### **Literature survey**

#### Paper 1: Car Price Prediction Using Machine Learning

Publication Year: JUNE 2021

Author: Ketan Agrahari, Ayush Chaubey, Mamoor Khan, Manas Srivastava

Summary: With the recent arrival of internet portals, buyers and sellers may obtain an appropriate status of the factors that ascertain the market price of a used automobile. Lasso Regression, Multiple Regression, and Regression Trees are examples of machine learning algorithms. We will try to develop a statistical model that can forecast the value of a pre-owned automobile based on prior customer details and different parameters of the vehicle. This paper aims to compare the efficiency of different model predictions to find the appropriate one. On the subject of used automobile price prediction, several previous studies have been conducted. To anticipate the value of pre-owned automobiles in Mauritius, Pudaruth employed naive Bayes, k-nearest neighbors, multiple linear regression, and decision trees. However, because there were fewer cars observed, their results were not good for prediction. In his article, Pudaruth concluded that decision trees and naive Bayes are ineffective for continuous-valued variables.

# <u>Paper 2 : Car's Selling Price Prediction using Random Forest Machine Learning Algorithm. 5th International Conference on Next Generation Computing Technologies</u>

Year: (NGCT-2019)

In this paper the main objective is to predict the price of the used car by making use of random forest algorithm and extra tree regression algorithm. Post performing data preprocessing the model is trained and Hyper-Parameter tuning is done using Randomized Search CV to get optimal result.

Algorithms: Random Forest Algorithm, Extra Tree Regression Algorithm Advantage: The algorithms mentioned in this paper would result in a highly accurate and fast prediction irrespective of the size of the dataset.

<u>Disadvantage</u>: The size of the dataset may vary from small to extremely large, as the size of datasets tend to grow the computing time for the prediction would also grow in a proportional manner.

## Paper 3: Prediction of Resale Value of the Car Using Linear Regression Algorithm

Year: 2020

Author: Kiran S

Algorithm: A correlation with each attribute to that of target attribute is found and linear regression curve with the target attribute is drawn. As a final step the total error and accuracy is measured.

## Paper 4: Price prediction machine learning model for used cars using <a href="mailto:pyspank">pyspank</a>

Author: Pasindu ukwatta

<u>Project Description:</u> We can analyse and creating plots from the results we identified few interesting factors from the dataset

Advantages: Highly explainable and easy to interpret

Disadvantages: In sometimes car owner did not put those details.