# LITERATURE SURVEY

PROJECT:CAR RESALE VALUE PREDICTION

TEAM ID:PNT2022TMID14520

**1.Used Cars Price Prediction using Supervised Learning Techniques**

The production of cars has been steadily increasing in the past decade, with over 70 million passenger cars being produced in the year 2016. This has given rise to the used car market, which on its own has become a booming industry. The recent advent of online portals has facilitated the need for both the customer and the seller to be better informed about the trends and patterns that determine the value of a used car in the market. Using Machine Learning Algorithms such as Lasso Regression, Multiple Regression and Regression trees, we will try to develop a statistical model which will be able to predict the price of a used car, based on previous consumer data and a given set of features. We will also be comparing the prediction accuracy of these models to determine the optimal one.

**link:** https://www.researchgate.net/publication/343878698\_Used\_Cars\_Price\_Prediction\_using\_Supervised\_Learning\_Techniques

**2.Car Price Prediction using Machine Learning Techniques**

A car price prediction has been a high interest research area, as it requires noticeable effort and knowledge of the field expert. Considerable number of distinct attributes are examined for the reliable and accurate prediction. To build a model for predicting the price of used cars in Bosnia and Herzegovina, we applied three machine learning techniques (Artificial Neural Network, Support Vector Machine and Random Forest). However, the mentioned techniques were applied to work as an ensemble. The data used for the prediction was collected from the web portal autopijaca.ba using web scraper that was written in PHP programming language. Respective performances of different algorithms were then compared to find one that best suits the available data set. The final prediction model was integrated into Java application. Furthermore, the model was evaluated using test data and the accuracy of 87.38% was obtained.

**link:** https://www.temjournal.com/content/81/TEMJournalFebruary2019\_113\_118.pdf

**3.Prediction of prices for used car by using regression models**

For this research, they conducted a comparative study on performance of regression based on supervised machine learning models. Each model is trained using data of used car market collected from German e-commerce website. As a result, gradient boosted regression trees gives the best performance with mean absolute error (MSE) =3D 0.28. . Followed by random forest regression with MSE =3D 0.35 and multiple linear regression with MSE =3D 0.55 respectively.

**link :** https://ieeexplore.ieee.org/document/8391177