KING COUNTY HOUSE PRICE ANALYSIS

Olaide Kashimawo

OVERVIEW AND BUSINESS UNDERSTANDING

The purpose of this project is to inform you the Real Estate Stakeholders what affects the values of homes in King County House Sale using a linear regression model.

King County House Price Data(2014-2015)

- 21,613 House Sales with 21 features

- Average House price:$540,000

- Average lot size: 21,000 Square feet

- Average Bedrooms: 3 -7

- Location: King County WA

- Model used : Linear Regression

BEDROOM

BATHROOM

WATERFRONT

SQUARE FEET
LIVING

LONGITUDE
AND LATITUDE
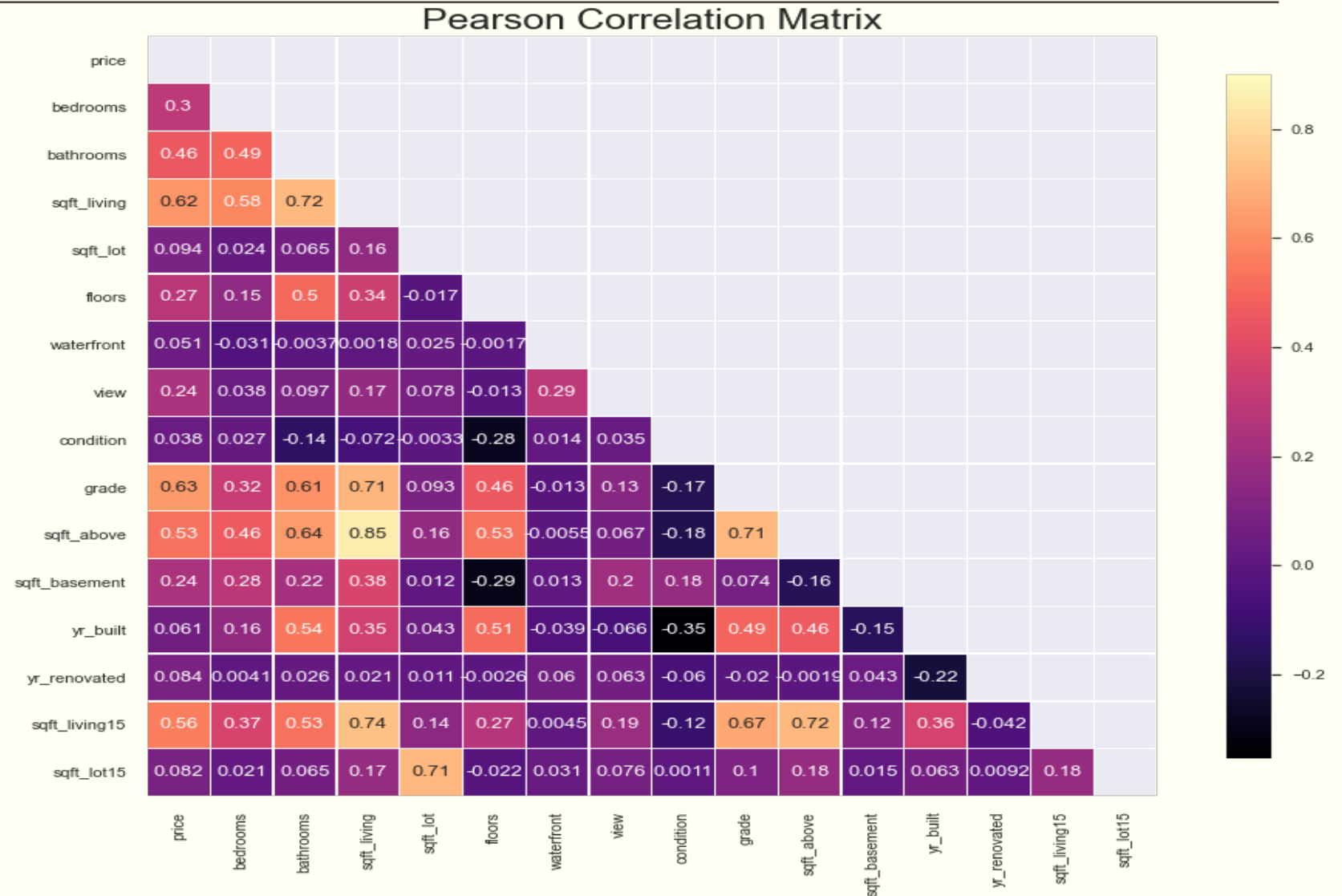
EXPLORATORY DATA ANALYSIS
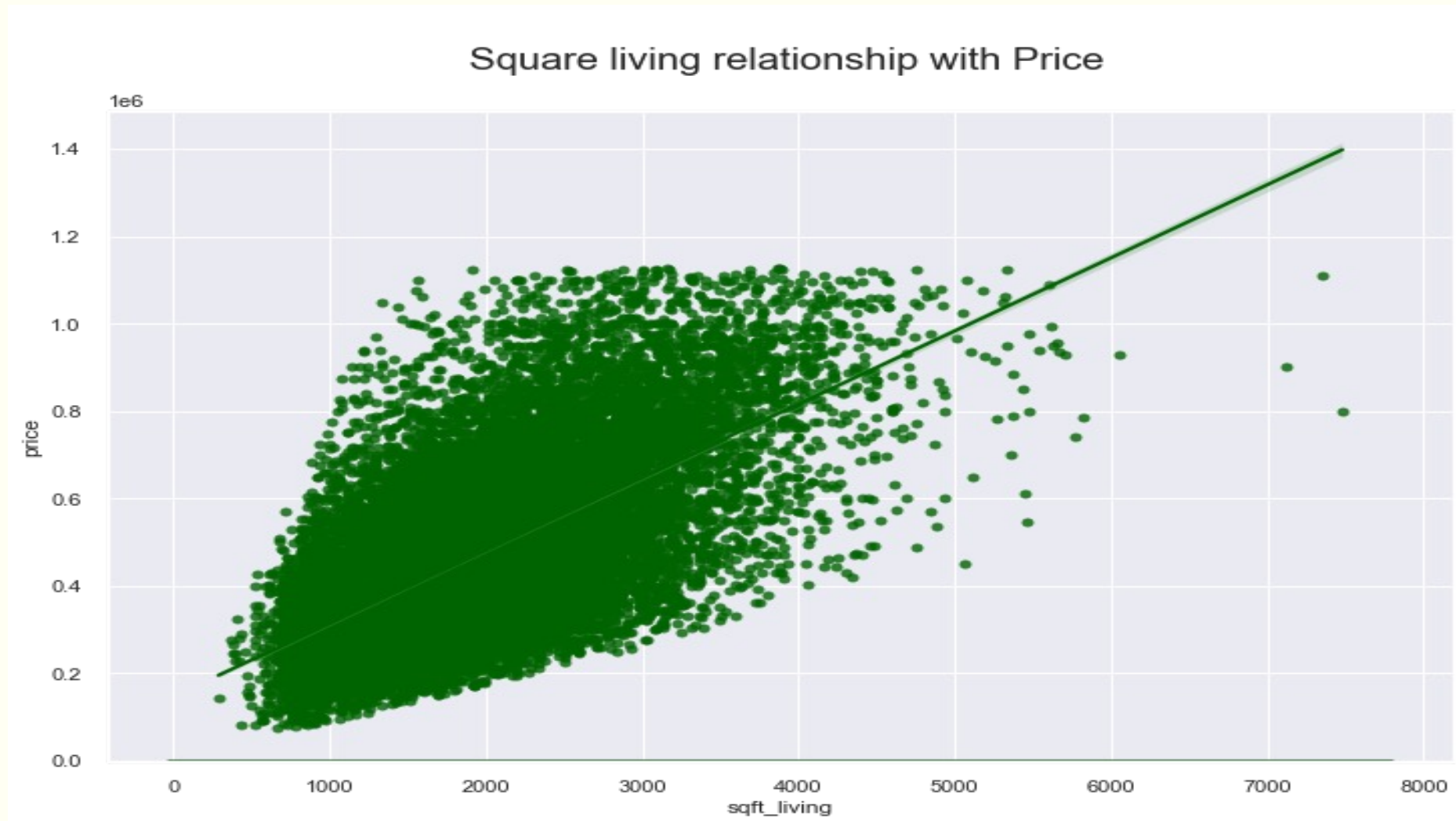
Factors to look at

- Does the latitude have any impact on house prices?

- Does the grade have any impact on house prices?

- Are good-condition properties likely to increase in value?

- Does the number of bathroom have any impact on house prices?
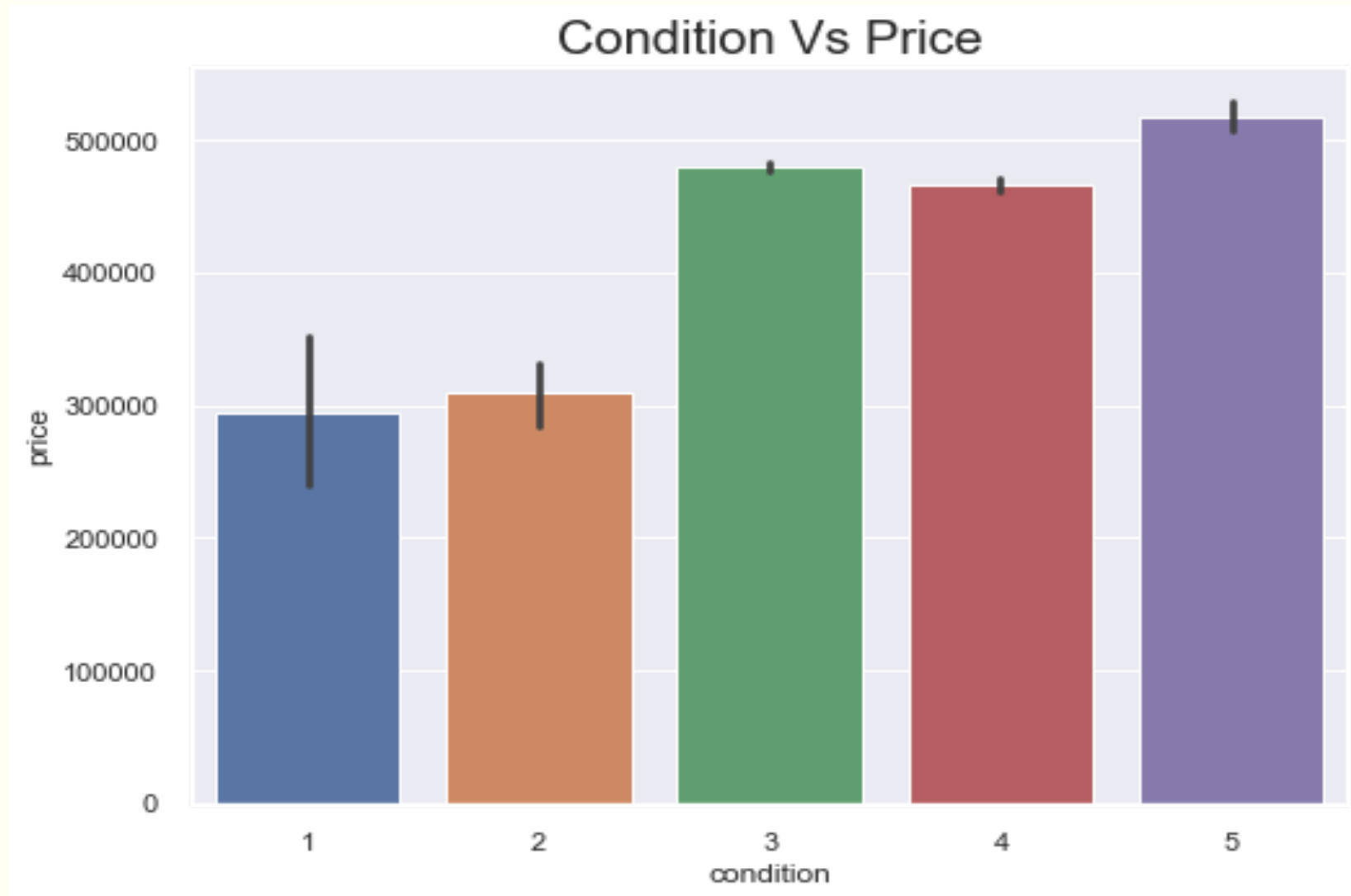
The most significant influence on house prices

- ✓ Square feet living
- ✓ Waterfront
- ✓ Grade
- ✓ Square feet above
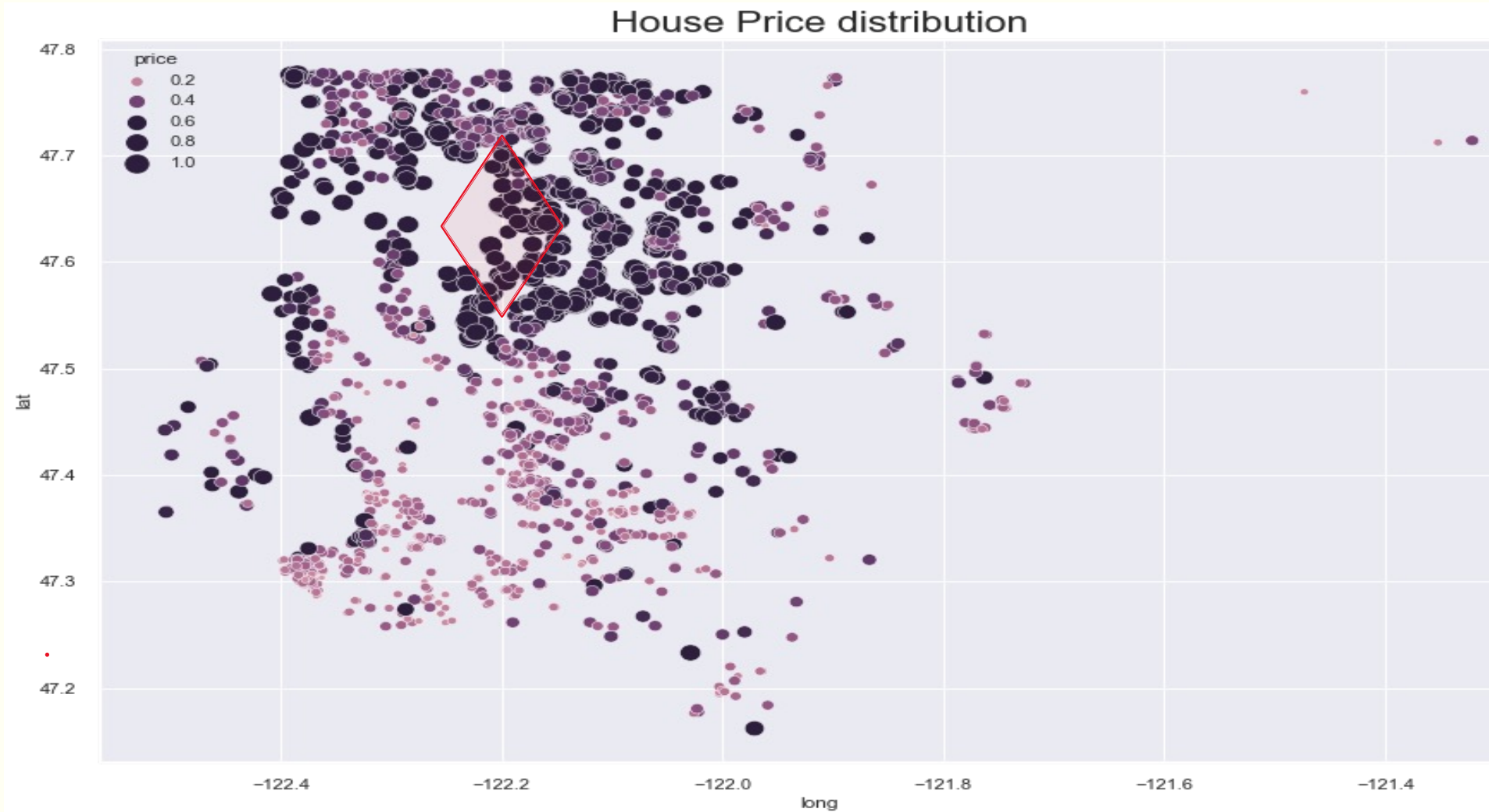

Pearson Correlation Matrix

The value of the house increases as we increase the square feet living of the house indicating is positively correlated.

Homes with good conditions from 3 to 5 sell at a better price the homes with conditions less than 3

Location Distribution: House price distribution show houses closer to waterfront has higher prices

The King's County grading system shows the grading between the number 1 to 12 with an average of 7 to 8

Result

Our model predicts in King County with a 0.775 accuracy and good of the fit

The R^2 changed from 0.6776 to 0.775 in the polynomial model

The MSE was 92330.41

The latitude coefficient is 491200 -- which means I assume, if the house around certain location with price is higher than other areas.

The bathrooms also had significant impact on prices with the coefficient of 82160

The King county grading system also impacted the house price, the coefficient is 87690

Recommendation

The model's most significant features on with an impact on house prices using the polynomial regression coefficient are as follows:

The latitude

The number of bathrooms

The King county grading system

NEXT STEP

Future work would need more insight into how zip code influenced house prices; are the number of houses in specific zip codes have higher sales prices?

THANK YOU

o GitHub: github.com/olaidekashimawo/
o Linkedln: linkedin.com/in/olaide-Kashimawo
o Email:goldprint3@outlook.com