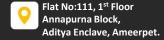




#### Who We Are

- ✓ We are a team of IT professionals started providing training to the students with a passion to deliver real time knowledge during the classes.
- ✓ We have started Tech Leads IT 10 years back in a small space with few courses and we are now offering multiple courses in different technologies.
- ✓ Our Director Mr.Krishna has vast experience in handling the organization by identifying skill full trainers from the market and selecting them through internal assessment process before onboarding.
- ✓ Tech Leads IT trainers are certainly skilled real time consultants providing quality content and teaching with dedication and enthusiasm.







- ✓ Faculty:
- **✓** Faculty Experience
- **✓** Duration:
- ✓ Course Fee:
- **✓** Batch Date:
- **✓** Batch Timings:
- ✓ Batch Mode
- ✓ Certifications:



#### **Data Science Certification Course**

#### **About Course**

Data science is a broad field that involves dealing with large volumes of data to uncover hidden trends and patterns and extract valuable information that aids in better decision-making. As companies are collecting massive amounts of data, they use various data science tools and techniques to build predictive models.

The course offers extensive training on the most in-demand Data Science and Machine Learning skills with hands-on exposure to key tools and technologies, including Python, R, Tableau, and concepts of Machine Learning. Become a Data Scientist by diving deep into the nuances of data interpretation, mastering technologies like Machine Learning, and mastering powerful programming skills to take your career in Data Science to the next level.

Tech Leads IT's Data Science training can help you learn all of its concepts from scratch.





#### Data Science Project Lifecycle

Demo: Introduction to Types of Analytics, Project Life Cycle, LMS walk through

#### Basic Stat

- Data Types
- Measure Of central tendency
- Measures of Dispersion Graphical Techniques
- Skewness & Kurtosis
- Box Plot

#### R Language

- R & R Studio
- Descriptive Stats in R

#### Python

- Python (Installation and basic commands) and Libraries Jupyter note book
- Set up GitHub
- Descriptive Stats in Python
- Pandas and Matplotlib

#### Basic Statistics- 2

- Random Variable
- Probability
- Probability Distribution Normal Distribution SND
- Expected Value Sampling Funnel
- Sampling Variation Central Limit Theorem
- Confidence interval

#### Assignments Session-1

### Hypothesis Testing

- Introduction to Hypothesis Testing
- Hypothesis Testing ( 2 propo<ion test, 2 t sample t test) Anova</p>
- Chisquare



- EDA:
  - Exploratory data analysis-I (Data Cleaning, Imputation Techniques, Data analysis)
  - Visualization(Sca8er Diagram, Correlation Analysis, Transformations)
- Linear Regression:
  - Principles of Regression
  - Intro to Simple Linear Regression
  - Multiple Linear Regression
- Logistic Regression:
- Deployment Method:
  - Model deployments using R and Python
- Assignments:
  - Assignments Session-2
  - Clustering in Coduction Hierarchical clustering
- Data Mining:
  - Unsupervised ML Algorithms
  - Kmeans
  - DBSCAN
- Dimensional Reduction Techniques
  - PCA
  - tSNE
- Market Basket Analysis
  - Association Rules
- Recommendation System and Assignment:
  - Recommender System
  - Assignments Session-3



- Supervised Machine Learning:
  - Supervised Machine Learning Concept( Regression Tasks/ Classification Tasks)
- Decision Tree:
  - Decision Tree (C5.0)
- EDA-2:
  - EDA -2

     ( Encoding Methods OHE, Label Encoders, Outlier detection-Isolation Forest)
  - Calculating the Predictive Power Score (PPS)
- Feature Engineering:
  - Feature Engineering (Tree based methods, RFE, PCA)
- Modal Validation Techniques:
  - Model Validation Methods (train-test, CV, Shuffle CV, and Accuracy method)
- Ensembled Technique:
  - Bagging Random Forest Boosting
  - XGBM
  - LGBM
- Classifiers:
  - KNN
  - Support Vector Machines
- Regularization Techniques:
  - Lasso
  - Ridge Regressions



- Neural Network:
  - ANN
  - Optimization Algorithm(Gradient descent)
  - Stochastic gradient descent(intro) Back Propagation method Introduction to CNN Assignments Session-4
- Text Mining:
  - Introduction to Text Mining
  - VSM
  - Intro to word embedding's
  - Word clouds and Document Similarity using cosine similarity Named Entity Recognition
- Naive Bayes:
  - Text classification using Naive Bayes
  - Emotion Mining
- Time Series:
  - Introduction to Time series
  - Level, Trend and Seasonality Strategy Scatter plot
  - Lag plot
  - ACF
  - Principles of Visualization Nalve forecasts
- Forecasting:
  - Forecasting Error and it metrics Model Based Approaches
  - AR Model for errors
  - AR Model for errors
  - Data driven approaches
  - MA
  - Exponential Smoothing
  - ARIMA
  - Survival Analysis
- Project Discussion:
  - Hands on using R and Python Projects description with deployment



#### Value Added Courses- Al

- Intro to Neural Network & Deep Learning
  - Intro
  - Deep Learning Importance [Strength & Limitations] SP | MLP
  - Neural Network Overview
  - Neural Network Representation Activation Function
  - Loss Function
  - Importance of Non-linear Activation Function Gradient Descent for Neural Network
- Parameter & Hyper parameter
  - Train, Test & Validation Set Vanishing & Exploding Gradient
  - Dropout
  - Regularization
  - Optimization algo
  - Learning Rate
  - Tuning
  - Soñmax
- S CNN
  - S cNN
  - Deep Convolution Model
  - Detection Algorithm
  - Face Recognition
- S RNN
  - S LSTM
  - Bi Directional LSTM



#### **Value Added Courses**

#### © R

- Introduction to R Programming
- How To Install R & R Studio
- Data Structures in R
- Programming Statistical
- How to Import Dataset in R
- R-Packages
- How to Integrate R and SQL
- How to Get Data From SQL to R

#### Python

- Introduction to Python
- Installation of Anaconda Python
- DiPerence between Python2 and Python3
- Python Environment
- Operators
- Identifiers
- Exception Handling (Error Handling)

#### MYSQL

- Introduction to What is DataBase
- DiPerence between SQL and NOSQL DB
- How to Install MYSQL and Workbench
- Connecting to DB
- Creating to DB
- What are the Languages inside SQL How to Create Tables inside DB and Inserting the Records
- Select statement and using Queries for seeing your data
- Joining 2 tables
- Where clause usage
- Indexes and views
- DiPerent operations in SQL
- How to Connect to your applications from MYSQL includes R and Python



#### Azure

- Introduction to Cloud Computing
- DiPerence between On Premise and Cloud
- Types of Service Models
- Advantages of Cloud Computing
- Azure Global Infrastructure
- Creation of Free tire account inside Azure
- Brief introduction to Machine Learning Services on Cloud and more

#### Tableau

- Introduction to Data Visualization
- Tableau Data Visualization Tool
- Tableau User Interface
- Basic Chart types
- Intermediate Chart

#### Other Value Added Courses

- Advanced Charts
- Maps in Tableau
- Adding Background Image
- Data Connectivity in-depth understanding
- Creating Calculated Fields
- Responsive Tool Tips
- Connecting Tableau with Tableau Server
- Connecting Tableau with R



## Key Features of the Program



Certificate from Tech Leads IT



Training by Real Time Experts



Material, Case Studies & Assignments



One-On-One with Industry Mentors



Predefined set of Interview Questions & Answers



Mock-Up
Interview Sessions



**Real-Time Projects** 



**Placements** 



# Our students got placed below tie-up companies

























Ready to get incubated in

# Data Science Course

Lets Start!

# Contact us

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