

**DR. AKHILESH DAS GUPTA INSTITUTE OF TECHNOLOGY & MANAGEMENT,  
NEW DELHI**

**Department of Computer Science & Engineering**

**Organized**

**NATIONAL LEVEL ONE WEEK FACULTY DEVELOPMENT PROGRAM**

**On**

**“Learn & Build an AI Application on Real Datasets”**

**Date:** 22-27 November 2020

**MODE:** Online (Via Zoom)

Department of Computer Science & Engineering organized a National Level one week FDP (Online Mode). The resource person of FDP was Mr. Saurabh Bhardwaj, Founder & CEO TechieNest Pvt. Ltd. During his work experience, he headed many commercial, Govt funded, Engineering projects and events. Recently launched India's First Online Eco-System for Latest Techs, LnB (Learn and Build) to provide practical knowledge that industry needs in simplest and structured way possible.

Faculty members from different parts of the nation actively participated in the session. More than 250 participants registered to gain the insight of the FDP.

**Topics Covered -**

- > What is an AI?
- > What is Machine Learning & Deep Learning?
- > Use of Various Categories of Algorithms of Machine Learning in Real Products.
- > Software installation and basics of python and supporting libraries
- > Artificial Neural Networks and its implementation in python
- > Practical implementation Machine Learning Algorithm for an AI Application.
- > Building an AI WebApp using ML Algo.
- > Understanding various deployment methods for an app
- > Deployment of an AI app using Python Flask

**Tools Covered** - Cloud, Flask, Machine Learning Algorithms, Neural Networks and Deep Learning with Python

*The major outcomes of this programme were*

- > To build entire AI product life cycle from scratch
- > Develop AI application
- > Describe most advanced tools used in the IT industry currently
- > Practical Hands-on AI Certification
- > Analyze how the knowledge can be used for Research and Development

### **Day 1 - 22nd November 2021**

- > What is an AI ?
- > What is Machine Learning & Deep Learning?
- > Use of various categories of Algorithms of Machine Learning in Real Products.
- > Software installation and basics of python and supporting libraries
- > Python Programming

### **Day 2 - 23rd November 2021**

- > Introduction to Data Analysis
- > Python Libraries for Data Computation and Visualisation
- > Libraries Installation
- > Working with Pandas and Matplotlib
- > Data Visualisation on Real Datasets

### **Day 3 - 24th November 2021**

- > Introduction to Machine Learning and Algorithms
- > Working with ANN
- > Writing code for ANN using MLP classifier
- > Introduction to Regression Algorithms
- > Writing code for salary prediction of a fresher candidate after interview

### **Day 4 - 25th November 2021**

- > Introduction to Model Development
- > Designing ML model and its testing using Python
- > Introduction to Model Deployment
- > What is Flask? Flask library installation
- > Practical implementation of Machine Learning Algorithm for an AI Application
- > Building an AI WebApp using ML Algo.
- > Understanding various deployment methods for an app.
- > Deployment of an AI app using Python Flask on local machine.

### **Day 5 - 26th November 2021**

- > Introduction to AWS/Azure Cloud and its services
- > Creating instances for hosting AI application live on server
- > Setting up our server for Live deployment
- > Deployment of an AI app using Python Flask on Server

Project: - Design an AI web application for predicting results of a Machine Learning Model build upon an algorithm and deploy it using python flask.

### **Day 6 - 27th November 2021**

- > Evaluation test on Learn and Build Platform
- > Certification of the Program

**CHIEF PATRON**  
**Smt. Alka Das**  
Hon'ble Chairperson, BBDGE, Lucknow  
**Shri Viraj Sagar Das**  
Hon'ble President, BBDGE, Lucknow  
**Ms. Sonakshi Das**  
Hon'ble Vice President, BBDGE, Lucknow

**PATRON**  
**Shri S. N. Garg, CEO**  
**Prof. (Dr.) Sanjay Kumar, Director**  
**Ms. Pankhuri Aggarwal, Asst. Director (HR)**

**CONVENER**  
**Prof. (Dr.) Anupam Sharma, HOD - CSE**

**Co-CONVENER**  
**Ms. Megha Gupta, Event Incharge**

**ORGANISING COMMITTEE**

•Prof. Sonu Mittal	•Dr. Shipra
•Dr. Prashant Vats	•Mr. Ujwal Jain
•Mr. Ankit Agarwal	•Ms. Yamini
•Ms. Shweta Chaudhary	•Ms. Tanvi
•Ms. Ruchi	•Ms. Garima
•Ms. Vaishali	



**Dr. Akhilesh Das Gupta Institute  
of Technology & Management**  
(Formerly known as Northern India Engineering College)  
PC-26, Shaheed Park, New Delhi, 110023

**Department of  
Computer Science & Engineering  
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FACULTY DEVELOPMENT PROGRAM  
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**Date: 22<sup>nd</sup> to 27<sup>th</sup> November, 2021  
MODE: ONLINE**



**ABOUT THE FDP**

Artificial Intelligence also known as computational intelligence is playing a vital role in many industrial, societal and economical applications. AI is developing so fast today and is finding applications in every conceivable field. It is high time for faculty members to learn the concept and its various applications in a structured and practical manner, so that the learned knowledge gained can be disseminated to the students. This program will give an edge to the participants to understand, analyse and appreciate the values of Artificial Intelligence and its interrelations with other fields such as Internet of Things (IoT), Data Science and Big Data. The program is structured with modern teaching pedagogies and lab components which will enable the participants to learn the techniques, algorithms and examples relating to the current trends and applications of AI.

**RESOURCE PERSON**

**Mr. Saurabh Bhardwaj**  
Founder & CEO- TechieNest Pvt. Ltd.



**REGISTRATION DETAILS**


Any Faculty / Research aspirants can register themselves through Google Form Link : <https://forms.gle/3G2UYC8t8qnuCjy59>  
or through the QR CODE

Registration Upto: 19th November, 2021  
Participation Certificate will be given to all participants  
**NOTE: "No Registration Fees"**



Zoom Meeting Participant ID: 422607

Recording



The Zoom meeting grid shows 20 participants in a 4x5 layout. The participants are: Pooja Yadav, shweta, Dr. Kavita, Garima Gakhar, Dr. Shipra Vatshey, Tanvi Rastogi, Parthiv Kumar Paul, Archana Kumar, Ankit savhna, Shweta, VIKAS, Megha Gupta, Utti Gore, Shree, Dr. Sonu mittal, Shubh Jain, Aadya Jain, Jagruti Raot, Mohit Dayal, Sanjay Singla, Kajal Kaul, Sunita Chaurasia, Sajjal Gupta, Dr. Sanjay Singla, and Piddhi Joshi.

Chrome File Edit View History Bookmarks Profiles Tab Win You are viewing LnB Core's screen View Options

Inbox - saur.tech@n... x Data for project - Google Shee... x (6) WhatsApp x Organisation Dashboard x +

learningoxygen.com/assignmentDetails/1421/3912

# LiB

← Back ML Projects

18 Projects

Start: 1st May, 2021

End: 31st December, 2021

Grades: No

Multiple Submission: Allowed

Attachment: Download

User Notes:

Upload Attachment: Choose file | No file chosen

Submit

shweta

shweta

LnB Core

Shruti Jain

Shruti Jain

Sanjay Singla

Sanjay Singla

Chrome File Edit View History Bookmarks Profiles Tab Window You are viewing LnB Core's screen View Options

Inbox - saur.tech@n... x Data for project - Google Shee... x (6) WhatsApp x Online Courses by... x flask\_app.py : /ho... x Deployment of ML... x LnB.html : /home/... x +

www.pythonanywhere.com/user/saurodrkr/files/home/saurodrkr/mysite/flask\_app.py?edit

/home/saurodrkr/mysite/flask\_app.py (unsaved changes) Keyboard shortcuts: Normal Share Save Save as... Run

```

1 import numpy as np
2 from flask import Flask, render_template, request
3 import pandas as pd
4 #import pickle
5
6 model = pd.read_pickle('/home/saurodrkr/mysite/Salary_md1.pkl')
7 #model = pickle.load(open('/home/saurodrkr/mysite/Salary_md1.pkl', 'rb'))
8
9 app = Flask(__name__)
10
11 @app.route('/')
12 def home():
13     return render_template('LnB.html')
14
15
16 @app.route('/prediction', methods=['POST'])
17 def predict():
18
19     int_f = [int(x) for x in request.form.values()]
20     final_f = [np.array(int_f)]
21     p = model.predict(final_f)
22     op = round(p[0], 2)
23     return render_template('LnB.html', prediction_text='Expected Salary should be INR {}'.format(op))
24
25
26 if __name__ == "__main__":
27     app.run(debug=True) #, port=5001
28

```

shweta

shweta

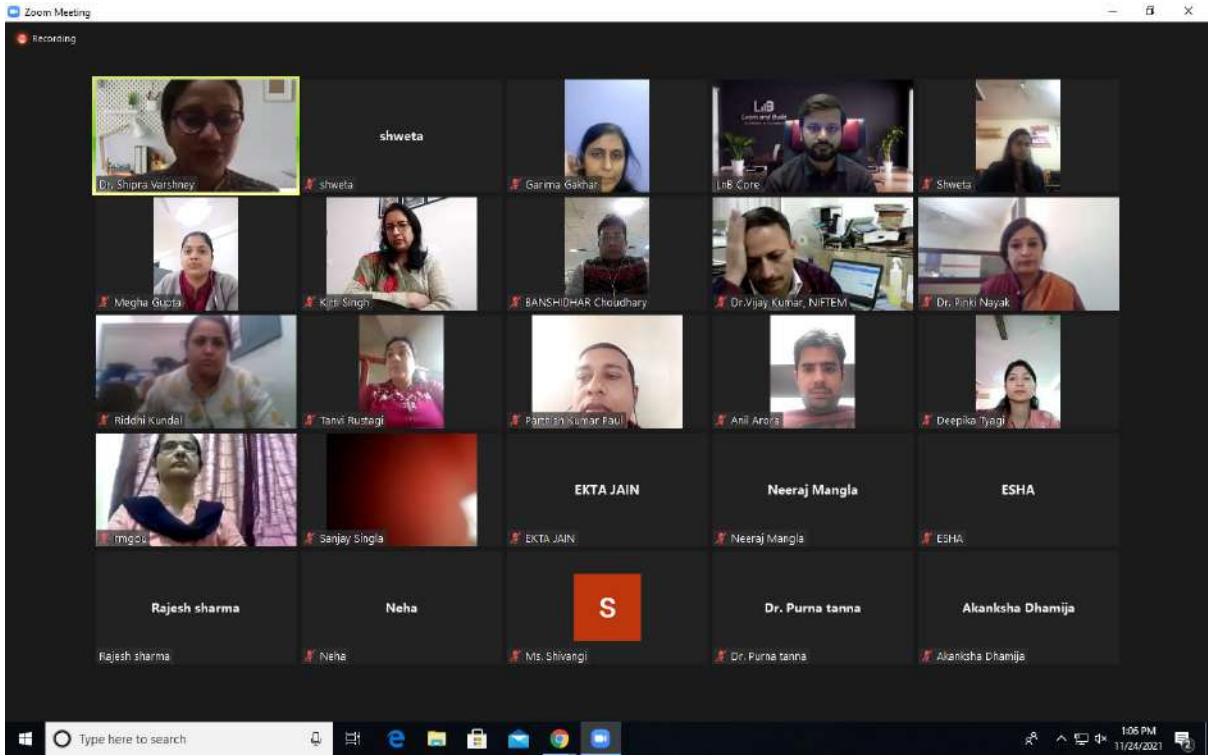
LnB Core

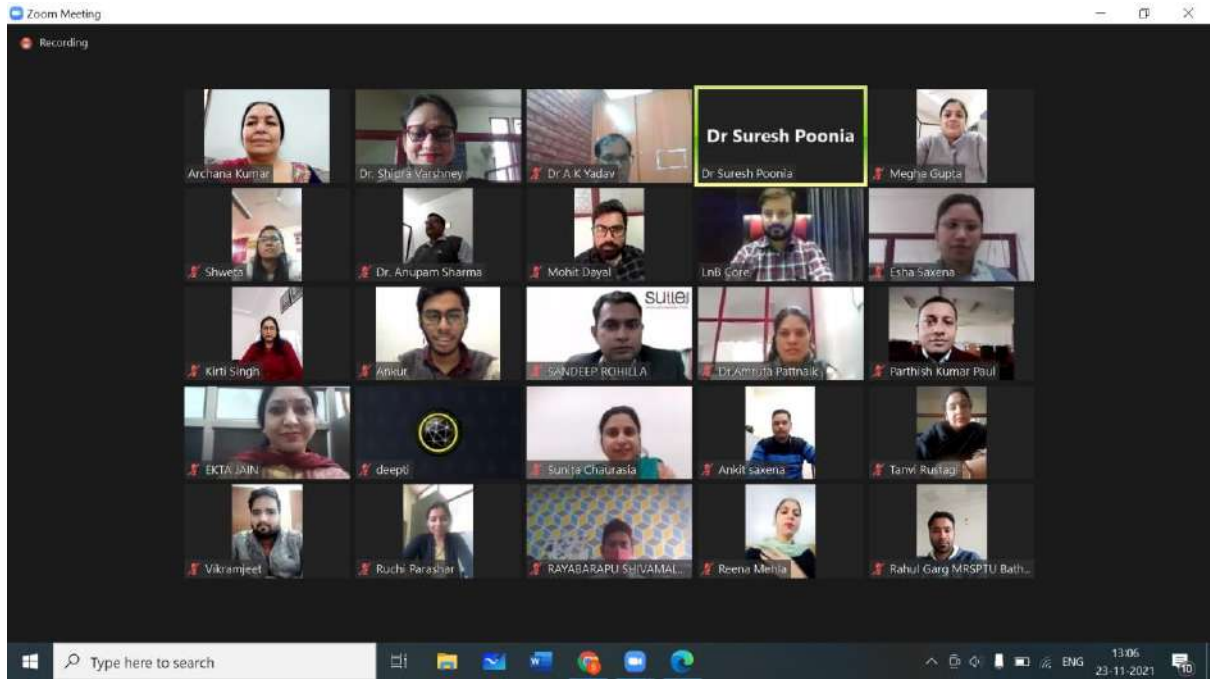
Riddhi Joshi

Sunita Chaurasia

Sheesh

Sheesh





**Megha Gupta**  
**Event-InCharge,CSE**

**Prof.(Dr.) Anupam Kumar Sharma**  
**HoD ,CSE**