Dataset Documentation: Riya Sharma .csv

1. Overview

This dataset contains time-series sensor data from an internal combustion engine. It records various parameters such as engine speed, temperature, and pressure over a 50-second interval. The inclusion of a Label column suggests this dataset is intended for binary classification tasks, such as anomaly detection or predictive maintenance.

2. Dataset Structure

Total Rows: 50

Total Columns: 9

Column Name	Units	Description
Row	-	Sequential index
Timestamp (sec)	Seconds	Elapsed time
Engine_RPM	RPM	Revolutions Per Minute
Coolant_Temp	deg C	Coolant temperature
Fuel_Pressure	kPa	Fuel delivery pressure
Intake_Pressure	kPa	Manifold absolute pressure
Oil_Temp	deg C	Engine oil temperature
Load_Percent	%	Engine torque load percentage
Label	Binary	Target (0: Normal, 1: Anomaly)

3. Statistical Summary & Insights

- Engine Speed: Ranges from 748 to 1,910 RPM.
- Temperature: Peaks at 135 deg C (Coolant) and 139.1 deg C (Oil).
- Target Distribution: 70% Normal (Label 0), 30% Anomaly (Label 1).
- Observation: Anomalies (Label 1) are strongly associated with high thermal readings, likely indicating an overheating diagnostic set.