

# Daily Entry – Week 2

Date: 17 – 21 June, 2024

## Day 1: Introduction to Machine Learning

- Supervised vs. unsupervised learning.
- Common algorithms (e.g., linear regression, decision trees, k-means).
- Applications of ML in real-world problems.

## Day 2: AutoML & PyCaret

- Automating the model training and selection process.
- PyCaret: An introduction to this library to simplify machine learning workflows.
- Building and comparing models with minimal coding.

## Day 3: Optimization & Statistics

- Optimization techniques (e.g., gradient descent) for improving model performance.
- Statistical concepts like probability distributions, hypothesis testing, and correlation.

## Day 4: Mini Projects

- Applying machine learning concepts to small datasets.
- Example: Predicting house prices, classifying flowers, or identifying spam emails.

## Day 5: Intro to Kaggle

- Creating a Kaggle account and exploring datasets.
- Participating in beginner-friendly competitions to analyze data and create predictions.