#### An Analysis of the House Sales **Prices in King County**

for

#### Miss Amy Williams







Kevin Dietrich 2025-03-17

# Getting Familiar with the Data Set ...

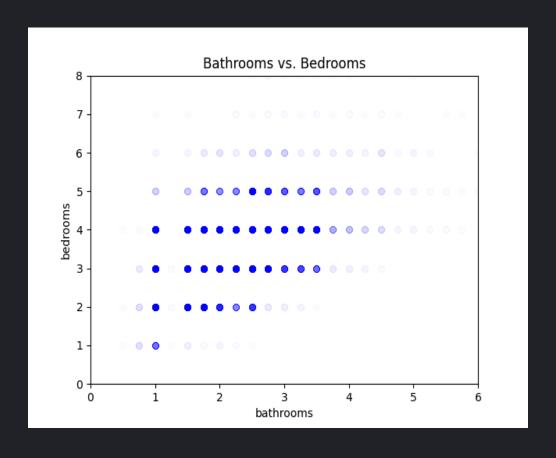
#### **HYPOTHESIS #1**

## The more bathrooms, the more bedrooms.

Is it true???

#### ??? The more bathrooms, the more bedrooms. ???

#### YES!



[Correlation  $\approx$  0.5]

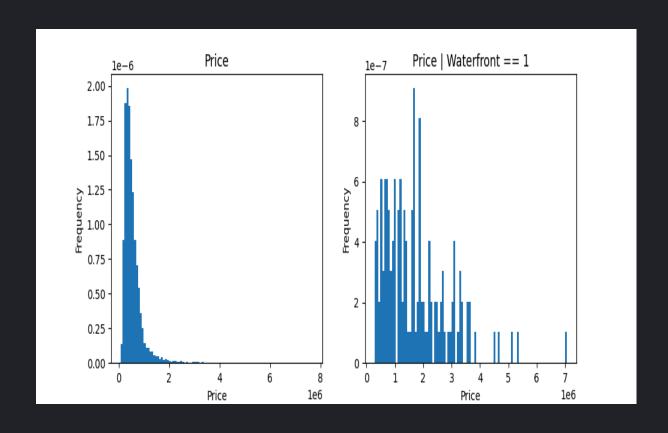
#### **HYPOTHESIS** #2

## The presence of a waterfront affects the prize.

Is it true???

#### 

#### YES!



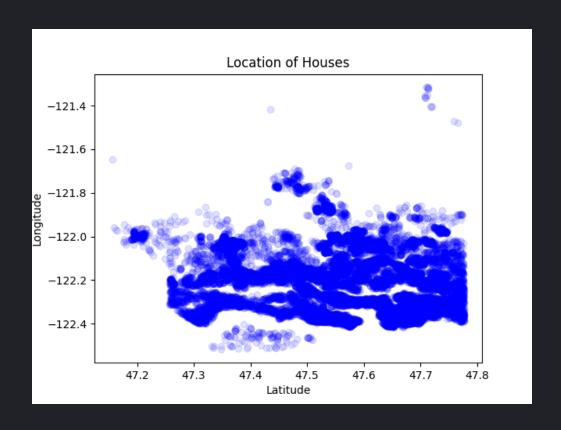
#### **HYPOTHESIS** #3

# The latitude and the longitude of a house location do not affect each other.

Is it true???

### ??? The latitude and the longitude of a house location do not affect each other. ???

#### **Probably YES!**



[Correlation  $\approx$  -0.1]

#### **Our Client**

Amy Williams, Seller, Mafiosa, sells several central houses (top 10%) over time, needs average outskirt houses over time to hide from the FBI.

NO!!!

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NO!!!

#### Corrected Description

#### ⇒ How to define ...

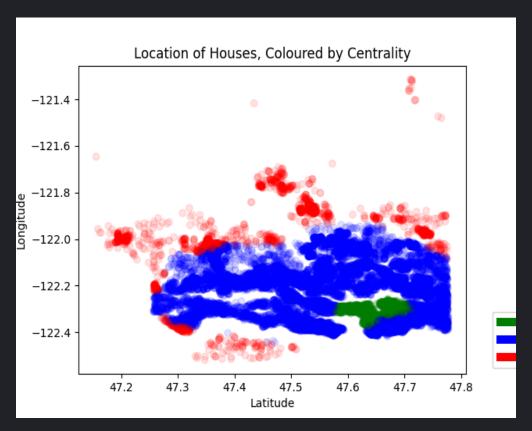
- (top 10%) centrality?
- exceptionality (on the outskirts)?
- "privacy" (on the outskirts)?

#### How to define ...

- (top 10%) centrality?
- exceptionality (on the outskirts)?
- "privacy" (on the outskirts)?

#### (Top 10%) Centrality?

Take the number of neighbours in a vicinity of fixed size!



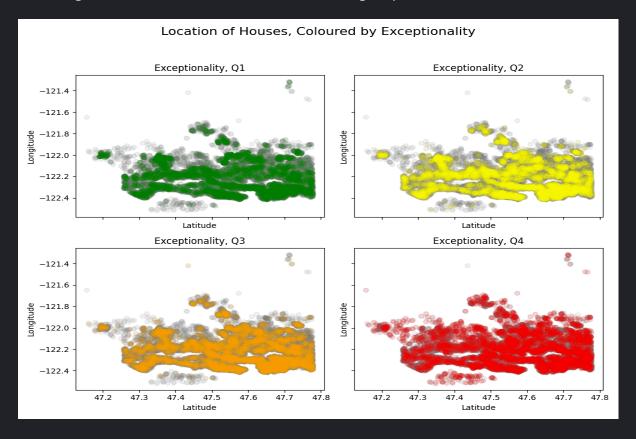
⇒ Sell "green" and buy "red" houses!

#### How to define ...

- (top 10%) centrality?
- exceptionality (on the outskirts)?
- "privacy" (on the outskirts)?

#### **Exceptionality?**

A house is more exceptional the more it differs from its immediate neighbours in terms of living space and lot size!



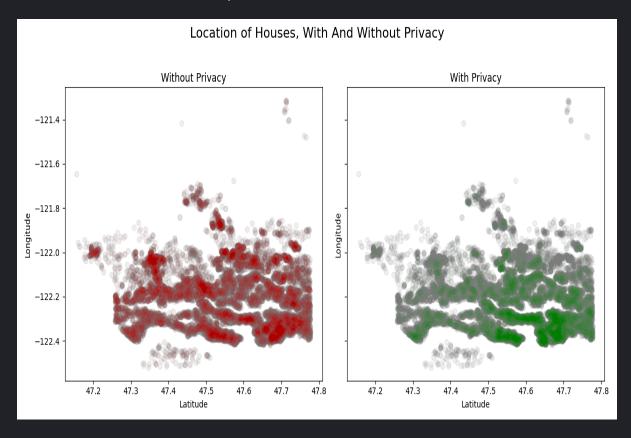
**⇒** Avoid regions indicated by cursor!

#### How to define ...

- (top 10%) centrality?
- exceptionality (on the outskirts)?
- "privacy" (on the outskirts)?

#### Privacy

Take the presence of a basement!



⇒ Avoid regions indicated by cursor!

### ... The End.