**ABSTRACT**

With the advancements in Artificial Intelligence, the automotive industry is undergoing revolutionization, bringing up self-driving-cars and collision warning systems. Besides, the used car sales markets are also on the rise due to the increased cost of modern cars, the incurring auto-insurance prices and the lack of funds. The prices of new cars are fixed by the manufacturer although taxes add upon them, whereas the value of pre-owned cars depends on their history, make and the hidden-heavy dealership charges. Having a framework to analyze and predict the cost of unused cars based on the historical data can help

* the dealers to offer a better service by having a good understanding of the car features and their actual worth,
* the existing platforms to provide better predictions by optimizing their systems and finally,
* the individuals to monitor the trends in the market and take decisions accordingly.

The dataset used to solve this problem was obtained from Kaggle.com,(<https://www.kaggle.com/austinreese/craigslist-carstrucks-data>-Licensed under CCO), which comprises the prices of the cars and trucks sold in the USA having 509577 observations and 25 attributes.

The dataset has to be preprocessed to standardize the values and then Exploratory Data Analysis will be applied for data mining. After EDA, an ML Regression model will be developed employing one of the best performing algorithms from Linear Regression, Random Forest, Ridge Regression, Lasso Regression, K-Nearest Neighbour and XGBoost. R-Programming will be used for hypothesis testing and feature engineering, and Python will be used for data wrangling, pre-processing and model implementation.