

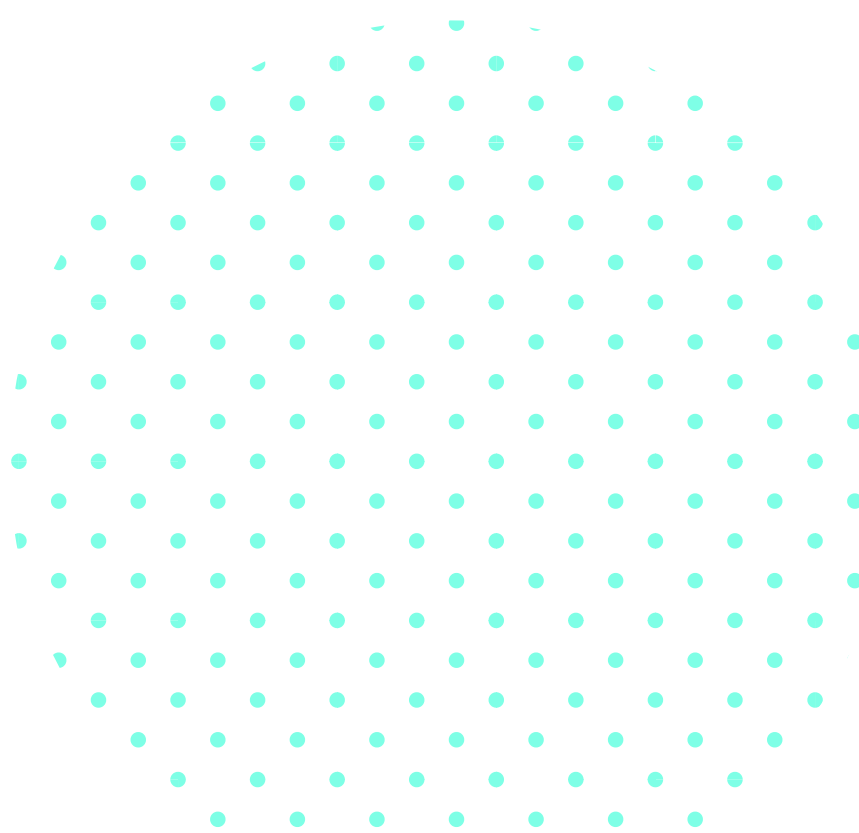
APPLIED

DATA
SCIENCE

AND

MACHINE
LEARNING

WITH



Live Online classes with Certificate & 5 projects

1

ANALYTICAL THINKING

- Environmental setup
- Guesstimate question
- Analytical thinking
- Data Science overview

2

DATA ANALYSIS USING EXCEL

- Excel features
- Excel formulas
- Analytics within Excel
- Visualization in Excel

3

DATA MINING FROM SQL DATABASES AND MONGODB

- Data mining
- Mining from Sqlite3
- Mining from MongoDB
- Loading data from CSV
- Interacting with Cloud data

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LEARNING CHECKPOINT 1

- Analytics Quiz
- Working with Excel data ribbon
- Setting up a cloud database



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PYTHON FUNDAMENTALS

- The CRISP-DM Framework
- Revisiting important concepts
- String formatting
- List and tuples
- Dictionary and sets
- Comprehensions
- map, filter and lambda

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NUMPY ARRAY

- n-dimension arrays
- Array properties
- Array functions
- Radom number arrays

7

PANDAS

- Reading CSV data
- DataFrame properties
- DataFrame slicing and sorting
- Data aggregations and joining

8

LEARNING CHECKPOINT 2

- Python Quiz
- Numpy array functions test
- Pandas DataFrame manipulation

**NumPy**

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DATA VISUALISATION WITH MATPLOTLIB AND SEABORN

- Graph forms and markers
- Line plot
- Scatter plot
- Bar graph and histogram
- Pie chart
- Cohort analysis with seaborn

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EXPLORATORY DATA ANALYSIS (EDA)

- Data investigation & pattern discovery
- Anomaly detection
- Model selection

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STATISTICS (PART-1)

- Statistical significance
- Basics statistical measurements
- Probability distributions
- Hypothesis testing

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LEARNING CHECKPOINT 3

- Statistics Quiz
- Subplots and HeatMap
- EDA assignment

 matplotlib statistics jupyter

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STATISTICS (PART-2)

- Probability Distributions
- Discrete Distribution
- Binomial Distribution
- Probability Density Functions
- Continuous Distribution
- Normal Distribution
- Continuous Distribution
- Standard Normal Distribution
- Central Limit Theorem
- Setting Up a Hypothesis test
- One tailed and two-Tailed test
- Type I and Type II error
- Significance of P value
- T Distribution
- Two Sample Mean Test
- A/B testing

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MACHINE LEARNING

Supervised Learning [Regression]

- Simple Linear Regression
- Multiple Linear Regression

[classification]

- Logistic Regression
- Support Vector Machines
- Naive Bayes
- Decision Tree
- K-nearest neighbours

Unsupervised Learning [Clustering]

- K means/ K median
- Principle Component Analysis
- Apriori Algorithm

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CAPSTONE PROJECT

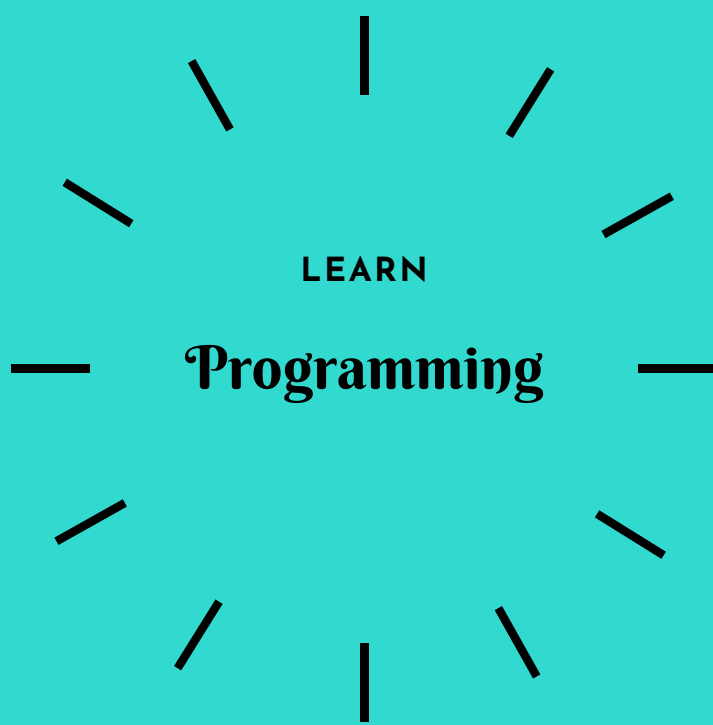
Industry project with real-world data sets

COURSE HIGHLIGHTS

- Duration: **2 months**
- Course Cycle: Mon, Wed, Thr, Sat
- Class timing: **8:00 PM - 10:00 PM** (IST)
- Trainer: Anurag Deyasi
- Course Fee: **INR 35,000**
- Lab setup: Python3, MSExcel, Sqlite3, Pymongo, Numpy, Pandas, Matplotlib, Seaborn, Statsmodels, Scikit-learn, Git

ADD-ON SERVICES

- Course completion certificate
- Placement preparation kit
- Backup classes
- Discussion forum
- Community access
- Comprehensive Notes
- Practice Datasets
- Live mentoring



Anurag Deyasi

Trainer



Ram Kumar

Mentor

EMAIL

hello@programink.com

CONTACT

(+91) 807 332 8732