

CAR RESALE VALUE PREDICTION

LITREATURE SURVEY

1. Car Price Prediction Using Machine Learning

[Mamoor khan et al]

It is used in linear and lasso regression for the price prediction. The regression model establishes the relationship between independent factors and dependent factors. The main drawback of this project is it does not work that well for continuous values thus it uses linear regression for prediction. Lasso regression is best for models for automating parts with lot of model selection process like variable selection and parameter removal.

2. Prediction of Customer Behaviour Using Random Forest

[Aparna Varma et al]

The aim of their project is to find relationship between customer behaviour parameters and their willingness to buy. The parameters can be changeable over time, such as environmental factor, organizational factor, individual factor and interpersonal factor. The results from the random forest classifier was way more accurate than any other algorithm.

3. Effective Crop Prediction Using Random Forest Classifier

[Geetha]

Reliable prediction of crop yield are difficult for developing agriculture. Crop production varies by various climatic conditions like dried period, increasing in temperature remains a huge problem for agricultural workers, governments and traders. Random forest algorithm has an ability to analyze crop growth related to the current climatic conditions and biophysical change. They collected dataset from various sources and split them into train and test sets.

4. Prediction of Rainfall using Random Forest

[Lalita Gupta et al]

This affects the Indian economy as it is mainly depends on agriculture. They collected the rainfall patterns and the parameters like wind, temperature, pressure, humidity. Instead of using traditional regression models, they used Random Forest. Decision tree also fails for the large amount of data. Thus the Random Forest provides better prediction.

5. Prediction of prices for used car by using Regression Models

[Sabir Buya et al]

Used regression model for prediction. Each model is trained using data of used car market collected from German e-commerce website. It only predicted the price of the cars around Germany. Regression trees gives the best performance with mean absolute error ($MSE = 0.28$), followed by random forest with $MSE = 0.35$ and multiple linear regression with $MSE = 0.55$ respectively.

6. Price Evaluation Model in Second-hand Car System based on BP neural network theory

[Ning Sun et al]

Proposed a system by using a optimized BP neural network algorithm. It is used to select the optimized number of hidden neurons in BP neural network, which improves the convergence speed of the network topology and the accuracy of the prediction model. As a result, the fitting of the optimized model is better as well as the accuracy is higher.

7. Prediction car prices using quantify qualitative data and knowledge-based system [Doan Van Thai]

The regression algorithms used to build his model are Random forest, Light Gradient Boosting Machine, Extreme Gradient Boosting. This method solved the non-numerical data for prediction. The performance of empirical predictions is better than other model's performance.

8. Cognitive approach for heart disease prediction using Machine Learning

[Suganya et al]

The aim of their project is to predict the possibility of having heart disease using various algorithms. Those algorithms are random forest, Naive Bayes, Support vector machine and Logistic model tree. Cleaveland dataset is used for the prediction. The dataset is preprocessed followed by feature selection to select most prominent features. The results are combined and show that Random forest gives maximum accuracy.

9. Random Forest Algorithm for the Prediction of Diabetes

[Vijiya Kumar et al]

The aim of their project is to develop a system which can perform early prediction of diabetes for a patient with higher accuracy. The algorithm which is used for the prediction is Random Forest. This proposed model gives the best results for the prediction of diabetes effectively, efficiently and most importantly, instantly.