IBM- NALAIYA THIRAN PROJECT
CAR RESALE VALUE PREDICTION

LITERATURE SURVEY:

S.NO	TITLE OF THE PAPER	AUTHORS AND YEAR	PROBLEM ADDRESSED BY THE PAPER	METHODOLOGY USED	LIMITATION OF THE SYSTEM
1.	Predicting Used Car Prices	**Kshitij Kumbar Pranav Gadre Varun Nayak** Stanford University	The focus of this project is developing machine learning models that can accurately predict the price of a used car based on its features, in order to make informed purchases across cities in the United States.	We utilized ensemble learning techniques, with a 90% - 10% split for the training and test data. To reduce the time required for training, we used 500 thousand examples from our dataset.	This was worked upon by restricting the depth of trees to different values and it was observed that beyond limiting depth to 36 resulted in negligible improvement in prediction performance but progressively increased overfitting.
2.	Car's Selling Price Prediction using Random Forest Machine Learning Algorithm	**Abhishek Pandey , Vanshika Rastogi , Sanika Singh** Student, BTech (IT)KCC Institute of Technology and Management, Greater Noida.	Many platforms in India provides these car buyers with a platform where they can sell their used cars, but what should be the price of the car, this is the toughest question ever.	The methodology describes the Data Preprocessing, Data Training and Modeling, Model prediction and cross-validation.	The model is deployed as a web application, it could be enhanced by developing an android application to provide portability for the users.

3.	Used Cars Price Prediction and Valuation using Data Mining Techniques	**Abdulla AlShared** Rochester Institute of Technology RIT Dubai	Because of the affordability of used cars in developing countries, people tend to purchase used cars. A primary objective of this project is to estimate used car prices by using attributes that are highly correlated with a label (Price).	The methodology describes Dataset Collection, Pre-processing, Experiments, Model evaluation.	After the data collection phase Semiconductor shortages have occurred after the pandemic which led to an increase in car prices, and greatly affected the secondhand market. Hence having a regular Data collection and analysis is required periodically, ideally, we would be having a real time processing program.
4.	Price Prediction for Pre-Owned Cars Using Ensemble Machine Learning Techniques	**Chetna Longania Sandhya Deore** Computer Engineering Sanjivani College of Engineering Kopargaon Maharashtra India	The Pre-owned cars or so-called used cars have capacious markets across the globe. Before acquiring a used car, several facets including mileage, year, model, make, run and many more are needed to be considered before getting a hold of any pre-owned car.	Data collection is the most prime step for any project. We have designed the system for used cars in the Mumbai region, for which the data of used cars is collected and scrapped using the Beautiful Soup. We used ensemble machine learning techniques to implement the system.	The system proposed here is implemented for the Mumbai region only.

| 5. | Used Car Price Prediction | **Praful Rane, Deep Pandya, Dhawal Kotak** Information Technology Padmabhushan Vasantdada Patil Pratishthan College of Engineering Maharashtra India | due to the increased prices of new cars and the financial incapability of the customers to buy them, Used Car sales are on a global increase. Therefore,there is an urgent need for a Used Car Price Prediction system which effectively determines the worthiness of the car using a variety of features. | The system is designed to detect and predict the price of used cars and hence appropriate algorithms must be used to do the two different tasks. Before the algorithms were selected for further use, different algorithms were compared for its accuracy. The well-suited one for the task was chosen. | Also we may add large historical data of car price which can help to improve accuracy of the machine learning model. We can build an android app as a user interface for interacting with users. For better performance, we plan to judiciously design deep learning network structures, use adaptive learning rates and train on clusters of data rather than the whole dataset. |