



Motorcycle Price Prediction



Presentation Outline

- Purpose of Analysis
- Data and method
- Results
- Future steps

Purpose of Analysis

Predict motorcycle prices in an unregulated secondary market

- Are you getting a good deal or bad deal?
- How much should the motorcycle you're purchasing cost?

Scraping Data from Craigslist

- Listings from each city
- Individual features per listing (Price, make, model, odometer)

CL New York ± 7.6 mi > for sale > motorcycles

Motorcycles/Scooters

all owner dealer

☐ search titles only
☐ has image
☐ posted today
☐ bundle duplicates

MILES FROM LOCATION
× New York ± 7.6 mi

PRICE
min max

MAKE AND MODEL
make / model

ENGINE DISPLACEMENT (CC)
min max

MODEL YEAR
min max

ODOMETER
min max

☐ street legal


► type
► condition
► fuel
► paint color
► title status
► transmission

☐ cryptocurrency ok
☐ delivery available

search Motorcycles/Scooters

Livewire \$19,895 (Long Island, NY queens) 3mi


\$9,750



★ Oct 19 **Moto Guzzi Ambassador 1971**
\$9,750 (Brooklyn brooklyn) 4.6mi

East Side) 1mi


\$19,500



★ Oct 19 **Rare & original 1965 BMW R69S**
\$19,500 (Brooklyn brooklyn) 4.6mi


queens) 5.1mi

\$17,888




★ Oct 19 **2017 Harley-Davidson Dyna Low Rider S FXDLS** \$17,888 (Long Island, NY queens) 3mi

\$300




★ Oct 18 **2 vintage Vespa scooters Stolen**
\$300 (Upper West Side) 0.6mi

\$3,300



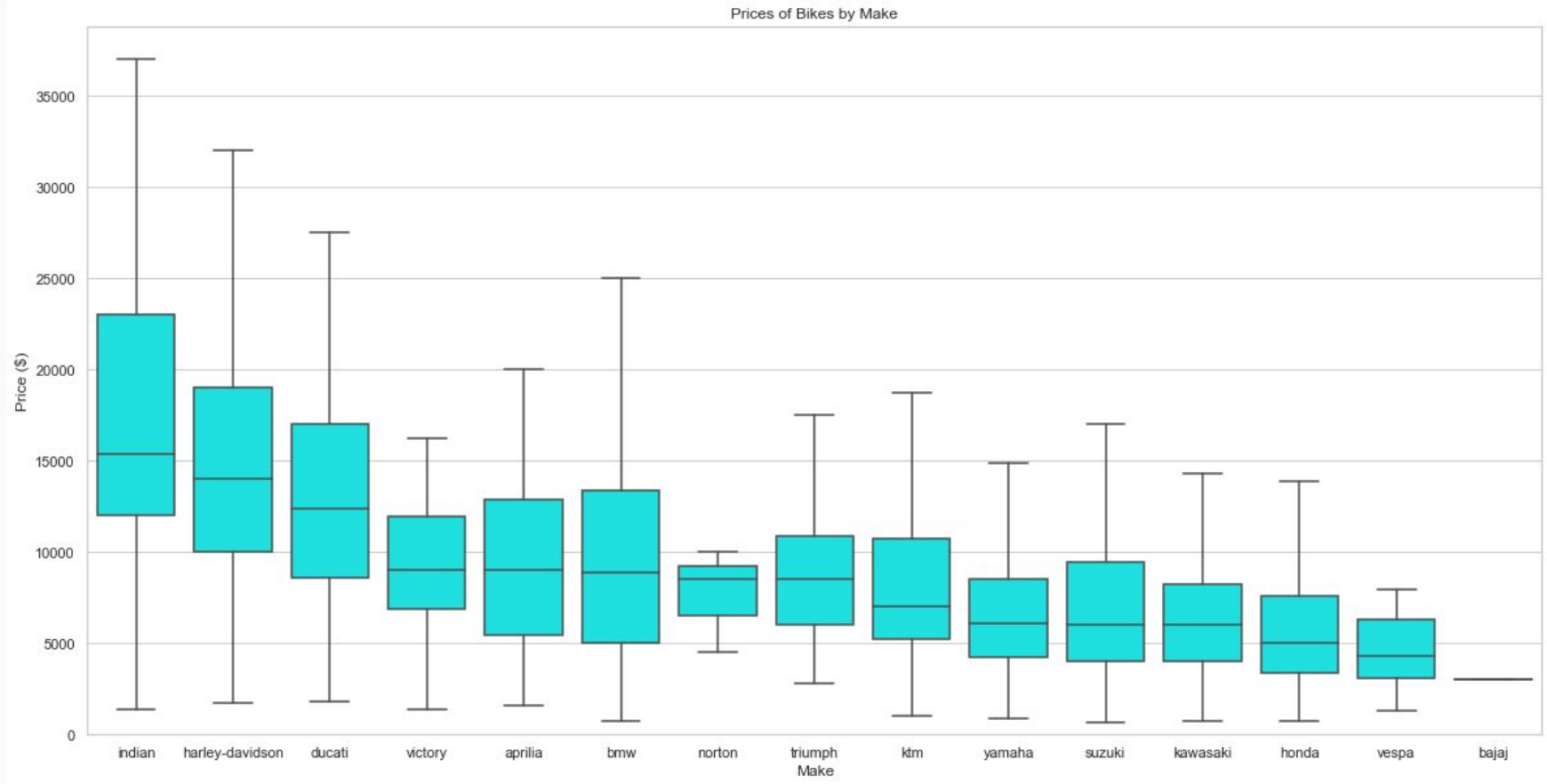
★ Oct 18 **1980 Honda CB 750 K** \$3,300 (Brooklyn brooklyn) 6.8mi

\$2,300



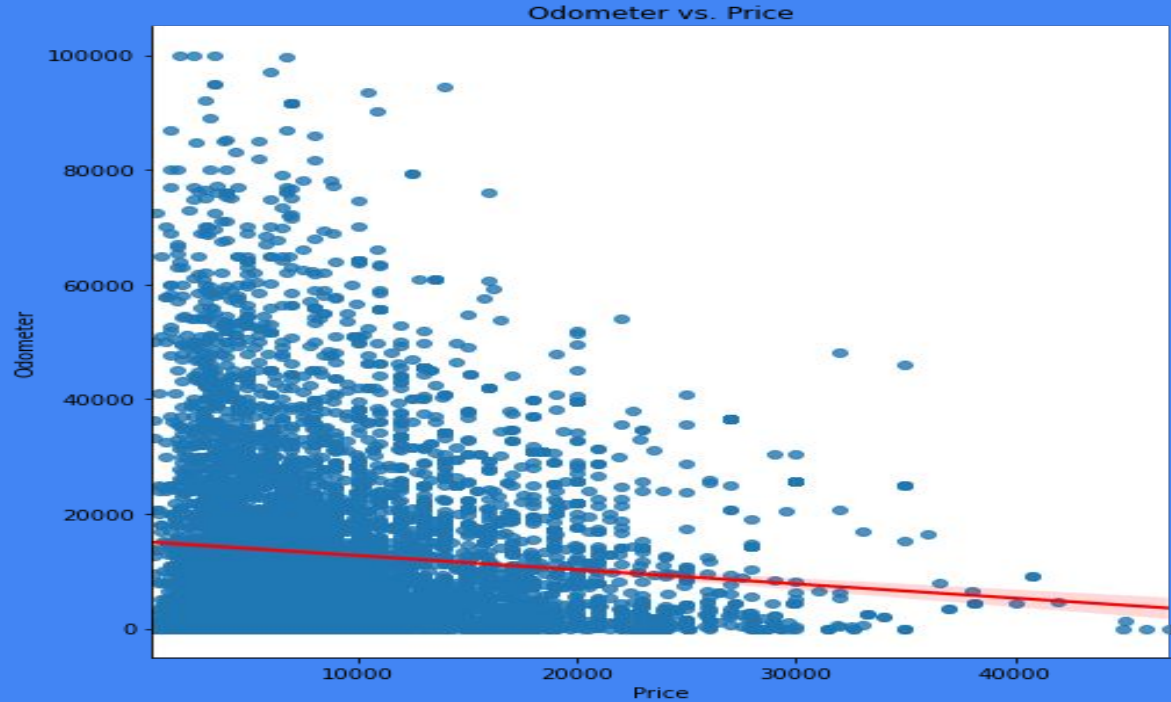
★ Oct 18 **XT 350 Dual Sport** \$2,300 (njy > Bergen County) 6.2mi

EDA - Price of motorcycles by Make (Indian typically being the most expensive)



Regression Models

1. Simple Linear Regression
2. Decision Tree Regressor
3. XGBoost Regressor
4. KNeighbors Regressor
5. Random Forest Regressor



Best Model

XGBoost Regressor

- Close to 70% variance explained
- RMSE of \$3,500

App Deployment

Enter the features of the motorcycle and the model will give out a range for how much the price should be

Motorcycle Price Prediction




Photo by [Unknown](#) on [Google Images](#)

Motorcycle Make

Year of Bike

Type of Bike Index

Condition of Bike

Transmission Type

Title Status

Paint Color

Odometer/Mileage

Fuel Type

Place holder for content I want to place

Info about scraped data from Craigslist and how my model does the predictions

More text holder

Thank you

Avi Rubin

LinkedIn: www.linkedin.com/in/avi-james-rubin

Github: <https://github.com/ajr930>