

**Course Name: Machine Learning** 

Weekly Report: 7

**Group Name: XYZ** 

Submitted to faculty:

**Mehul Raval** 

**Date of Submission: 12 Apr** 

2025

## **Student Details**

Roll No.	Name of the student	Name of the program
AU2240106	Meet Rathi	B.Tech in CSE
AU2240160	Harsh Panchal	B.Tech in CSE
AU2240153	Aditya Agarwal	B.Tech in CSE
AU2240085	Hariom Bhatt	B.Tech in CSE
AU2140181	Jeel Kadivar	B.Tech in CSE

## Table of Contents.

Work Done This Week	4
Work To be done next week	4

## WORK DONE THIS WEEK

- The UAV-based MOT platform requires development of the tracklet merging algorithm through successive iterations.
- Used previously collected feature extraction insights to change the tracklet merging protocol.
- Systematically tested new configurations:
  - Different temporal-spatial weightings
  - Fusion of appearance and motion-based features
- A detailed assessment took place through advanced benchmarking scripts which evaluated fresh segments from video content.
- Measures for evaluation includes logged results for comparison through metrics that followed.
  - Merge accuracy
  - False merges and missed merges
  - Computational time per evaluation cycle
- Periodic modifications take place for association scoring mechanics and threshold parameters to address various circumstances:
  - Overlapping tracks
  - Short tracklets
  - o Gaps due to missed detections