

Machine Learning Training and Internship Program Syllabus

15 Days (Introduction to Machine Learning)

Objective:

- Understand the fundamentals of machine learning and build a basic model.

Syllabus:

1. **Day 1-3: Introduction to ML**
 - a. What is ML? Types (Supervised, Unsupervised, Reinforcement Learning).
 - b. Basic Python for ML: NumPy, pandas, and matplotlib.
2. **Day 4-6: Data Preprocessing**
 - a. Handling missing data, encoding categorical data, scaling features.
 - b. Introduction to data visualization with seaborn.
3. **Day 7-9: Linear Regression**
 - a. Simple linear regression.
 - b. Implementing linear regression with Python (scikit-learn).
4. **Day 10-12: Classification Basics**
 - a. Logistic regression.
 - b. Evaluating models with accuracy, precision, recall, and F1-score.
5. **Day 13-15: Hands-On Mini Project**
 - a. Predict house prices using linear regression.
 - b. Classification of Iris dataset.