

Training Day 19 Report

Date: 16 July 2025

Topic: Logistic Regression

Overview

Logistic Regression is a **classification algorithm** used to predict categorical outcomes (like Yes/No or 0/1). Unlike Linear Regression, which predicts continuous values, Logistic Regression outputs probabilities using the **sigmoid function**.

Key Points

- Used for **binary and multiclass classification**.
- Outputs values between **0 and 1** as probabilities.
- Common applications:
 - Spam detection
 - Disease prediction
 - Customer churn analysis

Learning Outcome

- Understood the purpose of Logistic Regression.
- Learned how it is applied to **real-world classification problems**.
- Differentiated it from Linear Regression.