

KING COUNTY

## HOUSE HUNTING ATTRIBUTE BASED PRICE PREDICTIONS

**Tova Simonson** 







HOME SEARCHES BEGIN ONLINE

AVERAGE WEEK LENGTH &
HOMES VIEWED FOR A HOME
SEARCH

BUYERS FOUND THEIR
PURCHASED HOME ONLINE

### SOLUTION

CREATE APP THAT ALLOWS POTENTIAL HOME BUYERS TO UNDERSTAND REALISTIC HOUSING OPTIONS FOR A HOME WITH SPECIFIC ATTRIBUTES AND PROVIDE SUGGESTIONS TO SAVE MONEY, SPECIFIC TO THEIR SEARCH AND CITY.

# Let's go House Hunting!

## DATA

#### HOUSE SALES IN KING COUNTY, USA



#### SUMMARY

Homes sold in KC during

21613 Rows of Data

19 Features

#### EXPLORATION

High correlation variables:

bedrooms, bathrooms with

home square footage

Kent and Auburn do no

nave waterfront properties

#### FEATURES

Engineered binary

variables to indicate

waterfront

basement

renovations

Logged price and lot sqft

# PREDICTIVE MODEL & RESULTS

#### LINEAR REGRESSION

Models by city: 10

Each subset test/train split: 0.7/0.3

#### **RESULTS**

Average Train R2: 0.61

Average Test R2: 0.56



#### POINTS OF INTEREST

For cities with waterfront properties, changing that attribute to none will most likely decrease predicted price most.

Highest median home price: Bellevue (\$749,000)

Lowest median home price:

Federal Way (\$268,000)



### CONTACT

**THANK YOU!** 



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