LITERATURE REVIEWS

1. CAR RESALE VALUE PREDICTION USING MACHINE LEARNING BY

I. **Prashant Gajera**
II. **Akshay Gondaliya**
III. **Jenish Kavathiya**

The world is growing day by day and the expectations of every person are also growing up. Out of all the expectations one of them is to buy a car. But all are not able to buy a new car, so they will buy a used one. But new person don't know about the market price for his or her dream car for old car. That is where we need a platform which helps new people for car price prediction. In this paper we are coming up with that platform which is made using machine learning technology. Using supervised machine learning algorithms such as linear-regression, KNN, Random Forest, XG boost and Decision tree, let's try to build a statistical model which will be able to predict the price of a used car. For that, previous consumer data and a given set of features will help us. And we will also be comparing the prediction accuracy of these models to determine the optimal one.

Concluding whether a used car is worth the posted price when you see listings online can be difficult. Several factors, including mileage, make, model, year, km driven etc. can affect the actual worth of a car. From the perspective of a seller, it is also a difficulty to price a used car appropriately. Based on existing data, the aim is to use machine learning algorithms to develop models for predicting used car prices.

2.LINEAR REGRESSION FOR CAR SALES PREDICTION IN INDIAN AUTOMOBILE INDUSTRY BY

I. **Rohan Kulkarni**
II. **Anuja Bokhare**

The automobile industry is one of the leading industries in our economy. Sudden up rise in the demand for automobile vehicles and also the growth in profits are the leading factors for this industry to become one of the major and important ones. This industry is also coming up with various financial aids and schemes for the general population which is why people buying vehicles is causing a ripple effect and maximizing their profits and the growth of industry. This industry has been a great force and a contributor to our economy. That is why this is of important significance for us to accurately predict the sales of automobiles. That is why every industry or organization wants to predict the result by using their own past data and various learning algorithms of machine learning. This will help them visualize past data and help them to determine their future goals and plan accordingly and, thus, making sales predictions of the current trend in the market. Current study helps to get the prediction of sales in the automobile industry using machine learning techniques.

3.SUPPORT VECTOR REGRESSION ANALYSIS FOR PRICE PREDICTION BY

Mariana Listiani

To remain profitable under a tight competition, a leasing company has to offer a good leasing price. In order to determine the right price, it is necessary to predict the future price of a second hand car.

By knowing the car's value depreciation, the leasing price could be set to cover it. The approach commonly used for a price prediction task is multiple linear regression analysis. However, there are a large number of factors that drive the price, that make this crucial task di-cult. The standard regression approach might not be suitable for high dimensional data. A modern data mining technique which is independent of input dimension, namely Support Vector Regression, will be applied to overcome this potential problem. The forecasting accuracy will then be compared against the statistical regression model. In particular, a fully automatic approach for tuning and applying SVR is developed, borrowing ideas from the field of evolutionary search. The whole experiment with the machine learning approach is based upon real-world data from a leading German car manufacturer.

4. DETERMINANTS OF USED CAR RESALE VALUE BY

Michael S. Richardson

Hybrid vehicles have recently emerged as a growing market segment in the automobile industry. The value these vehicles hold over time has important implications for consumers. Vehicles that maintain their value better over time are likely to be in higher demand, and thus auto-makers are keen on producing more and more of these vehicles in the next few years. Using a multiple variable regression analysis, this thesis analyzes the major determinants of resale value in used cars. Current market values of used cars compared with their original prices are used as data. This study predicts that hybrid vehicles maintain their value better than traditional vehicles due to environmental perceptions as well as fuel efficiency ratings.

5. CAR VALUE PREDICTION USING MACHINE LEARNING BY

Yash, M. M. G. Y. D

A fair car value prediction has made it so easy for the buyers to get a car home, as it just requires a few efforts and brains of field experts. Day to day, there are many brands that bring new models to the market with lavish prices. Customers not being capable of buying a new car financially due to the higher market price, there is a need for used car value prediction globally which effectively determines the worthiness of a car that can be bought without much thinking. To train a model for predicting the price of used cars we applied machine learning techniques i.e., Regression Algorithms because it provides us continuous value as an output and not a categorized value such as Random Forest, linear regression and other algorithms for getting better accuracy. Then after processing the data from the dataset collected from Kaggle, we will be comparing the performance of different algorithms to get a chosen output. Further it would be available in GUI as a Web-application developed using Python-flask making it user friendly so that users could give input and get the price of a car according to it.