CAR RESALE VALUE PREDICTION

LITERATURE SURVEY

| S.NO | PAPER | AUTHOR | YEAR | METHOD AND ALGORITHM | ACCURACY |
|------|---|--------------------------------|------|---|----------|
| 1. | Car resale price forecasting: The impact of regression method, private information, and heterogeneity on forecast accuracy | Stefan Lessmann, Stefan Vob | 2017 | Resale price forecasting is first done with Random Forest Regression. Then the same price forecastign is done with externally generated residual value estimates and finally the two results are compared to determine the best approach. | 95% |
| 2. | Prediction of Resale Value of the Car Using Linear Regression Algorithm | Kiran S | 2020 | 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. | 90% |
| 3. | Car Price Prediction in the USA by using Liner Regression | Huseyn Mammadov | 2021 | They proposed a model using linear regression since the dependent variable price is linearly related to many independent variables and they have eliminated the irrelevant features by using the recursive feature elimination to reduce the dimensionality. Then R-square and root mean squared error is used to reduce the errors produced. | 96.5% |
| 4. | Predicting the Price of Used Cars using Machine | Sameerchand Pudaruth | 2013 | Different techniques like multiple linear regression | 70% |

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| | Learning Techniques | | | analysis, k-nearest neighbors, naïve bayes and decision trees have been used to make the predictions. The predictions are then evaluated and compared in order to find those which provide the best performances. | |

ERROR ACCURACY BASED:

| Model | Error Rate | |
|---------------------|-------------------|--|
| Lasso Regression | 3.581% | |
| Multiple Regression | 3.468% | |
| Regression Tree | 3.512% | |

| Model Algorithm | RMSE |
|------------------------------|-------|
| Support Vector | 56000 |
| Regression | |
| Logistic Regression | 86000 |
| Random Forest Regression | 78000 |
| Gradient Boosting Regression | 42000 |

Pros:

- Good at learning complex and non linear relationships.
- Highly explainable and easy to interpret.
- Robust to outliers
- No feature scaling is required.

Cons:

- Consumes more time.
- Requires high computational power.