



# Airbnb: Rental Price Predictor

Metis Project 2  
Wenting Deng

# Background

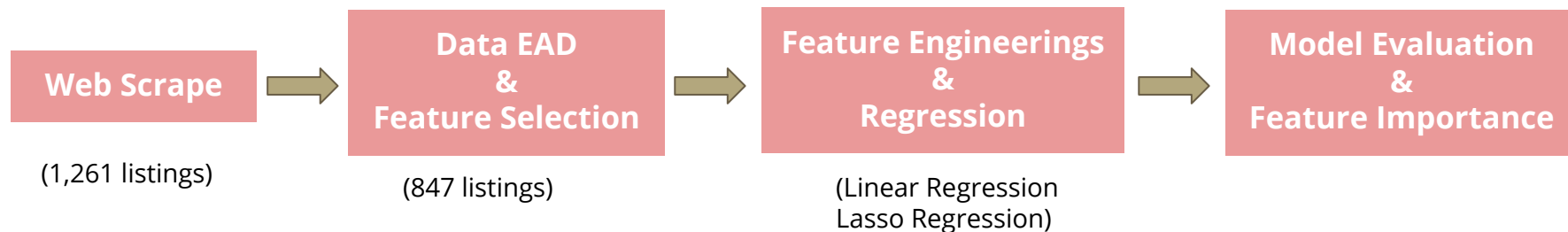


**More people are listing vacation homes in Lake Tahoe on Airbnb**

**Objective:** help hosts identify features could directly impact rental price on Airbnb

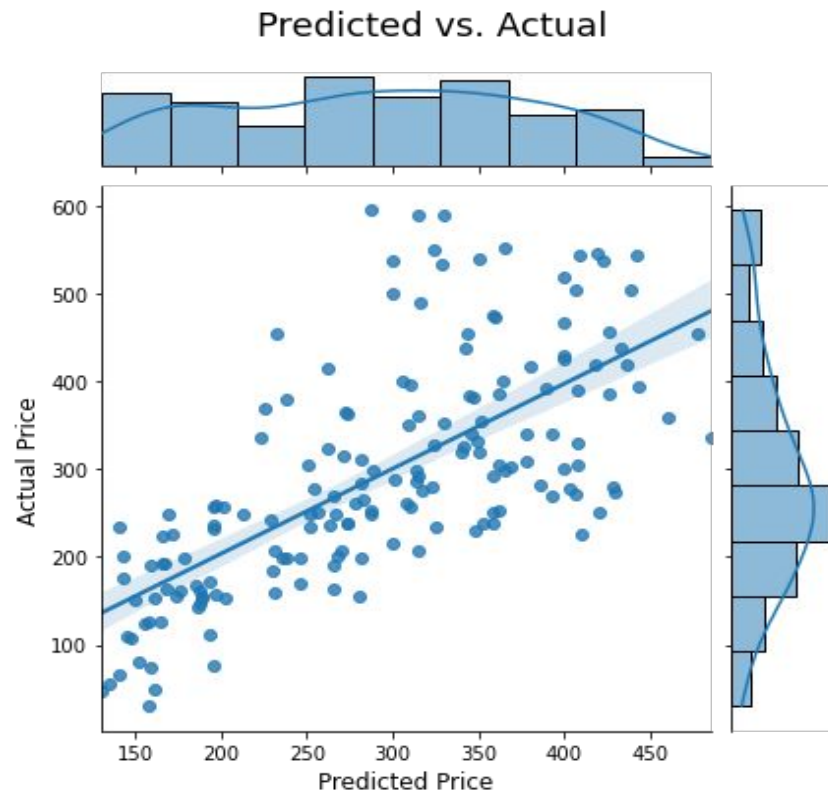
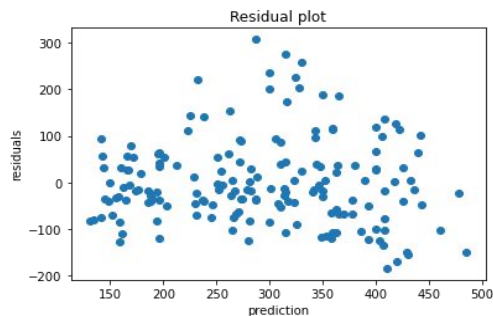
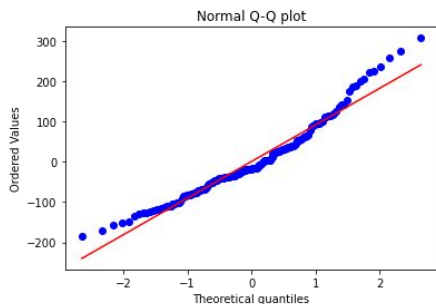
# Data Sources and Tools

- Python 3
- Pandas & Numpy
- Matplotlib & Seaborn
- BeautifulSoup & Selenium
- Scikit-learn & StatsModels



# Model Selection & Results

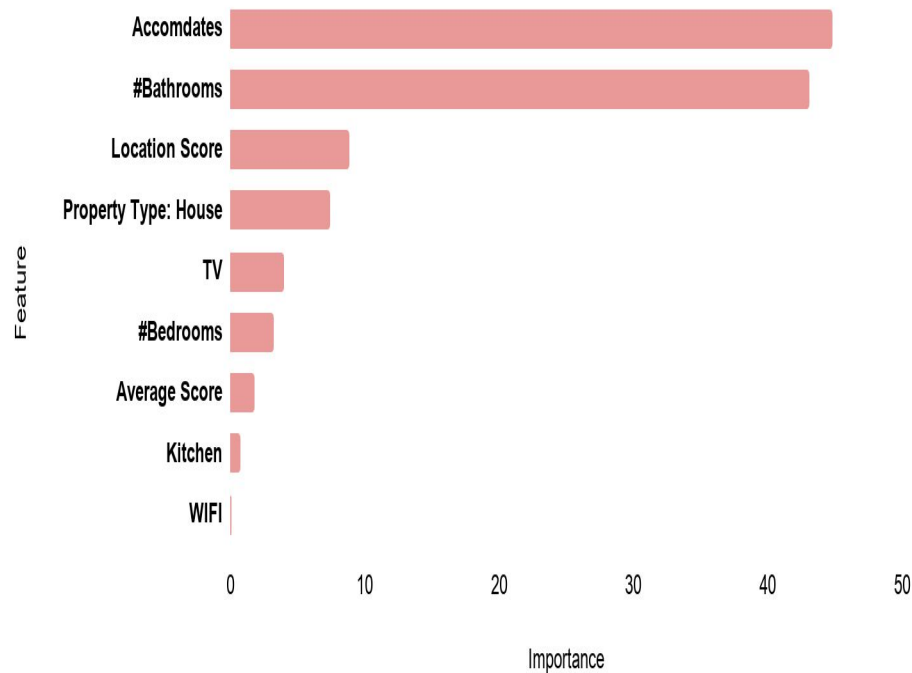
Model	Cross Validation adj-R <sup>2</sup>
Linear Regression	0.54
Lasso	0.55



adj-R <sup>2</sup>	0.59
RMSE	91.69

# Feature Importance

Feature Importance



Top Features in terms of Lasso coefficients (actual value)

Factors impact rental price most:

- How many people the property accommodates
- The number of bathrooms
- Ratings on neighborhood environment

# Next Step

- Scrape more data:
  - property availabilities in next 7/15/30 days
  - Cleaning fees/ service fees
- Analyze by distance between the property and Lake Tahoe