & Response Pairs

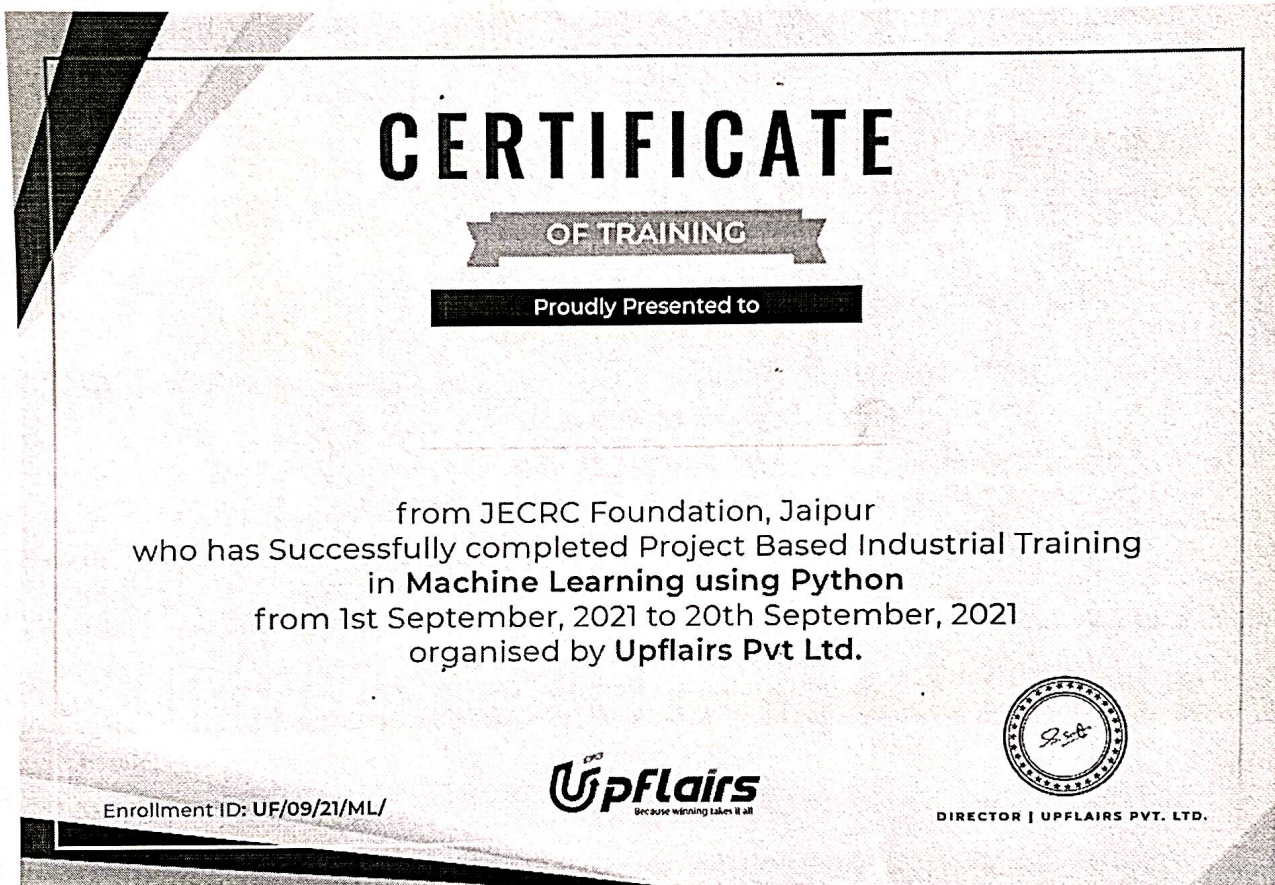
ATTENDANCE SHEET

JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE JAIPUR					
STUDENT LIST OF "Workshop on Machine Learning With Python SESSION - 2021 – 22					
Sr. No.	Name of Student	Sr. No.	Name of Student	Sr. No.	Name of Student
1	Aayush sharma	29	harsh nagar	57	Nishant Munshi
2	Abhey Singh	30	HARSH SAHU	58	Nishant Shakya
3	Abhishek Singh Rathore	31	Harshdeep Singh Saluja	59	Nishita Sharma
4	Abhishek Surana	32	Harshit Dhanuka	60	Nitin Malav
5	Akshat Khatod	33	Jay Jignesh bhavsar	61	OJASVI SHARMA
6	Aman Dhakad	34	Kanika Munshi	62	Piyush jaiswal
7	Anjali Agrawal	35	Kartik Sankhala	63	Prasham Jain
8	Ankit Khandelwal	36	Khushal Kumawat	64	PRAVAL JINDAL
9	Anshika Singhal	37	Khushi Soni	65	Preksha Jain
10	Archit Sharma	38	KISHNA GUPTA	66	Priyank mehta
11	Arpit Krishan Sharma	39	Koushik Khandelwal	67	Pulkit Mathur
12	Aryan Sharma	40	Kriti Pancholi	68	Pulkit Tiwari
13	Aryan Yadav	41	Kritika Gupta	69	RAGHAV BHADADA
14	Bhanu Pratap Sharma	42	Kunark Rawat	70	Raj Kumar
15	Bhawna Golchha	43	Kushagra Kashyap	71	Rakshit Parti
16	Chandrapal Singh	44	Lakshit joshi	72	Rishi Chaturvedi
17	Chirag Middha	45	Lakshya panchal	73	Roopam Agrawal
18	Devang Devlia	46	Lakshya Tambi	74	Sahil manyal
19	Devang Rathod	47	Laxit Nahar	75	Samarth Amera
20	Dhruv Agrawal	48	Manav choudhary	76	Sanskar Sharma
21	Digvijay Singh	49	Manoj Kumar Khandelua	77	Sanskriti Gupta
22	Divit Rajawat	50	Mayank Rohilla	78	sarthak jain

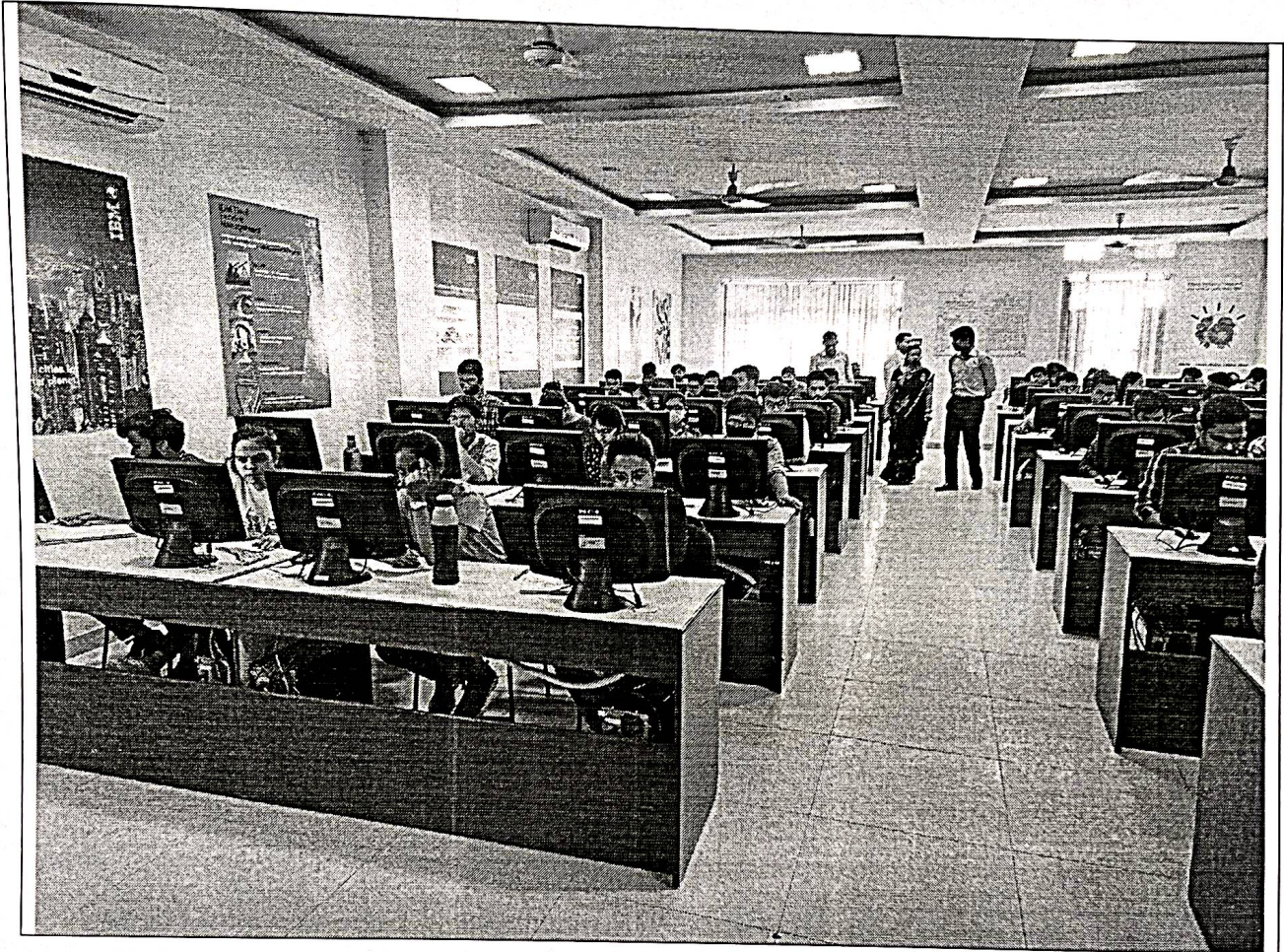
23	Divya Jain	51	Mohammed Bilal Sheikh	79	Sarvesh Sharma
24	Divyanshu mittal	52	Mohit Joshi	80	Satvic Gupta
25	Gaurav Gupta	53	Naman Mathur	81	Satyam Sitoliwal
26	Gaurav Thanvi	54	Nandini Trivedi	82	shivam agarwal
27	Girdhar Pandey	55	Nehal Jain	83	Shivam Somani
28	Gourav Singh	56	Nipun Jain	84	Shubh gaur

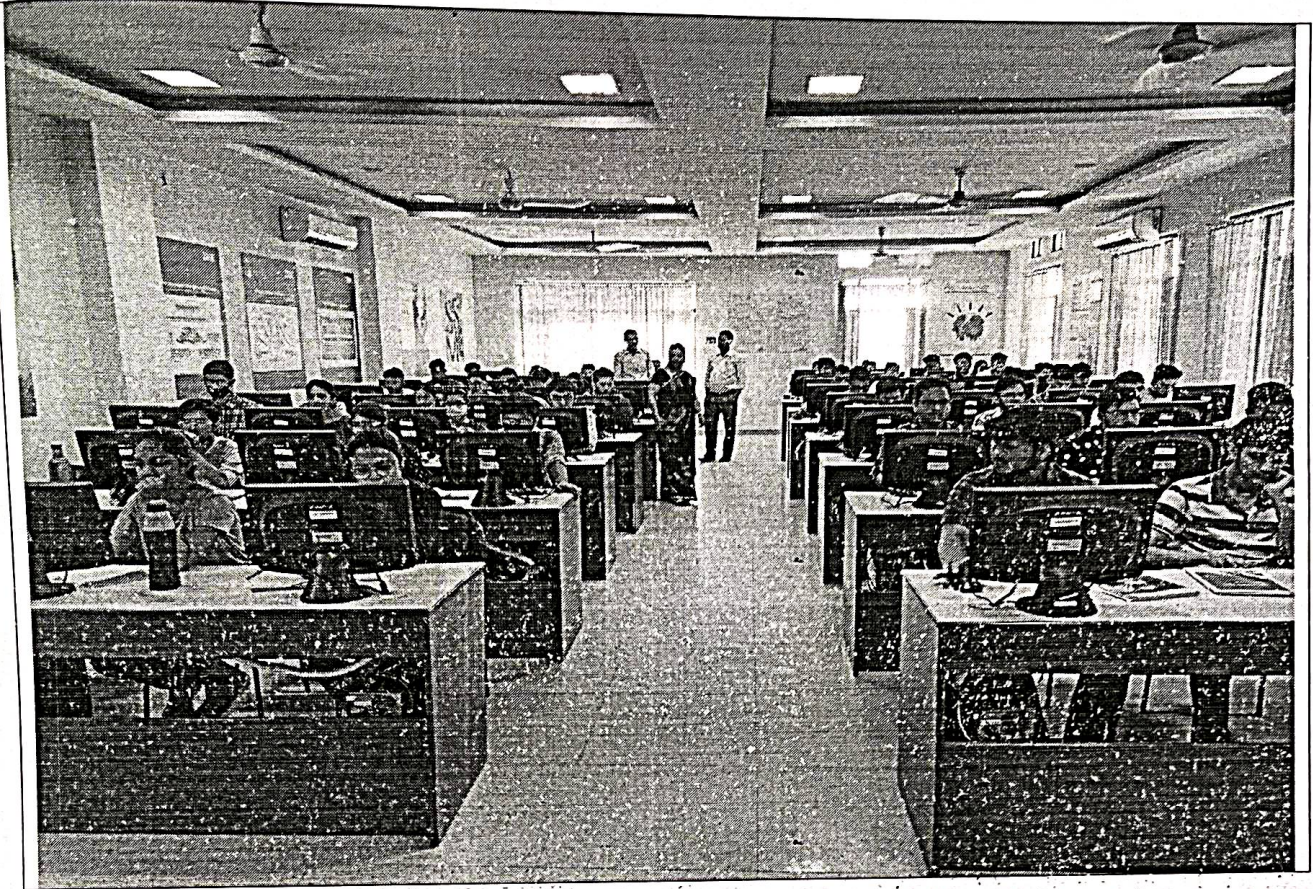
JAIPUR ENGINEERING COLLEGE & RESEARCH CENTRE JAIPUR					
STUDENT LIST OF "Workshop On Web Chat Bot (Voice Control Personal Assistant)" SESSION - 2021 - 22					
Sr. No.	Name of Student	Sr. No.	Name of Student	Sr. No.	Name of Student
85	Shubham Agarwal	86	Shubham Sharma	87	Shubhangi Vijayvargiya
88	Siddhi Nahar	89	Srashti Rawat	90	Surbhi Mathur
87	Shubhangi Vijayvargiya	92	Vanshika Jain	93	Varsha Jain
91	Urvi rav	95	Yeril Baswana	96	Yogesh Kumar

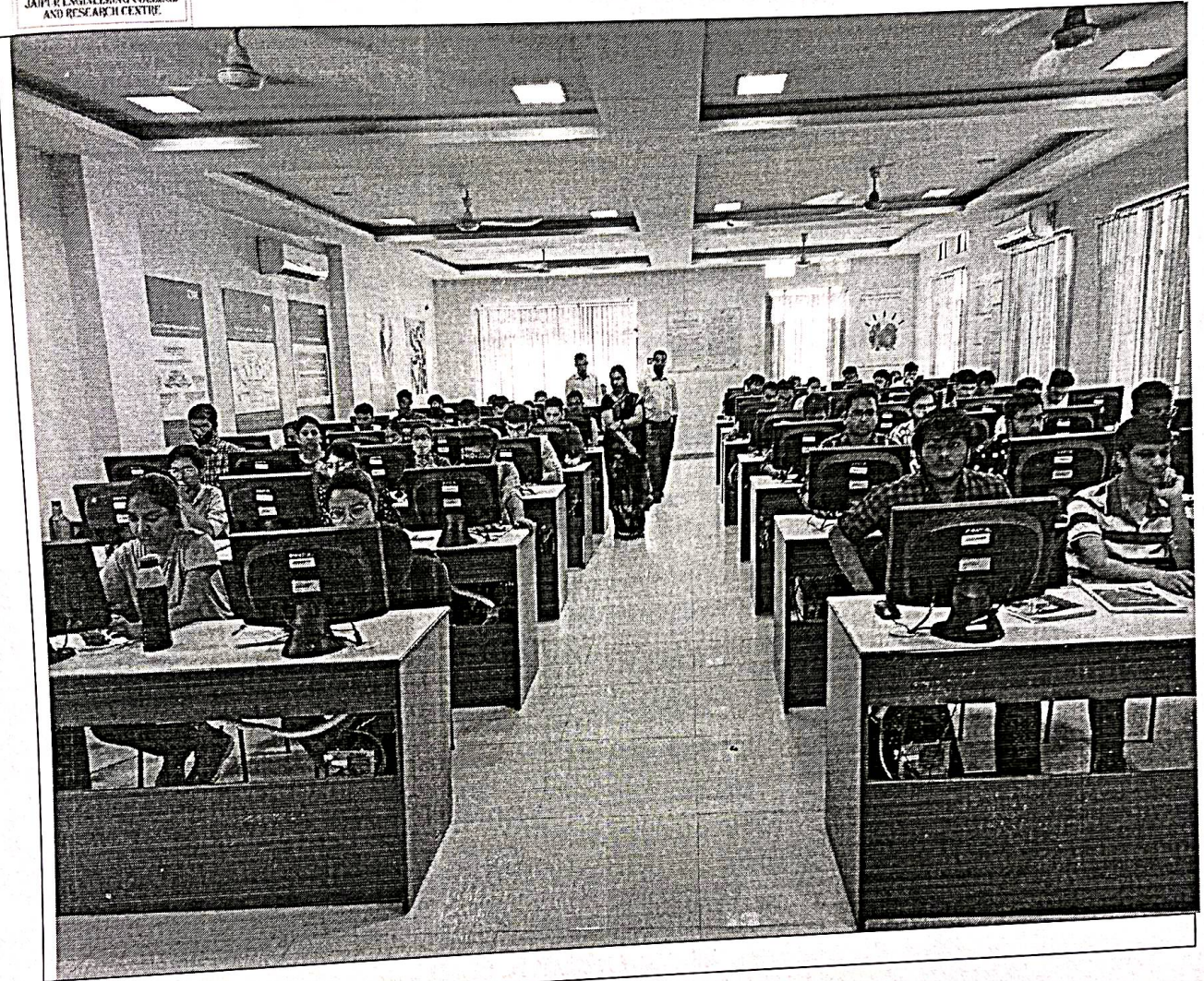
Certificates



Snapshots:







Department of Computer Science & Engineering

Date: 30 August, 2021

From : HOD Office

To : Faculty Members of CSE

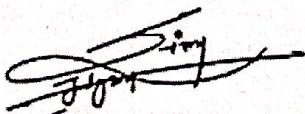
Meeting Notice

Sub.: Meeting on 30/08/21 at 11:00 AM in AF-02 block A

There is a meeting on Monday the **30 August, 2021** at 11:00 AM at Block A, AF-02 with the following members to discussed about the introduction to Add-on Course (Machine Learning with Python) for certification in the academic session 2021-2022 even semester.

1. Dr. Sanjay Gour, HOD(CSE)
2. Dr. Vijeta Kumawat, Dy. HOD(CSE)
3. Ms. Anima Sharma , AP (CSE)
4. Mr. Abhishek Dixit, AP(CSE)
5. Mr. Amit Mithal, AP (CSE)

All concerned are requested to kindly make it convenient to attend.



Department of Computer Science & Engineering

Minutes of Meeting

Date: 30 August, 2021

A meeting of all faculty members was held on **30 August, 2021** at 11:00 AM at A Block AF-02 to discuss about the Machine Learning with Python. the introduction to new course for certification in the academic session 2021-2022 even semester.

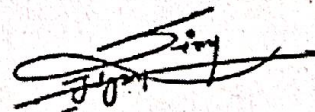
The certification program will help to enhance the employability of the students as well as it will bridge the industry-institute gap.

The details of the new certification program to be introduced are as follows:

Name of Certificate Program	Duration	Course Coordinator	In Collaboration with
Machine Learning with Python	40 Hours	Mr. Abhishek Jain Mr. Sachin Gupta	UpFlair

Following Faculties were present in the meeting:

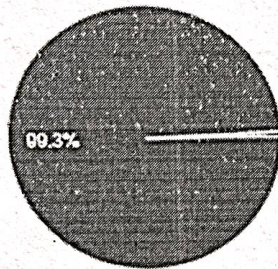
1. Dr. Sanjay Gaur, HOD(CSE)
2. Dr. Vijeta Kumawat, Dy. HOD(CSE)
3. Ms. Anima Sharma, AP (CSE)
4. Mr. Abhishek Dixit, AP(CSE)



Feedback Analysis Report

Training objectives were stated clearly and met

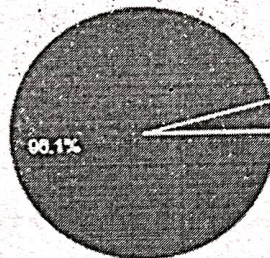
152 responses



Yes
 No

The Training was relevant to my placement

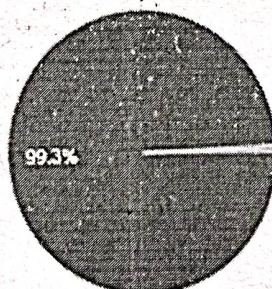
152 responses



Yes
 No

The presenter(s) provided adequate time for questions and answered them satisfactorily

152 responses



Yes
 No

What did you like Best about this workshop?

152 responses

Explaining everything and enthusiast

Overall

got to learn new thing(botchat) which i can impliment in my projects.

There was no waste of time

I love the concept of NLTK and how the REGEX works in stemming and lemmatizing the text and do the text analysis.

The way of explanation.

Entire Workshop was Best

Topics covered

What did you like least about this workshop?

152 responses

Everything

All things are best.

Did not consist of high-level implementation

Time was less

Pace

It's online

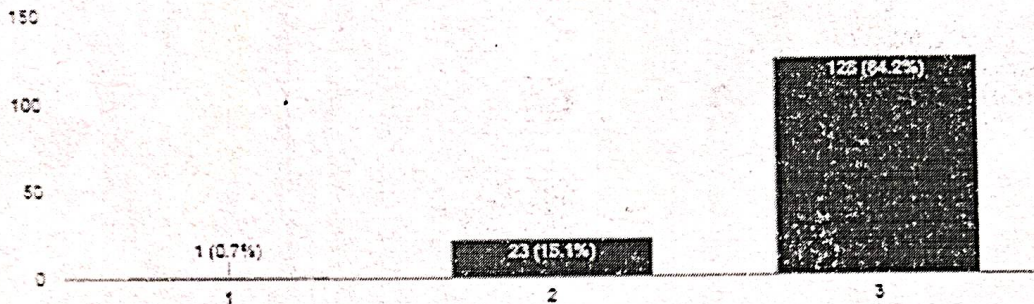
It was less interactive

.....

Actually there was nothing like that

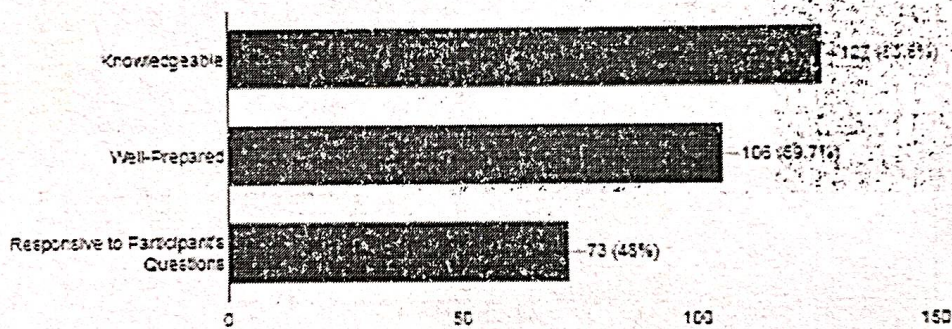
Was the Workshop Relevant?

152 responses



The facilitator were

152 responses



Mr. Abhishek Jain

Mr. Sachin Gupta

HOD-CSE

[Add-on course Coordinators]