

USED CARS PRICE PREDICTION

Team Members:

Venkata Manikanta Monic Kamisetty (A20446683)

Jesleen Sonia Pradeep Kamalesh (A20448891)

Venkata Sai Akshay Kishore Khanderao (A20458999)

Rajesh Kumar Bandaru (A20446254)

Description:

Generally, the price of new car is fixed by the manufacturer, so the customer is assured of the quality. It is not the case for used cars where customers get easily deceived by fake companies and pay more for less worthy cars. Our idea is to implement different machine learning algorithms which predicts the price based on the features such as condition of the vehicle, entry year, manufacturer, model, etc. It helps customers to have knowledge on buying and selling price in the market.

Survey of previous work and our proposed work:

The previous implementation included Random Forest, Artificial Neural Network and Support Vector Machine algorithms and results were compared. We plan to implement few more algorithms like XGBoost, Gradient Boosting, Lasso Regressor, Bagging Regressor, Ridge Regressor and Model Averaging. By comparing the above-mentioned algorithms, the best method is selected to predict the price of car.

Dataset:

- Used Cars Dataset from Kaggle <https://www.kaggle.com/austinreese/craigslist-carstrucks-data>

Preliminary Plan:

- Data Preparation
- Modelling and Evaluation
- Model Deployment
- Results and Visualization

Reference Papers:

- https://www.temjournal.com/content/81/TEMJournalFebruary2019_113_118.pdf
- <https://arxiv.org/pdf/1711.06970>