

Marketing Campaign

Data-driven insights and predictive modelling



# **Problem Statement**

Advertising Campaign to encourage sales in King County

- Data-driven recommendations
- Model to predict house prices

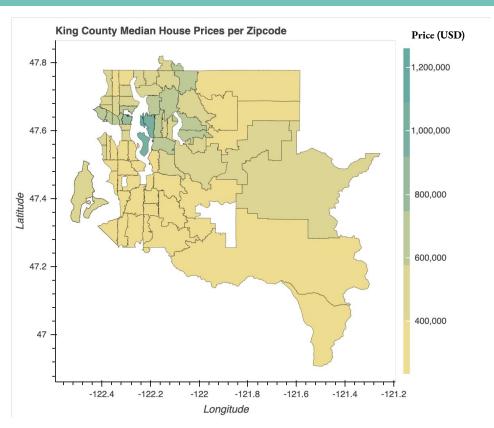


**REAL ESTATE** 

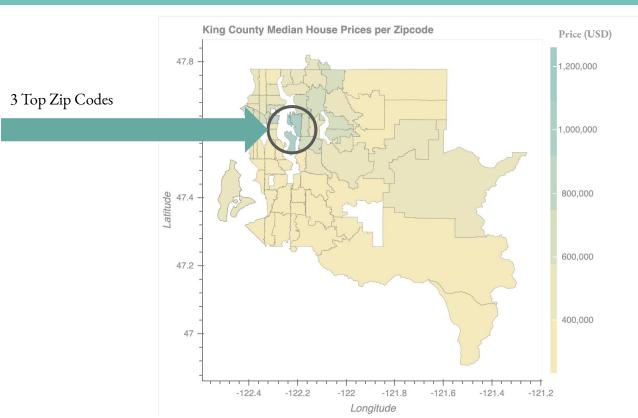
# Location



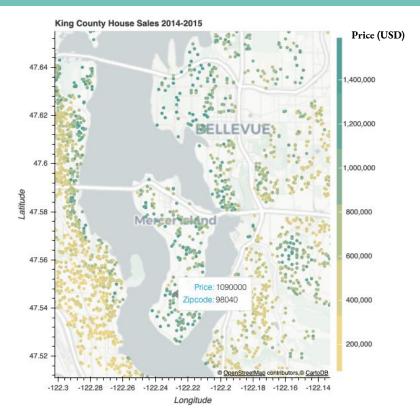
# **LOCATION - Zip Codes**



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## **LOCATION - Neighbourhoods**



# Recommendations



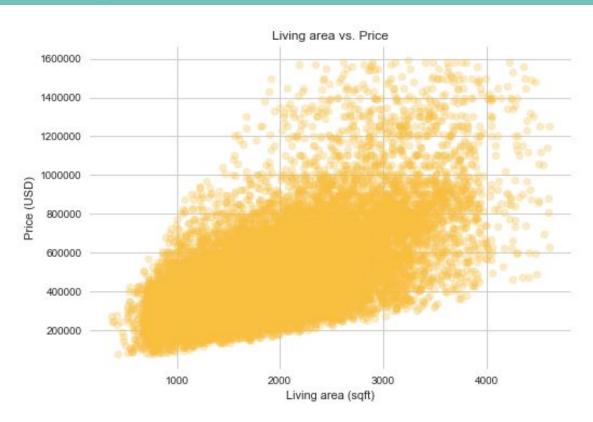
#### Location



# **House Features**



#### **House Features - Living Area**



#### **House Features - Grade**



#### **House Features - Other**

Was viewed

#### Presence of Basement

Square Feet of Lot

Condition

Year Built

Bathroom count



Recently renovated

Bedroom count

Waterfront view

Number of floors

#### Recommendations

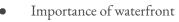


#### **Home Features**

- Larger living area (sqft)
- Grade 10 and above
- Grade better predictor



#### Location



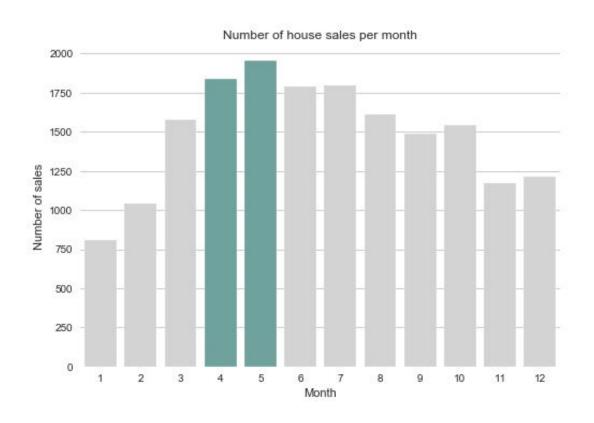
Bellevue and Mercer Island areas



# **Time of Year**



# Time of year



#### **Recommendations**



#### **Home Features**

- Larger living area (sqft)
- Grade above 10
- Grade better predictor



#### **Time of Year**

- Constant median house price
- April/May highest sales volume
- Campaign in March/April



#### Location

Importance of waterfrontBellevue and Mercer Island areas



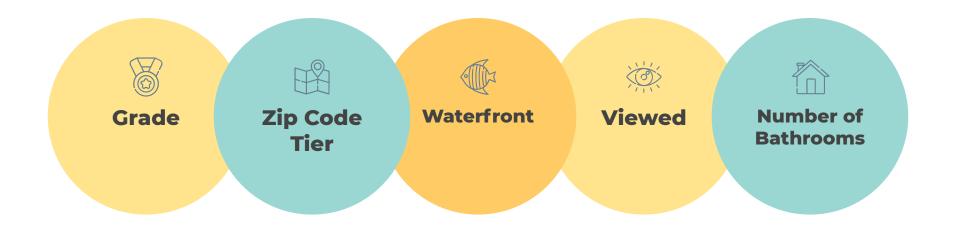
# Predicting House Prices



# **Predicting House Prices**

	Model A	Model B
Features	17	87
Pros	Easy to interpret, generalises well Performance	
Cons	Less accurate Uses exact zip code data	
Score	0.70 0.83	
Mean Error	USD 132,444	USD 99,654

## **Best predictors - Model A**



# Further work

School Ratings Data	Proximity to a good school is likely to increase sale price
Commuting Time Data	Homes better connected to downtown Seattle are likely to be more valuable
Longer Time Scale	See which areas show signs of growth/ decline

# **THANK YOU**

Nadine Amersi-Belton <u>nzamersi@gmail.com</u> <u>https://github.com/nadinezab</u>

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