



# **Secondhand Car Price Prediction**

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# About Dataset

Here is a brief overview of the dataset:

**v.id:**

Unique identifier for each vehicle.

**on road old:**

The original on-road price of the car when it was first purchased.

**on road now:**

The current on-road price of the car.

**Years:**

The age of the car in years.

**Rating:**

A rating score that reflects the car's overall performance and user satisfaction.

**Condition:**

The current condition of the car (e.g., excellent, good, fair, poor).

**km:**

The total kilometers the car has been driven.

**economy:**

The fuel economy of the car, typically measured in kilometers per liter or miles per gallon.

**top speed:** The maximum speed the car can achieve.

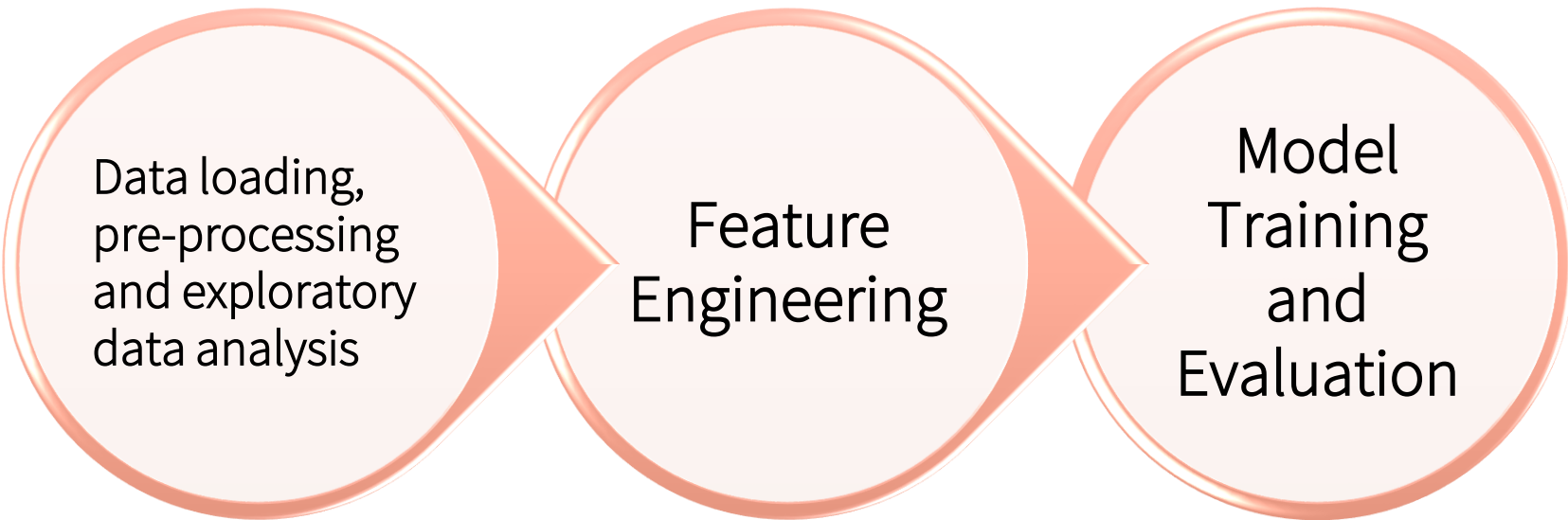
**hp:** The horsepower of the car.

**torque:** The torque produced by the car's engine.

**current price:** The current market price of the car.

# Methodology Overview

Processes in getting the work done



Data loading,  
pre-processing  
and exploratory  
data analysis

- Check for null values
- Check for duplicated records
- Statistical summary
- Shapiro-Wilk test for data distribution confirmation
- Correlation matrix

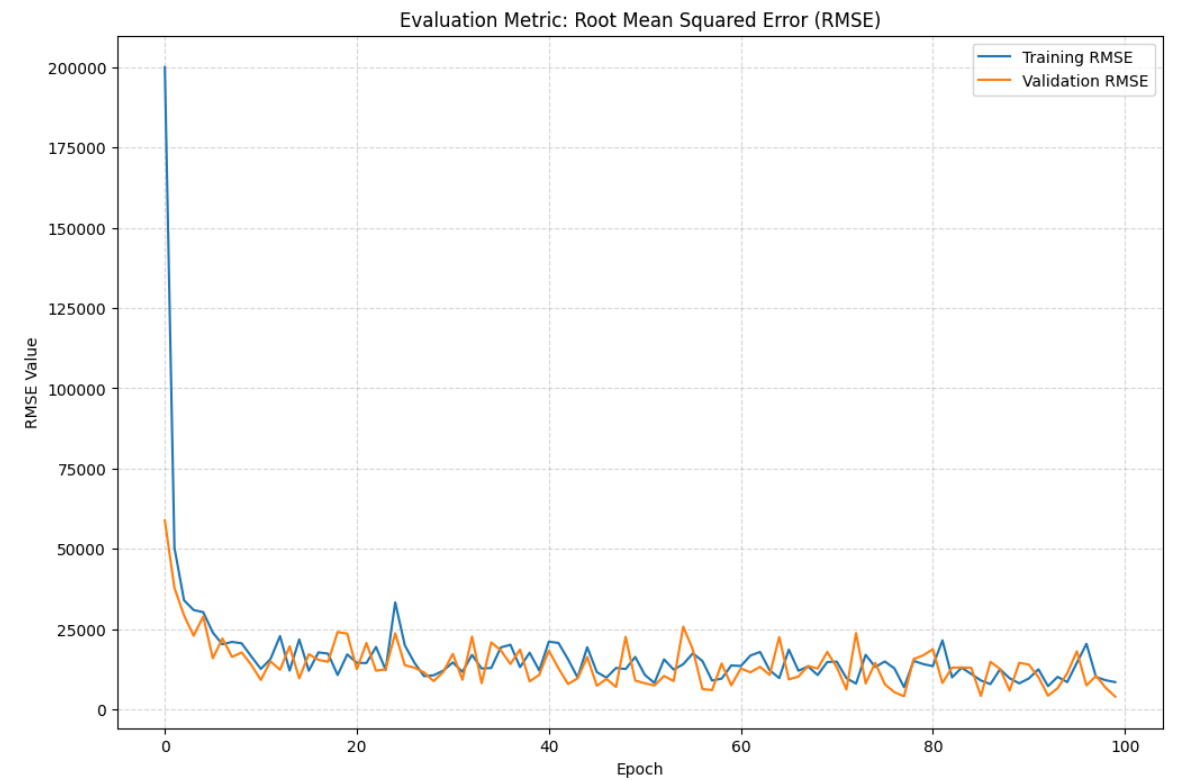
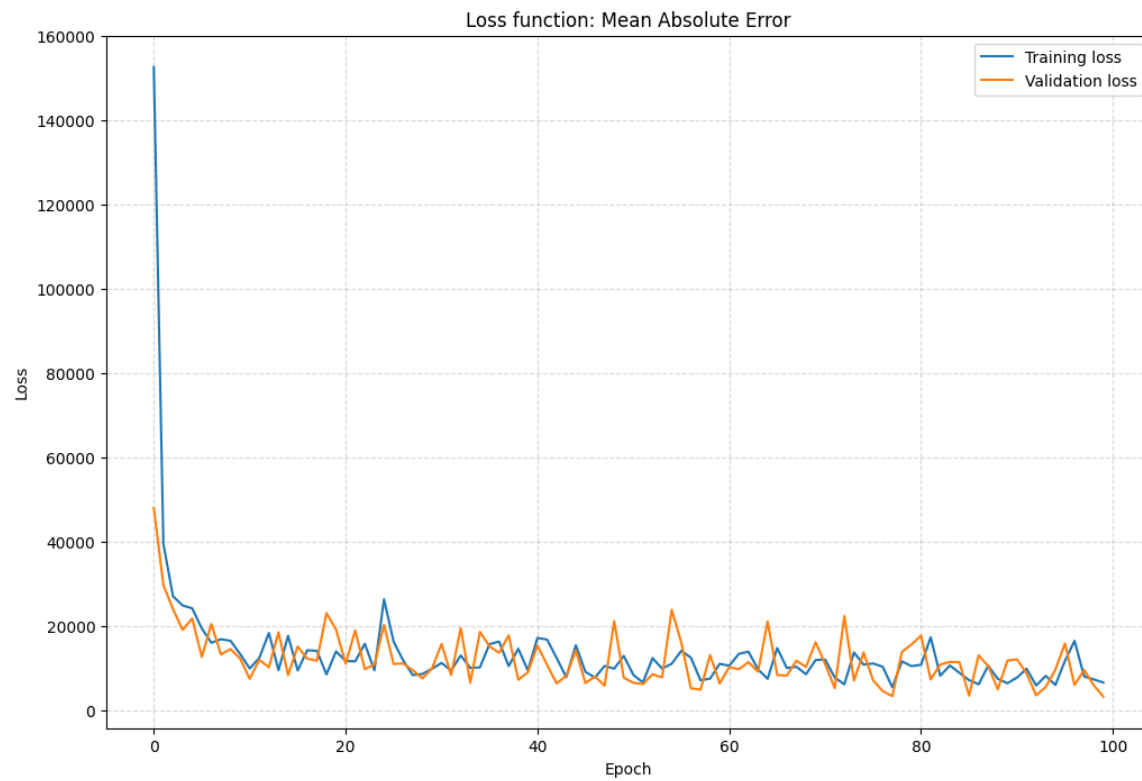
Feature  
Engineering

- **Univariate Selection** – used SelectKBest class to select number of features.
- Data Normalization
- **Train-test-split:** 80 -10-10

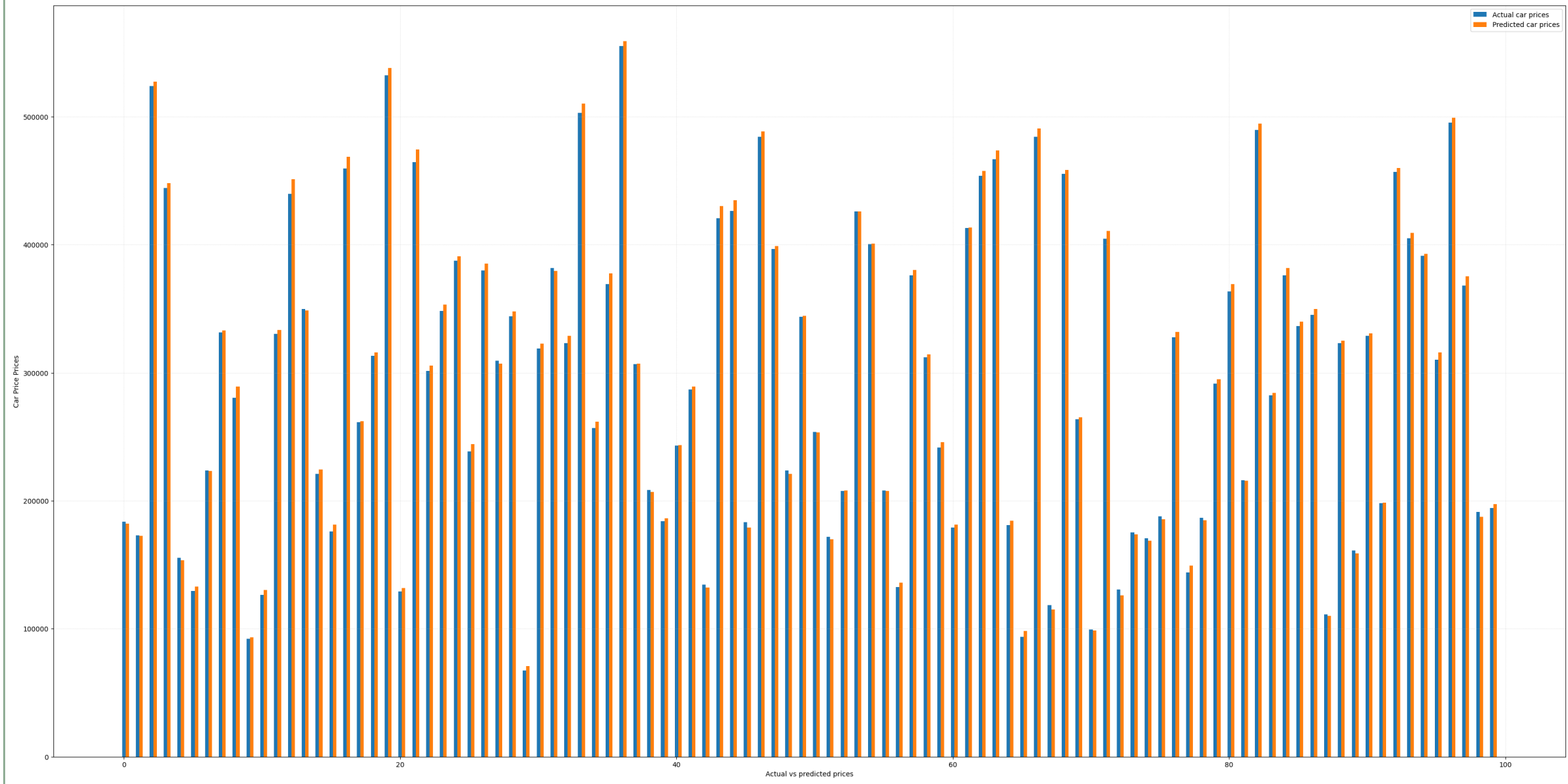
Model  
Training  
and  
Evaluation

- **Model set-up:** Three (3) hidden layers with 128 neurons, activation function = “relu” and an output layer.
- **Evaluation metric:** Root Mean Square Error
- **Loss function:** Mean Absolute Error

# Model Evaluation



# Result



**Thank  
you**

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Source code:

[https://github.com/DAMILARE1012/second\\_hand\\_car\\_prediction](https://github.com/DAMILARE1012/second_hand_car_prediction)