

A collage of five different used cars. In the top left is a dark blue station wagon. In the top right is an orange coupe. In the center is a black SUV. In the bottom left is a silver sedan. In the bottom right is a blue sedan. The text "Best Used Car Deal" is overlaid in the center in a large, white, sans-serif font.

Best Used Car Deal

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Goal

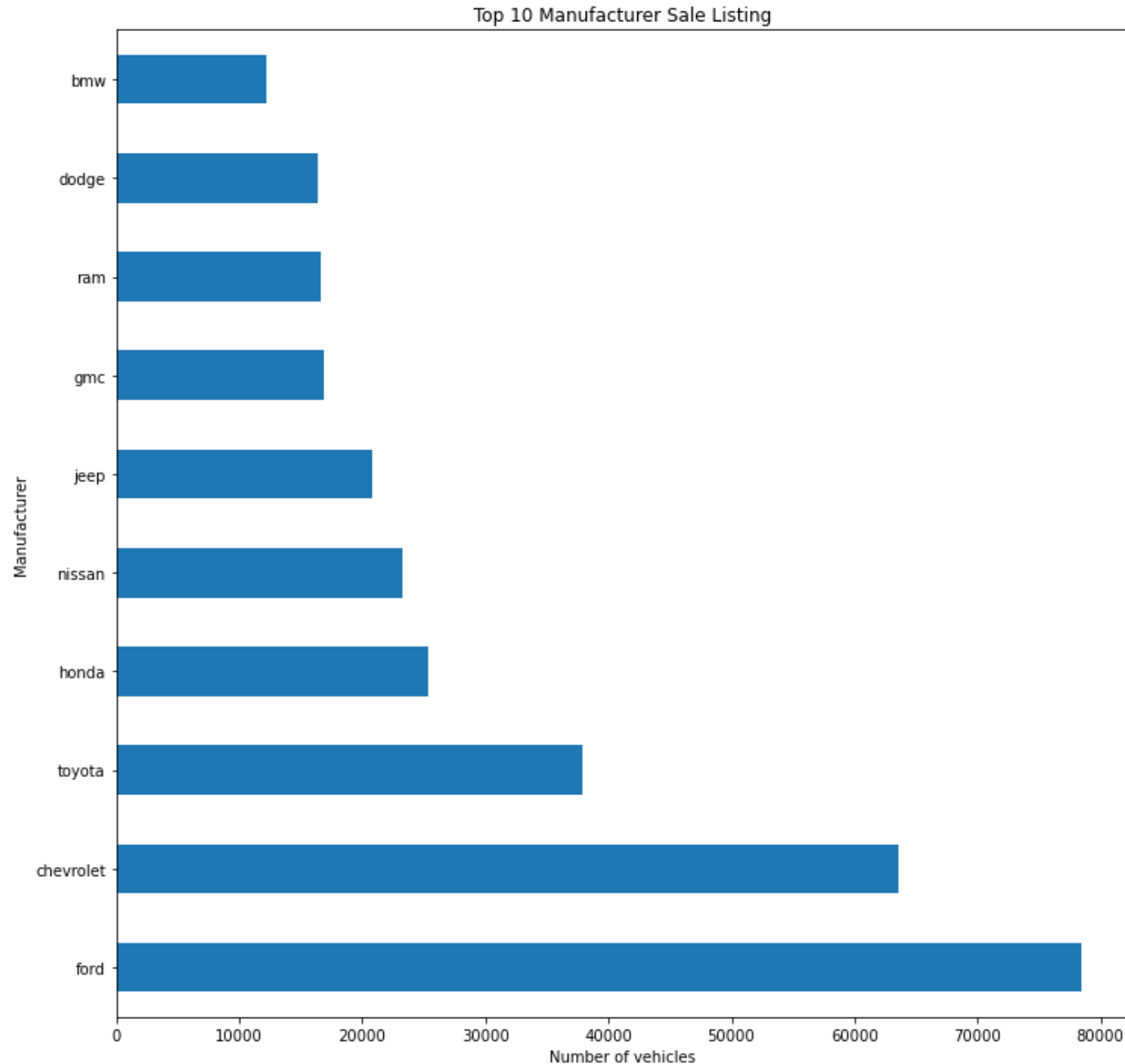
- ❖ The goal of this project is to predict the price of the used cars from the listing of the craigslist

Data

- ❖ The data for this project is obtained from Kaggle datasets.
- ❖ Source - <https://www.kaggle.com/austinreese/craigslist-carstrucks-data?>
- ❖ It consists over 450,000 entries and it's a listing on craigslist from October to December of 2020 used cars for sale.
- ❖ It contains information regarding the cars like price, condition, manufacturer, latitude/longitude, odometer and year.

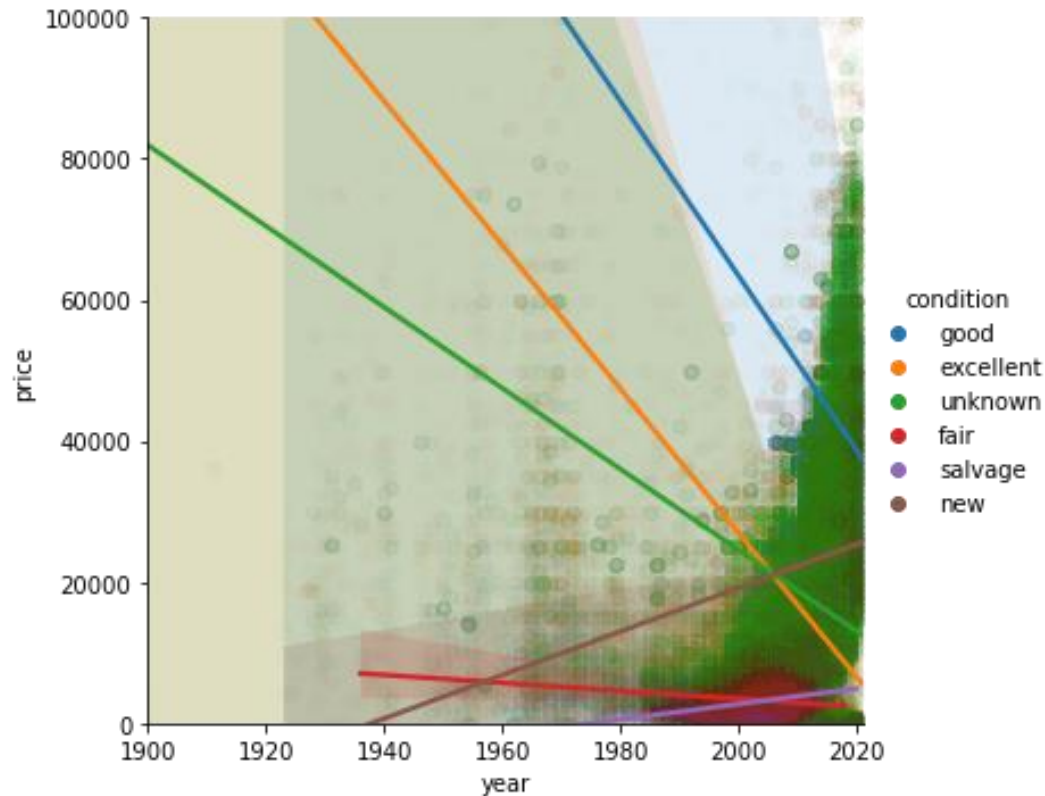
Top Ten Manufactures Car Sales Listed

❖ Ford has the highest number of cars available for sale. Followed by Chevrolet and Toyota.

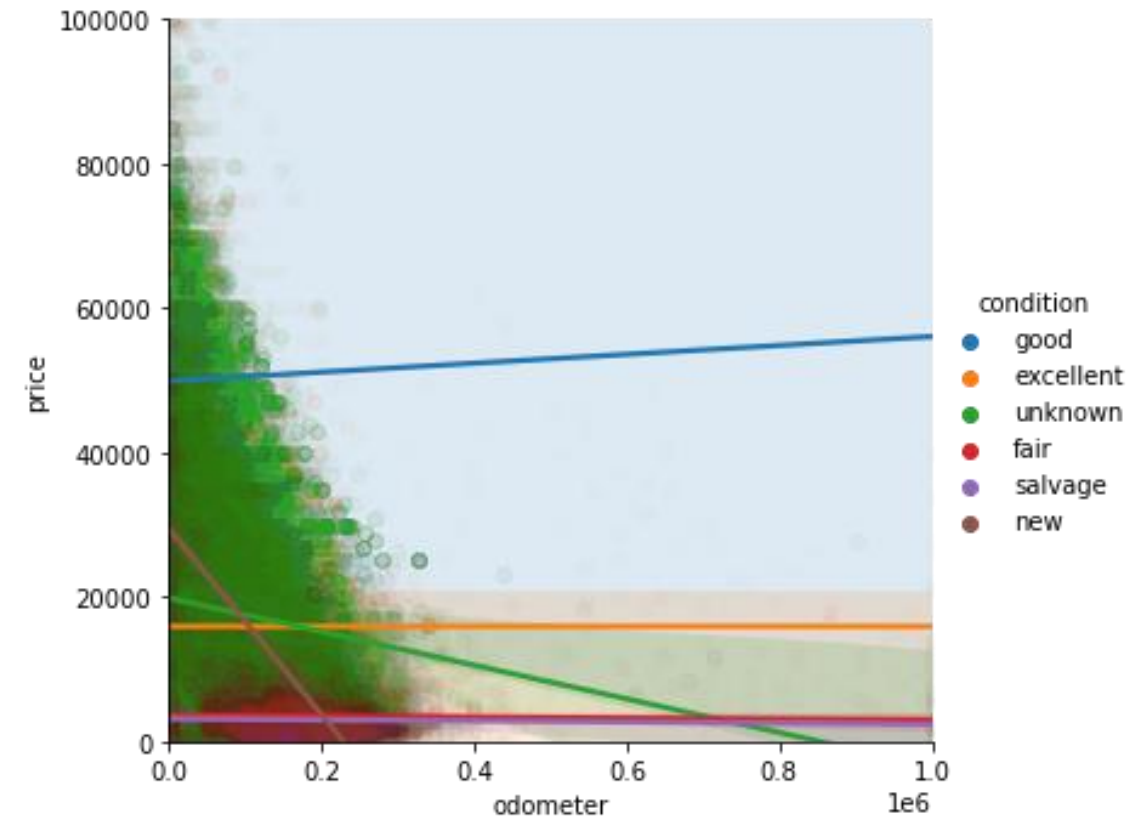


Linear relationship between price, year and odometer on condition of car

PRICE VS YEAR

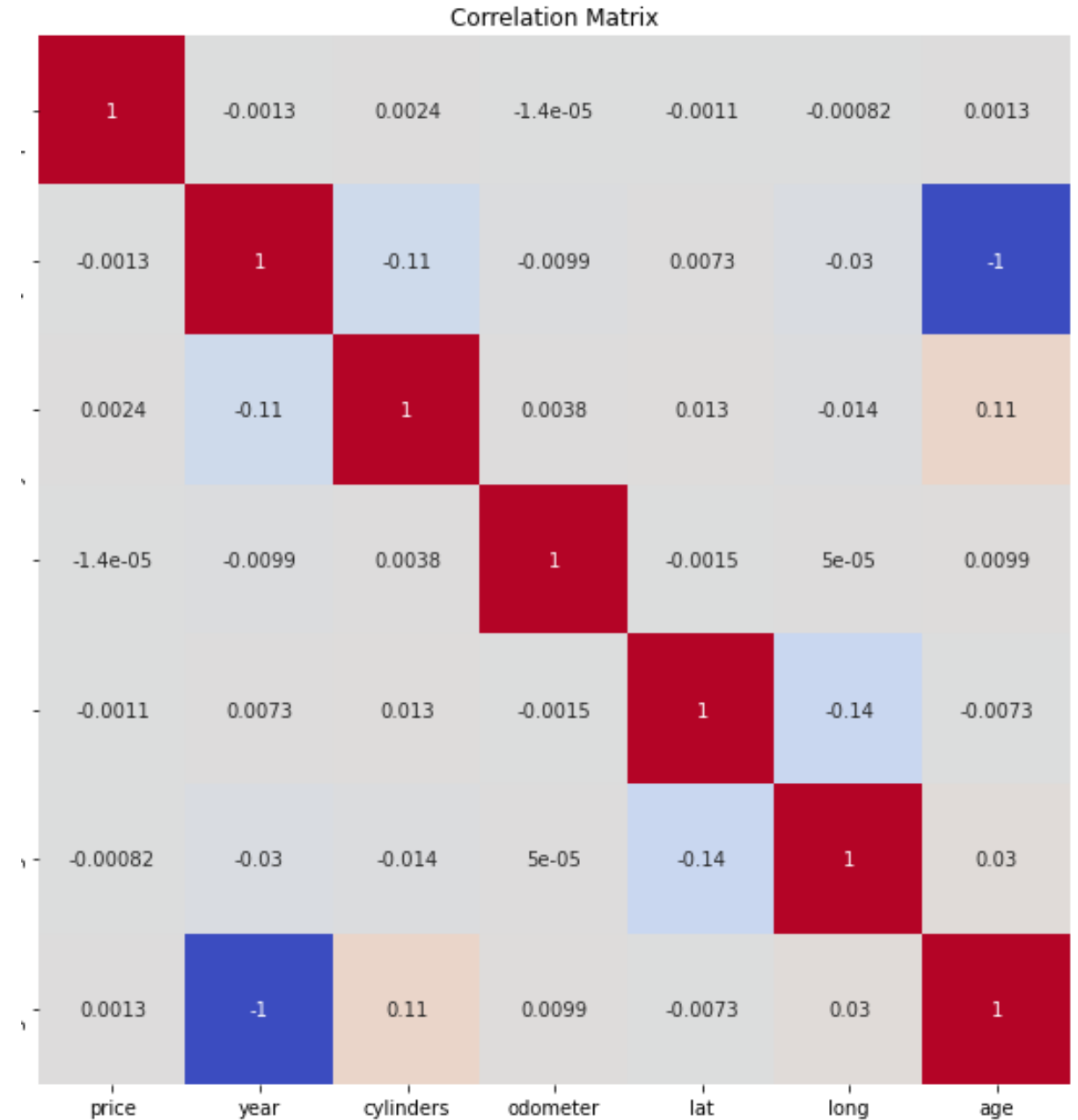


PRICE VS ODOMETER



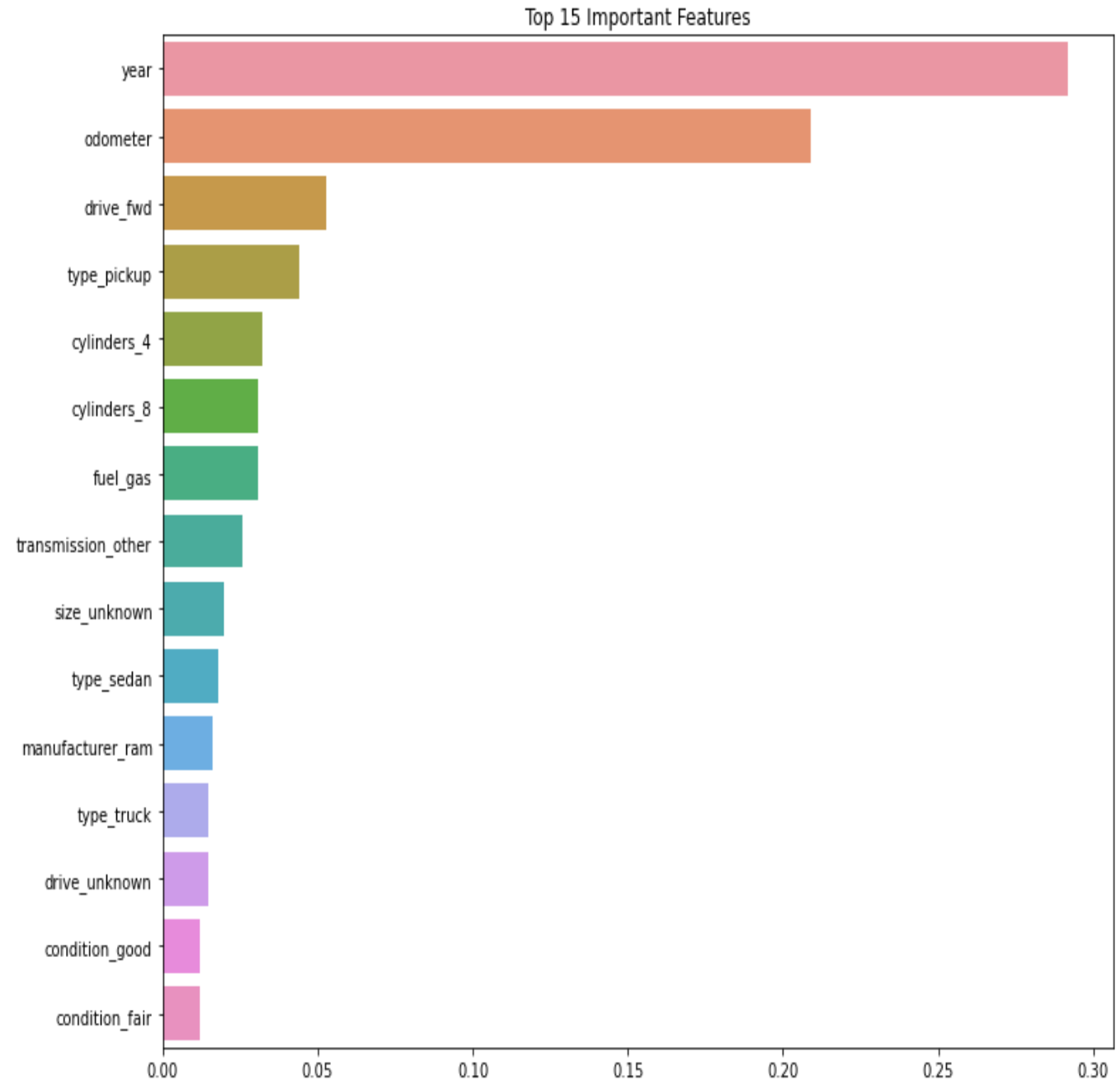
Correlation Matrix

❖ There is a negative correlation between price and odometer, price and age, slight negative correlation between year and odometer, which means price will be less with higher miles and higher age of car.



Important Features

❖ This chart shows the top 15 features which can predict the price of the used cars.



Conclusion

- ❖ Performed different models on the dataset, Linear regression, Random Forest, Grid Search with Random Forest, and Neural Network.
- ❖ Final model with a R^2 score = 0.82 is Neural Network Model.
- ❖ Number of miles and year of the vehicles has big impact on the price of the vehicles.
- ❖ The condition, drive and manufacturer of vehicles also have effect on the price of vehicle.

Future Work

- ❖ How the location of the listing impact on the price of the car?
- ❖ How the model of the car the price?

Thank You