

# ZENUS INFOTECH INDIA PVT. LTD.

## CURRICULUM OF MACHINE LEARNING

Course Duration: 6/8 Weeks\*

Revisiting Python	Visualisation
Python Libraries for ML	Scikit-learn Library for ML
What is ML? Why ML?	Code Exercises
Introduction to Supervised ML	Supervised learning - Regression
Introduction to Unsupervised ML	Different types of Regression-Linear and Logistic
Mathematical Background for ML- Matrix ops Probability Theory (Bayes' Theorem)	Decision tree Algorithms
Statistical knowledge for ML- Mean, Median, Mode , Z-scores, bias -variance dichotomy	Real-world code exercises
Tools required for development - Anaconda, Jupyter NB	Supervised Learning- Classification
ML libraries Explained: Scipy, Numpy, Matplotlib	Naive- Bayes' Classification
ML Glossary- Variable types, k-fold CV, AUC, F1score, Overfitting/Underfitting, Generalization,	KNN Classification
Data split & hyper parameter training	Real-world code exercises
Data wrangling using Pandas	Clustering Introduction
Preprocessing data and feature engineering	k-means clustering
Exploratory Data analysis using	Code Exercises
	Advanced topics-Curse of Dimensionality- PCA algo
	SVM Classification Introduction
	Real-time mini project

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