



Data Science-AI Course in Hyderabad

Python + Data Science (Machine Learning Includes) + Google Cloud Platform

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Data Analytics

- > Statistics
- > Probability

Python

- > Introduction to Python
- > Anaconda software introduction and installation
- > Python – Fundamentals
- > NumPy (with updated methods)
- > Pandas (with updated methods)
- > Matplotlib (Graphical data visualization)
- > Seaborn

MS Excel

1. Basics of Excel
2. Data management and Formatting
3. Statistical Formulas implementation
4. Short cut keys
5. Pivot table

Exploratory Data Analysis (EDA): The Initial Step of Data Science Project

1. Data Analysis Introduction
2. Types of Analysis
 - a. Univariate Analysis
 - b. Bivariate Analysis
3. Data Preprocessing
 - a. Data Cleaning



- b. Missing value treatment
- c. Outlier treatment
- d. Data transformation

Data Visualization

1. Histogram Plot
2. Bar Plot (Vertical & Horizontal)
3. Density Plot
4. Box Plot
5. Pie Plot
6. Line Plot
7. Correlation Matrix
8. Scatter Plot
9. Joint Plot
10. Heat map Plot

Machine Learning

- > A brief Introduction to Machine Learning
- > How Machine Learning Helping the Technology?
- > Types of Machine Learning
- > Supervised Learning
- > Unsupervised Learning
- > Reinforcement Learning (Self Supervised Learning)
- > Data set Models
- > Model Validation Metrics

Algorithms Introduction

1. Regression Algorithms
 - a. Linear Regression
 - b. Logistic Regression
2. Linear discriminant Analysis
3. Gradient decent Algorithm
4. Tree Algorithm
 - a. Decision tree
 - b. Random forest
5. KNN Algorithm
6. Naive Bayes Algorithm
7. Support vector machines algorithm
8. XG Boost



9. Clustering Algorithms
 - a. K Means Clustering
 - b. Hierarchical Clustering
10. Principle component Analysis
11. Dimensionality Reduction
12. Time Series Forecasting (ARIMA, SARIMA, MA, Prophet, Holts)
13. SK-Learn package for Algorithms implementation.

Deep Learning

1. Introduction to Deep learning
2. How Deep Learning changing the World
3. Neural Networks
 - a. Introduction
 - b. Convolution Neural network
 - c. Artificial Neural network
 - d. Deep Neural network
2. Tensor flow
3. Open CV

Complimentary

1. Optical Character recognition (OCR)
2. Image Processing
3. Basics and Importance of Big Data

Google Cloud Platform (GCP)

1. Importance of Cloud
2. Introduction to Google Cloud Platform
3. Project Setup
4. Introduction to GCP Administration
5. GCP Cloud Storage (Data Storage tool)
6. GCP Vertex AI (Data Science Work Notebooks and API's Platform)
7. GCP Big Query

Projects

1. Assignments for every topic
2. 4 – Realtime projects
3. Mockup interview
4. Resume preparation & Interview questions