

**GET TRAINED BY  
INDUSTRY EXPERTS**

#### ADDRESS:

##### Head Office:

M-12, OLD DLF  
Colony, Sec-14,  
Near-SBI Bank,  
Gurugram – 122001  
(Haryana)

##### Branch Office:

Building No – 578/2,  
Gopal Nagar,  
Near Auto Stand,  
Beside OBC Bank  
New Railway Road  
Gurugram-122001  
(Haryana)



#### **Contact**

7827180534  
9911459630



**Python**

**NumPy, Pandas**

**Machine Learning**

**Supervised Learning**

**Unsupervised Learning**

**Project**



[www.facebook.com/TCAGURGAON.IN/](https://www.facebook.com/TCAGURGAON.IN/)



<https://twitter.com/GurgaonTca>



[tcagurugram@gmail.com](mailto:tcagurugram@gmail.com)



<http://www.tcagurgaon.in>

## Python

### Python Training

- Introduction to Python
- Installation of Python
- Python programs using Spyder, Command Prompt
- Working with Jupyter Notebooks
- Python Variables & Operators
- Basic Data containers: Lists, Dictionaries, Tuples & sets

### Iterative Operations & Functions in Python

- For Loops in Python
- List & Dictionary Comprehension
- While loops and conditional blocks
- List/Dictionary using loops
- Functions in Python
- User Define Classes & Functions

### Data Summary: Numerical and Visual in Python

- Need for data summary
- Summarising numeric data in pandas
- Summarising categorical data
- Group wise summary of mixed data
- Need for visual summary
- Introduction to ggplot & Seaborn
- Visual summary of different data combinations

### Data Handling in Python using NumPy & Pandas

- Introduction to NumPy arrays, functions & properties
- Introduction to pandas
- Dataframe functions and properties
- Reading and writing external data
- Manipulating Data Columns

# Machine Learning

## An Introduction to Machine Learning

- Introduction
- What is Machine Learning?
- Types and Applications of ML
- AI vs ML
- Essential Math for ML and AI

## Supervised Learning

- Introduction to Supervised Learning
- Linear Methods for Classification
- Linear Methods for Regression
- Support Vector Machines
- Basis Expansions
- Model Selection Procedures

## Unsupervised Learning

- Introduction to Unsupervised Learning
- Association Rules
- Cluster Analysis
- Reinforcement Learning

## Neural Networks

- Introduction to Neural Networks
- The Perceptron
- The Backpropagation Algorithm
- Training Procedures
- Convolutional Neural Networks

## Real World Machine Learning

- Introduction to Real World ML
- Choosing an Algorithm
- Design and Analysis of ML Experiments
- Common Software for ML

## Final Project