

LITERATURE SURVEY

1.1 TITLE- USED CAR PRICE PREDICTION

AUTHOR- Praful Rane¹, Deep Pandya², Dhawal Kotak³

DESCRIPTION

The price of a new car in the industry is fixed by the manufacturer with some additional costs incurred by the Government in the form of taxes. So, customers buying a new car can be assured of the money they invest to be worthy. But, due to the increased prices of new cars and the financial incapability of the customers to buy them, Used Car sales are on a global increase. Therefore, there is an urgent need for a Used Car Price Prediction system which effectively determines the worthiness of the car using a variety of features. Existing System includes a process where a seller decides a price randomly and buyer has no idea about the car and its value in the present-day scenario. In fact, seller also has no idea about the car's existing value or the price he should be selling the car at. To overcome this problem, we have developed a model which will be highly effective. Regression Algorithms are used because they provide us with continuous value as an output and not a categorized value. Because of which it will be possible to predict the actual price a car rather than the price range of a car. User Interface has also been developed which acquires input from any user and displays the Price of a car according to user's inputs.

1.2 TITLE- Vehicle Price Prediction using SVM Techniques

AUTHOR- S.E. Viswapriya, Darbuka Sai Sandeep Sharma, Gandavarapu Sathya Kiran

DESCRIPTION

The prediction of price for a vehicle has been more popular in research area, and it needs predominant effort and information about the experts of this particular field. The number of different attributes is measured and also it has been considerable to predict the result in more reliable and accurate. To find the price of used vehicles a well-defined model has been developed with the help of three machine learning techniques such as Artificial Neural Network, Support Vector Machine and Random Forest. These techniques were used not on the individual items but for the whole group of data items. This data group has been taken from some web portal and that same has been used for the prediction. The data must be collected using web scraper that was written in PHP programming language. Distinct machine learning algorithms of varying performances had been compared to get the best result of the given data set. The final prediction model was integrated into Java application.

1.3 TITLE- Used Cars Price Prediction and Valuation using Data Mining Techniques

AUTHOR- Abdulla AlShared

DESCRIPTION

Due to the unprecedented number of cars being purchased and sold, used car price prediction is a topic of high interest. Because of the affordability of used cars in developing countries, people tend more purchase used cars. A primary objective of this project is to estimate used car prices by using attributes that are highly correlated with a label (Price). To accomplish this, data mining technology has been employed. Null, redundant, and missing values were removed from the dataset during pre-processing. In this supervised learning study, three regressors (Random Forest Regressor, Linear Regression, and Bagging Regressor) have been trained, tested, and compared against a benchmark dataset. Among all the experiments, the Random

Forest Regressor had the highest score at 95%, followed by 0.025 MSE, 0.0008 MAE, and 0.0378 RMSE respectively. In addition to Random Forest Regression, Bagging Regression performed well with an 88% score, followed by Linear Regression having an 85% mark. A train-test split of 80/20 with 40 random states was used in all experiments. The researchers of this project anticipate that in the near future, the most sophisticated algorithm is used for making predictions, and then the model will be integrated into a mobile app or web page for the general public to use.

1.4 TITLE- Prediction of Resale Value of the Car Using Linear Regression Algorithm

AUTHOR- Kiran S

DESCRIPTION

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. The demand for used cars has increased significantly in the past decade and it is prognosticated that with Covid-19 outbreak this requirement will augment considerably. Hence to enhance the reliability, with the expansion of the used car market, a model that can forecast the current market price of a used automobile on the basis of a variety of criteria. This analysis can be used to study the trends in the industry, offer better insight into the market, and aid the community in its smooth workflow. The aim of this research paper is to predict the car price as per the data set (previous consumer data like engine capacity, distance travelled, year of manufacture, etc.). The result of these algorithms will be analysed and based on the efficiency and accuracy of these algorithms, the best one of them can be used for the said purpose.