

Dr. Akhilesh Das Gupta Institute of Technology and Management

(Formerly known as Northern India Engineering College)

(A Unit of Babu Banarasi Das Group of Educational Institutions) FC-26, Shastri Park, New Delhi-110053 (India)

Phones: 011-49905900

Report on Hands-On Training Role of Statistics in ML using Python Programming

Department of Artificial Intelligence & Machine Learning

Date: 7-Jan-2022

Timings: 9:00-11:00 AM

Venue: online

No of Participants: 66

Organized For: AI&ML (2nd Year)

Trainer Name: Ms. Kanika Miglani (Data Scientist Flax & Teal Ltd. UK)


Event Co-Ordinators: Dr. Preeti (Associate Professor, AI&ML)

Details of Training

Statistics is a core component of data analytics and machine learning. It helps you analyze and visualize data to find unseen patterns. If you are interested in machine learning and want to grow your career in it, then learning statistics along with programming should be the first

step. 

So get ready, as KRITRIM DHI - Department of AI & ML brings you a great opportunity for a

training session on the Role of Statistics in ML using Python programming. 
This is an interesting one right!!! Speaker - Ms. Kanika Miglani, Data Scientist, Flax & Teas UK .

Google Meet link: <https://meet.google.com/dvt-mdex-yyw>

Benefits of the Industrial Visit to students

After that We have learned about the new era of Big Data Handling Technologies
Including:

- Big data allows you to re-develop the products/services you are selling.
- Big data allows you to test different variations of CAD (computer-aided design) images to determine how minor changes affect your process or product.
- Big data tools help you map the data landscape of your company, which helps in the analysis of internal threats.

Dr.Preety

Event Coordinators

Dr. Meenakshi Yadav

DI (AI&ML)

Event photographs

The poster is for an online event. At the top left is the logo of Dr. Akhilesh Das Gupta Institute of Technology & Management, New Delhi. To its right is the institute's name and address: FC-26, Shastri Park, Delhi - 110 053. Below that, it says 'Approved by AICTE and Affiliated to GGSIPU' with the website 'www.adgitmdelhi.ac.in' and phone number '+91 11 49905900-99'. On the top right is the BBD GROUP logo. The middle section features the 'KRITRIM DHI DEPARTMENT OF AI & ML' logo on the left and the 'LOGIX' logo on the right. The main title 'HANDS ON TRAINING' is in large letters. Below it, an orange box contains the event topic: 'ROLE OF STATISTICS IN ML USING PYTHON PROGRAMMING'. The date and time are listed as 'SATURDAY 07 JANUARY 2023 9:00 AM ONWARDS'. A red box says 'ONLINE EVENT'. At the bottom left is the hashtag '#ShapingGenerations'. On the right, a circular photo shows Ms. Kanika Miglani, a woman with long dark hair wearing a black blazer over a white shirt. Below her photo, her name and title are listed: 'MS. KANIKA MIGLANI (DATA SCIENTIST) FLAX & TEAL LTD. UK'.

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BBD GROUP

KRITRIM DHI
DEPARTMENT OF AI & ML

LOGIX

HANDS ON TRAINING

**ROLE OF STATISTICS IN ML
USING PYTHON
PROGRAMMING**

**SATURDAY
07 JANUARY 2023
9:00 AM ONWARDS**


ONLINE EVENT

#ShapingGenerations

**MS. KANIKA MIGLANI
(DATA SCIENTIST)
FLAX & TEAL LTD.
UK**

Google Cloud Essentials | Google Meet - dvt-mdex-yyw

meet.google.com/dvt-mdex-yyw



Kanika Miglani

11:26 AM | dvt-mdex-yyw

Participants:

- DEVANSH SINGH ...
- meenakshi yadav
- vedanshi bansal
- tarun lata
- Arnab Mandal
- Dev Yadav
- Ansh Gupta
- You

45°F Fog

Google Cloud Essentials | Google Meet - dvt-mdex-yyw

Use co-activities in Google Meet


meet.google.com/dvt-mdex-yyw

Kanika Miglani is presenting

Artificial Intelligence

Key Applications

- Speech Recognition
- Customer Service
- Computer Vision
- Recommendation Engines
- Automated stock trading



Kanika Miglani

9:38 AM | dvt-mdex-yyw

Participants:

- meenakshi yadav
- vedanshi bansal
- tarun lata
- Kashish Arora
- Aman saxena
- Deepti Prasad
- 22 others
- You

43°F Fog

Google Cloud Essentials | Google Meet - dvt-mdex-yyw

meet.google.com/dvt-mdex-yyw

11:27 AM | dvt-mdex-yyw

45°F Fog

Google Cloud Essentials | Google Meet - dvt-mdex-yyw

meet.google.com/dvt-mdex-yyw

Kanika Miglani is presenting

10:45 AM | dvt-mdex-yyw

45°F Fog

Kanika Miglani is presenting

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graph TD; AI[Artificial Intelligence (AI)  
Computer mimics human intelligence] --> ML[Machine Learning (ML)  
Machine improves at tasks with experience]; ML --> SL[Supervised learning  
Algorithm requires labeled data for learning]; ML --> UL[Unsupervised learning  
Algorithm finds patterns and correlations between unlabeled data]; ML --> RL[Reinforcement learning  
Algorithm makes decisions that maximize reward]; SL --> CL[Classification  
• logistic regression  
• Naive Bayes  
• support vector machine  
• decision tree  
• random forest  
• neural network]; SL --> RE[Regression  
• linear regression  
• Gaussian process regression  
• support vector regression  
• decision tree  
• random forest  
• neural network]; UL --> CLUS[Clustering  
• k-means  
• DB SCAN  
• neural network]; UL --> AR[Association rules  
• single-dimensional  
• multi-dimensional]; UL --> DR[Dimensionality reduction  
• linear reduction  
• nonlinear reduction]; RL --> MDP[• Markov Decision Process]; RL --> Q[• Q-learning]; RL --> NN[• neural network];
```

9:52 AM | dvt-mdex-yyw

vedanshi bansal
meenakshi yadav
tarun lata
Kashish Arora
Ishika Aggarwal
Sachin Kumar Ray
Kanika Miglani
You

Kanika Miglani
Ansh Gupta
Rahul Sharma
meenakshi yadav
Arnab Mandal
Sachin Kumar Ray
DEVANSH SINGH THAKUR
RISHABH GIRI
Yash Raj Singh
Pranoo Singh
Adit Sharma
Rashi Gupta
Abhishek Dhawan_20_1
Qamar Ali
15 others
You

dvt-mdex-yyw

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meet.google.com/dvt-mdex-yyw

Kanika Miglani is presenting

VIDEO GAME SALES PREDICTION
 Video Game Sales Prediction: Weekend Hackathon #10
 Final Report: 10/11/2023

Task:
 The main business goal is to help the company to forecast the sales and to make a prediction on the sales of the product.

Year	Genre	Units Sold	Revenue	Profit
2017	Action	1,000,000	1,000,000,000	100,000,000
2018	Strategy	2,000,000	2,000,000,000	200,000,000
2019	Adventure	3,000,000	3,000,000,000	300,000,000
2020	Simulation	4,000,000	4,000,000,000	400,000,000
2021	Sports	5,000,000	5,000,000,000	500,000,000
2022	Horror	6,000,000	6,000,000,000	600,000,000

10:34 AM | dvt-mdex-yyw

45°F Fog

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meet.google.com/dvt-mdex-yyw

Kanika Miglani is presenting

Approach using ML

Decision Process → Error Function → Model Optimization Process

Prediction or classification
 Based on some input data, which can be labeled or unlabeled, the algorithm will produce an estimate about a pattern in the data.

Loss Function
 Evaluates the prediction of the model, if there are known examples, an error function can make a comparison to assess the accuracy of the model.

Repetition till accuracy
 Model fitting better to the data points in the training set, then weights are adjusted to reduce the discrepancy between the known example and the model estimate, updating weights autonomously until a threshold of accuracy has been met.

vedanshi bansal
 meenakshi yadav
 tarun lata

9:45 AM | dvt-mdex-yyw

43°F Fog

Kanika Miglani is presenting

Roadmap



Video thumbnails for participants:

- Kanika Miglani (Presenting)
- Mohammad Aarish
- meenakshi yadav
- vedanshi bansal
- tarun lata
- Sachin Kumar Ray
- Kashish Arora
- 28 others

11:11 AM | dvt-mdex-yyw

Meeting controls: Mute, Video Off, Chat, Hand Raise, Screen Share, More, End Call

System tray: Info, 37 participants, Chat, Screen Share, Lock