

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 ...

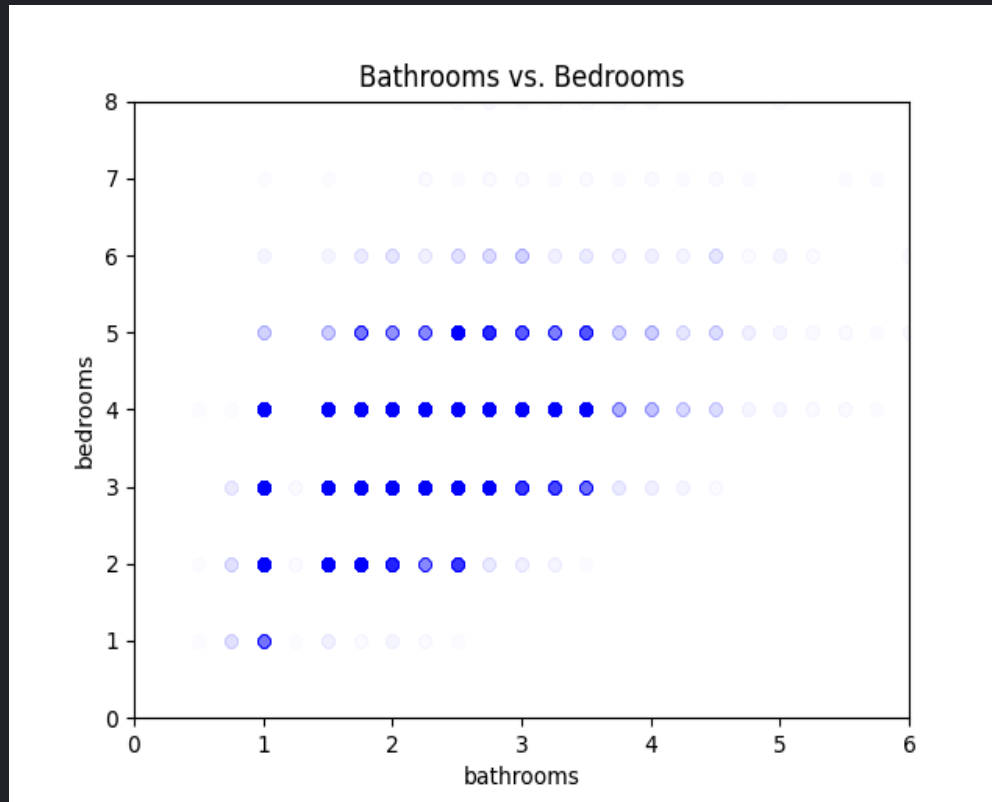
HYPOTHESIS #1

**The more bathrooms, the
more bedrooms.**

Is it true???

The more bathrooms, the more bedrooms. (?)

YES!



[Correlation ≈ 0.5]

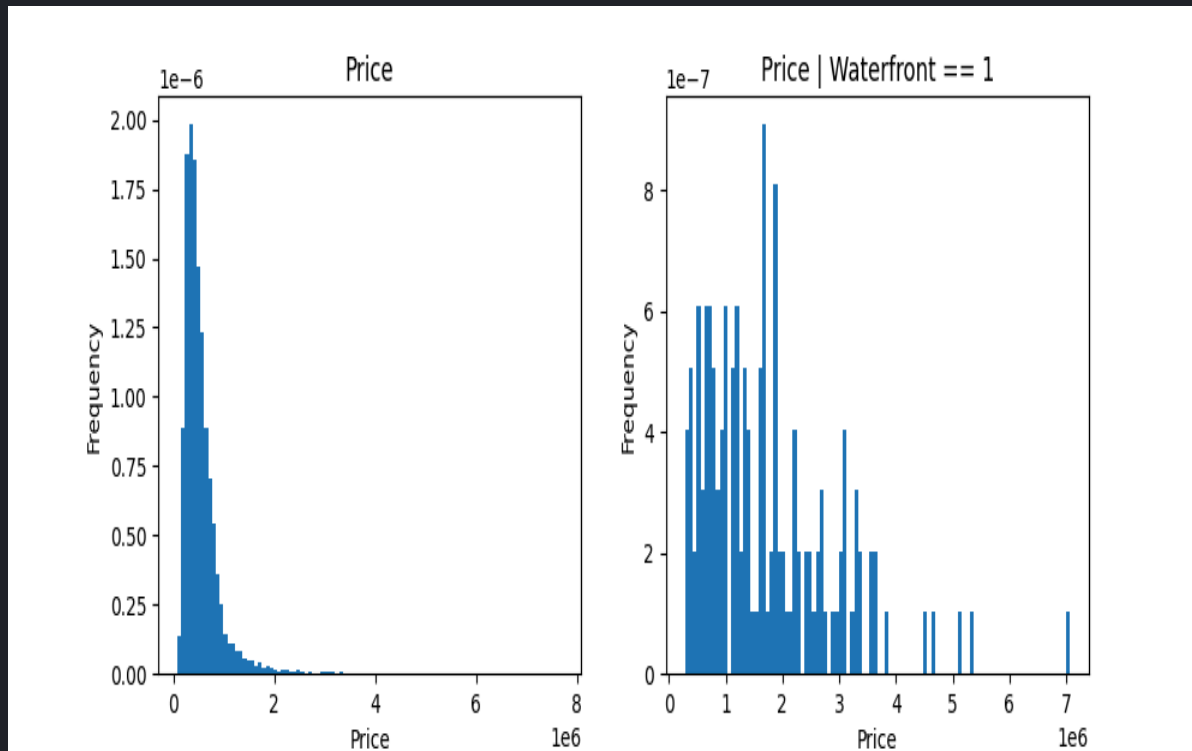
HYPOTHESIS #2

**The presence of a waterfront
affects the prize.**

Is it true???

The presence of a waterfront affects the prize. (?)

YES!



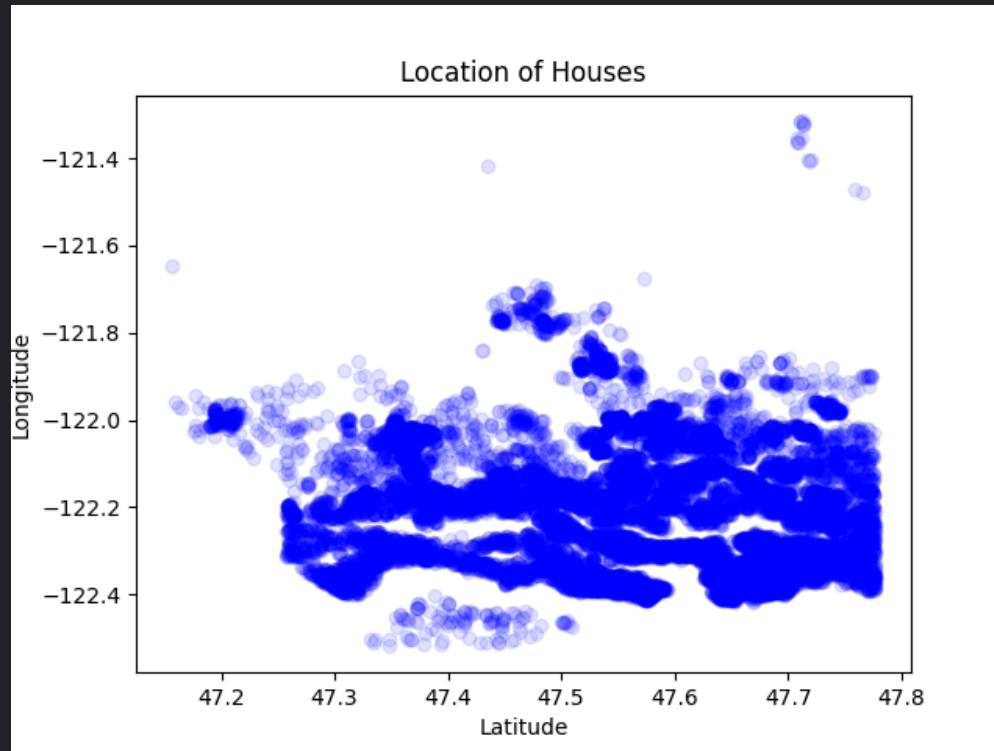
HYPOTHESIS #3

**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 ≈ -0.1]

Our Client

Amy Williams, Seller, ~~Mafiosa~~
businesswoman by trade, sells several
central houses (top 10%) over time, needs
average outskirt houses over time to ~~hide~~
~~from the FBI~~ **avoid entanglements with the**
FBI.

Amy Williams, Seller, businesswoman by trade, sells several central houses (top 10%) over time, needs average outskirts houses over time to avoid entanglements with the FBI.

⇒ How to define ...

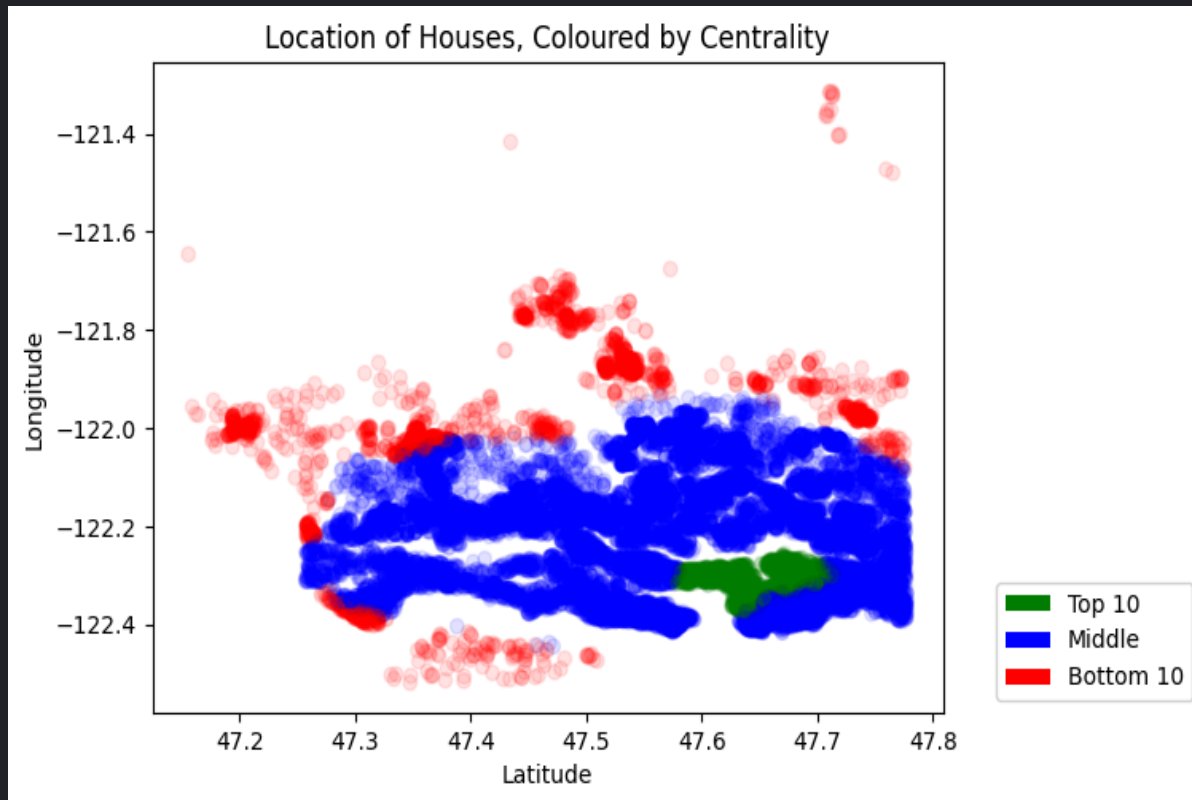
- **(top 10%) centrality?**
- **exceptionality** (on the outskirts)?
- **"privacy"** (on the outskirts)?

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!



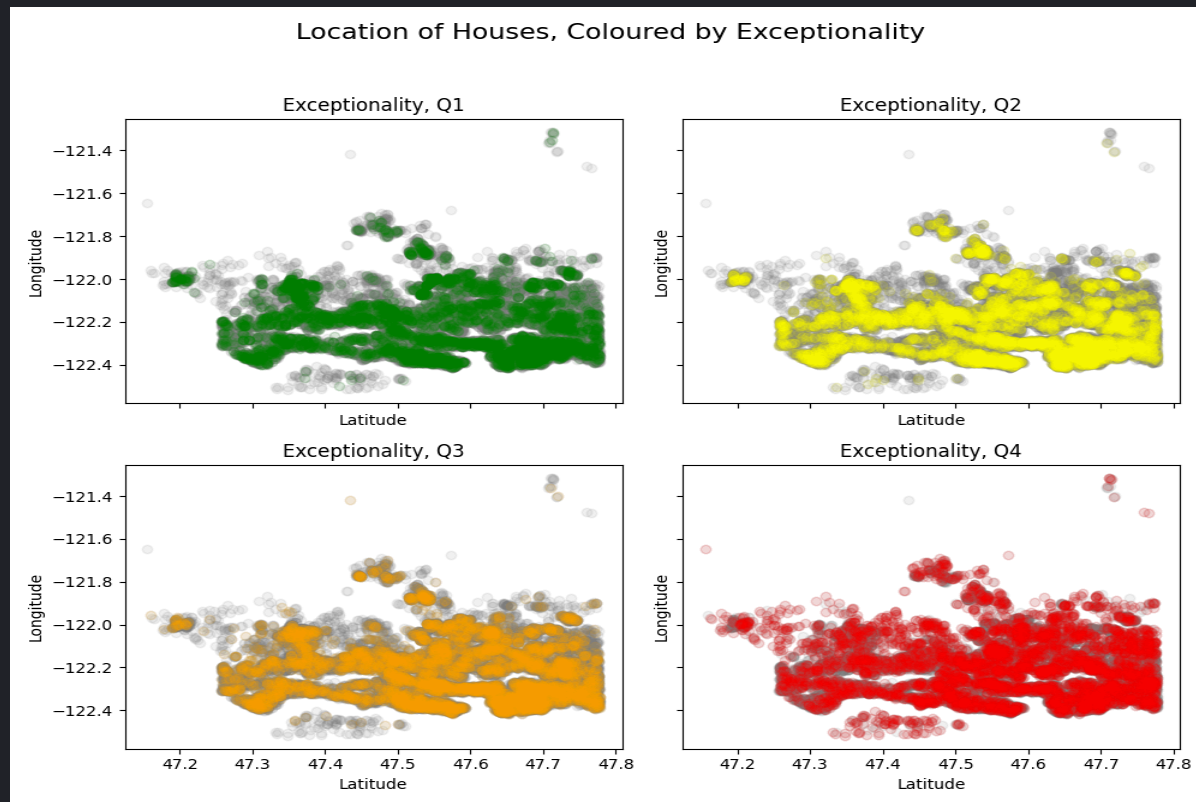
⇒ Sell "green" and buy "red" houses!

How to define ...

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

Exceptionality?

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



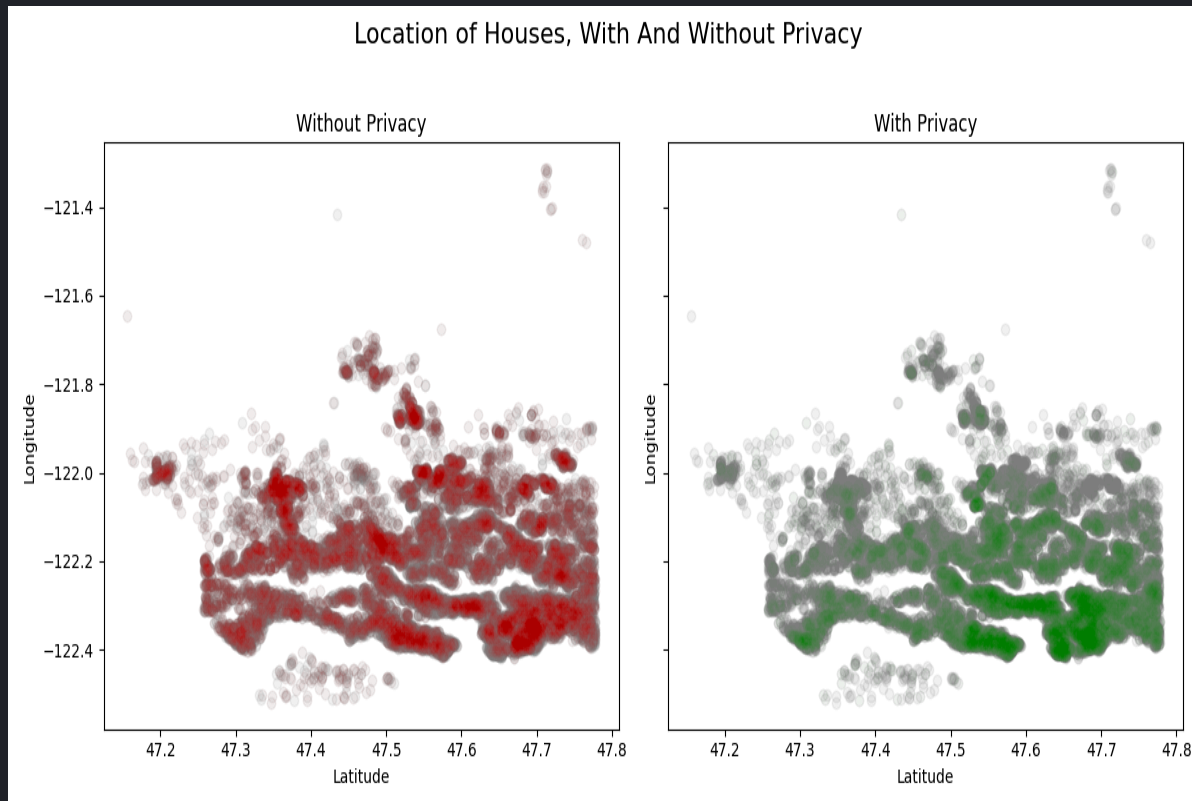
⇒ **Avoid regions indicated by the cursor!**

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 the cursor!**

The End