

An abstract graphic design on a black background. A large white circle is centered, with a thick light green ring around its bottom half. To the left of the circle are two white wavy lines and a solid light orange circle. To the right is a light orange double-circle and a grid of white dots. The text 'Week 11' is centered in white.

Week 11

# Manual Data Labelling

- Challenges automatically classify session
- Attempted initial logic to use average speed, rpm, throttle position.
- Second attempt using ROC, requires more testing

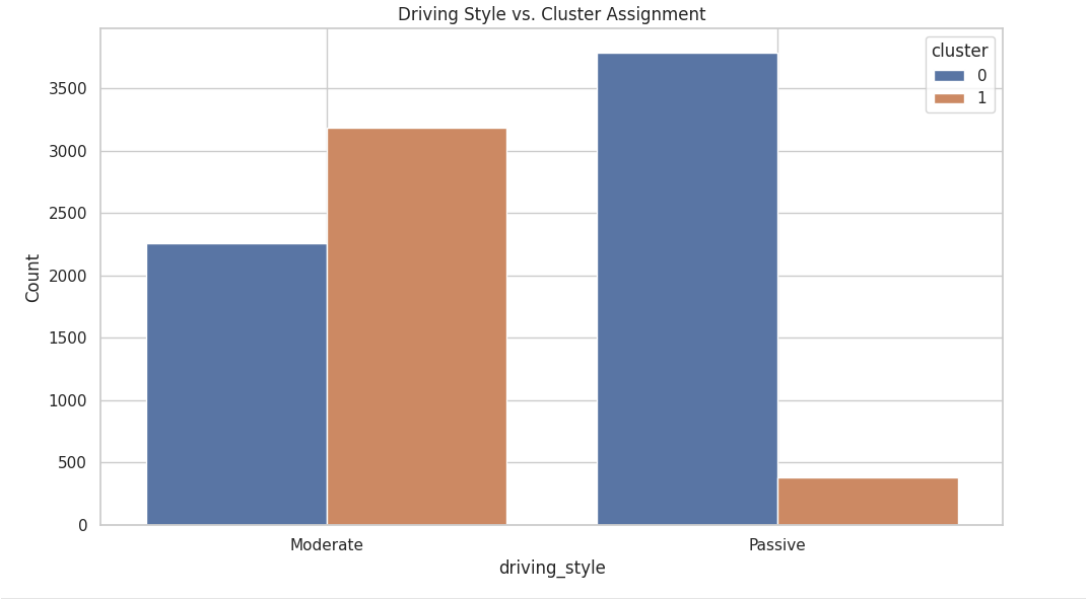
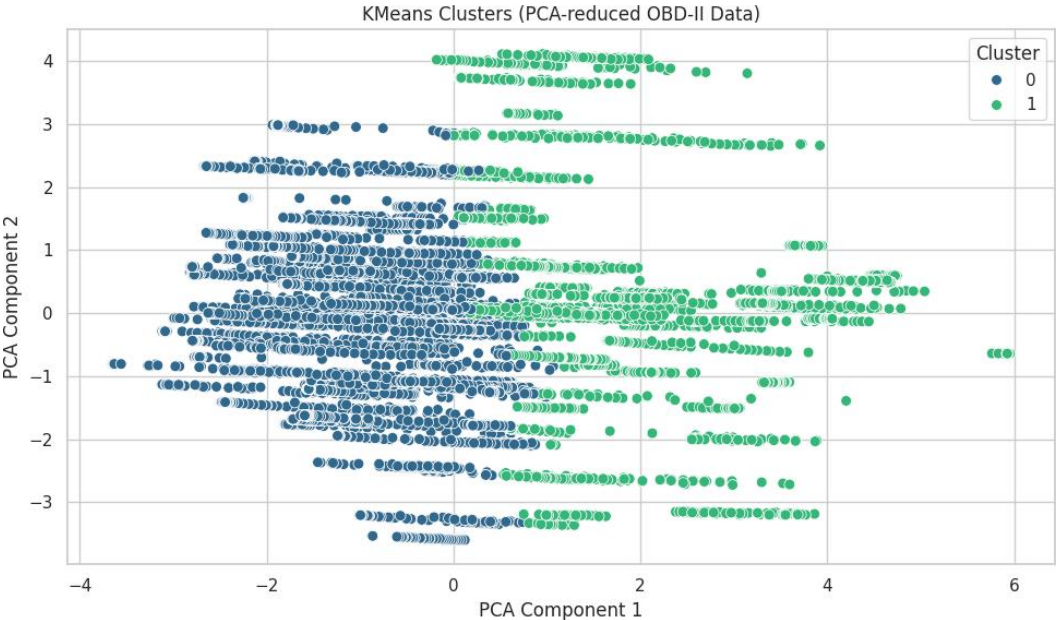


# Unsupervised Learning Exploration

## Proposal

- Use unsupervised learning to identify natural clusters in data
- Classify clusters manually by assigning labels from cluster statistics
- Less subjectivity
- Scalable to much larger datasets

silhouette Score: 0.169





# Automation Cloud Service

Dashboard was implemented this week  
on the server, deployed on Hugging Face,  
containerized in Docker





# Data Cleaning Pipeline & Output

## **Removed Fully Empty Rows**

Dropped rows with no sensor or timestamp data.

## **Dropped Rows with >50% Missing Values**

Ensured integrity by removing sparsely populated entries.

## **Filtered Out Rows Without Driving Style Labels**