# Thinking about breaking into the Airbnb Rental Market?

What should you look for in a rental home to maximize profit?

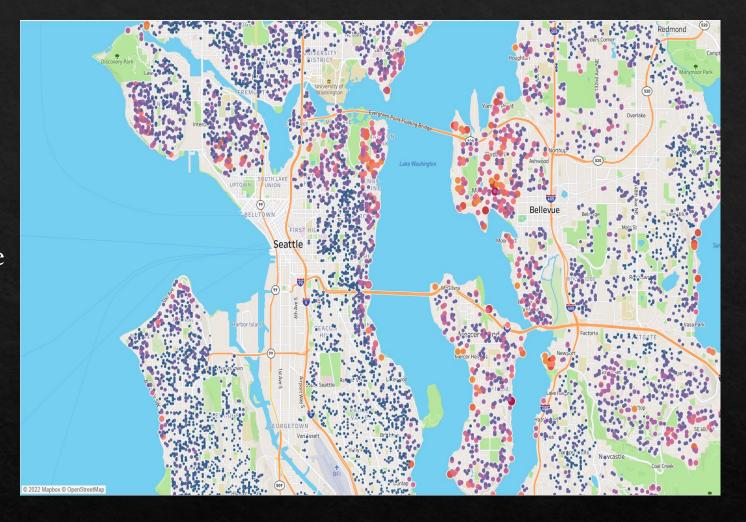




# The Data

#### Three data sources:

- King County Data
  - House sale price and descriptive features
- Airbnb Data
  - Listing data and price per night
- Washington State Data
  - Income data by zip code



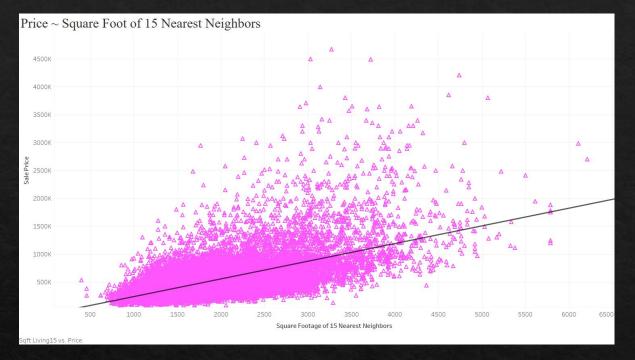
Individual houses from the King County Dataset

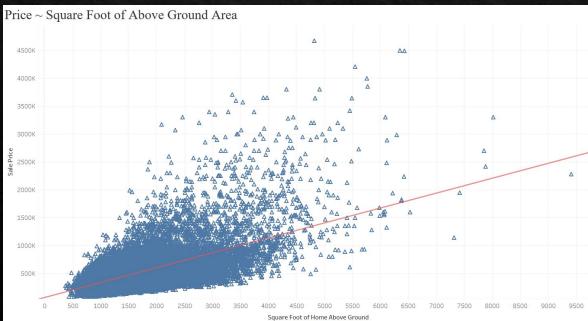
## Price Correlation with Housing Features



#### Baseline Model: Using the Square Footage of the living Room to predict the sales price of a home







### Our top 3 estimators



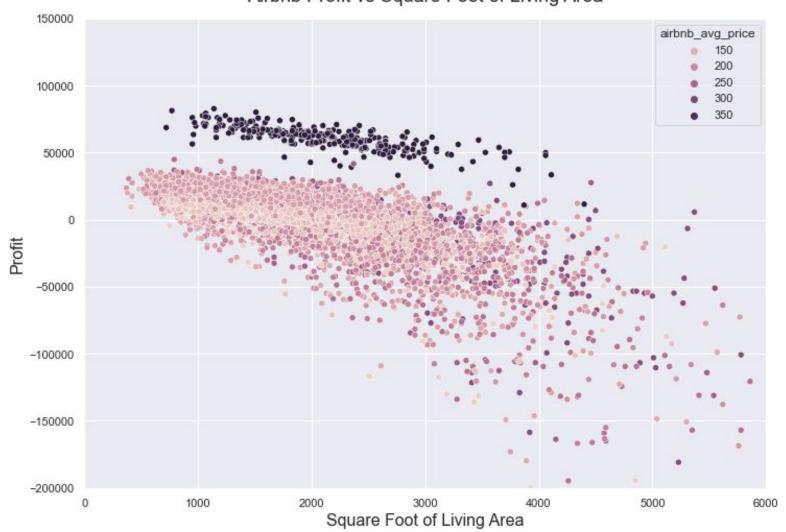
	Features Used in Best Model Correlated with Price	===
sqft_living	0.693	
grade_ord	0.677	
sqft_above	0.597	- 0.6
sqft_living15	0.589	
bathrooms	0.516	
view_ord	0.397	- 0.5
sqft_basement	0.325	
bedrooms	0.313	- 0.4
lat	0.309	- 0.4
Avg. Income/H/hold	0.283	
Model Features waterfront	0.252	- 0.3
waterfront	0.238	
≥ yr_renovated	0.120	
renovated	0.119	- 0.2
sqft_lot	0.086	
sqft_lot15	0.078	
condition_ord	0.049	- 0.1
yr_built	0.038	
long	-0.006	- 0.0
distance_to_starbucks_miles	-0.013	
zipcode	-0.059	
Population	-0.118	0.1
	price Correlation Values	

#### Final Model: Using 79 Estimators to predict home sales price

Predict Home Sale Price in King County with 79:  $R^2 = 0.85975$ 

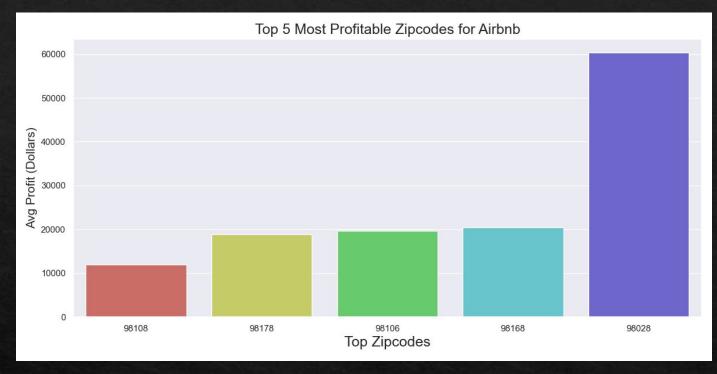


#### Airbnb Profit vs Square Foot of Living Area



Profit = Yearly Airbnb Revenue - Yearly Mortgage Payment of Property

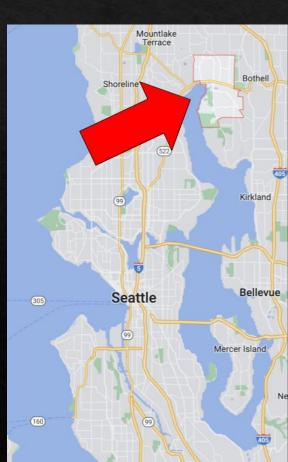
Clear subset of houses with a higher profit margin



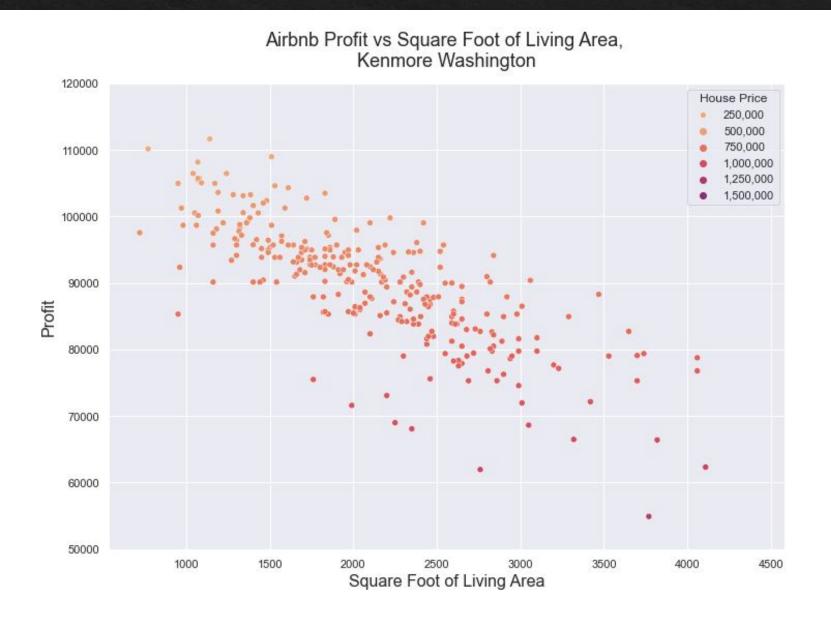
Zip code 98028 had the highest profit by a large margin for Airbnb rentals.



This is the town of Kenmore:



### Square Foot of Living Space Versus Profit, Kenmore Washington



#### Observations:

- Highest profit
   margins on smaller
   houses (between
   1000-2000 square
   feet)
- As home price increased, rental profit decreases

#### Recommendations:

• Go with a smaller to mid sized home between \$250,000 and \$500,000

# Contact Information



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