# **EDA**

#### How to buy a house for Thomas Hansen?

by Gwendolin Hoffmann

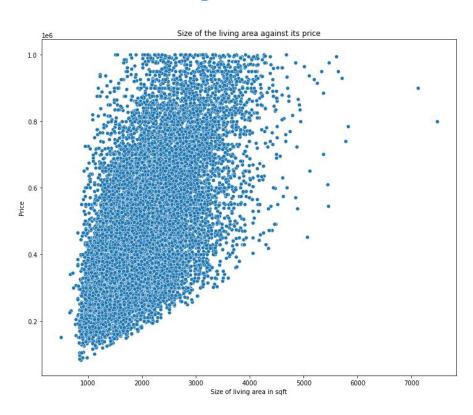
#### Who is Thomas Hansen?

- Wants a house for himself and his 5 children
- Has not much money
- Wants a nice neighborhood

#### What is the important data for him?

- condition → cleaned
- grades
- number of bedrooms → cleaned
- Size of the living area
- Size of the lot → cleaned
- Year when house was last renovated
- Year when house was built
- Date when the houses were last sold
- Price → cleaned

#### Possibility: Choose a smaller house



But: Huge family

#### **Hypothesis I**

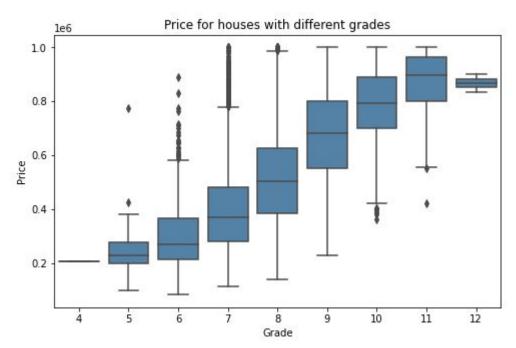
The higher the rankings for conditions and grades are, the higher is the price for the house.

## Hypothesis I: Conditions and grades vs. Price



Not correct for conditions

## Hypothesis I: Conditions and grades vs. Price



Correct for grades

#### Recommendations after Hypothesis I

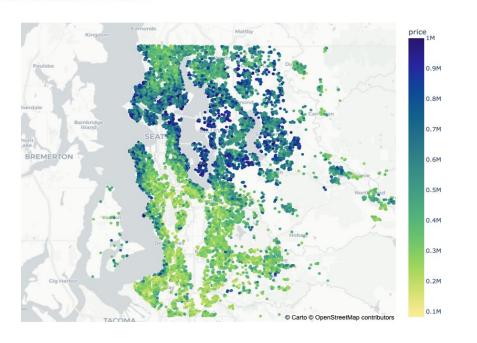
- Choose house with condition 4.
- Choose house which smaller grade.

#### **Hypothesis II**

The price of a house will increase if the house is closer to the city center.

#### Hypothesis II: Price vs. distance city

Prices and location of the houses



Not correct.

#### Recommendations after Hypothesis II

Choose house in the south.

#### **Hypothesis III**

The date matters, when you buy a house.

### Hypothesis II a: Price vs. buying month



Not (really) correct.

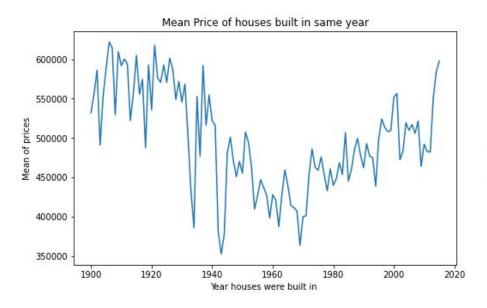
#### Hypothesis II b: Price vs. part of month

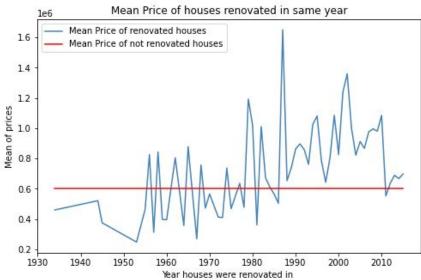


Not correct.

#### Recommendations after Hypothesis III

Care more about the age and renovation than the day the house was last sold.





#### **Summary**

- Choose house grades with condition 4
- Choose house grades with a most possible small grade
- Choose house in the south.
- Choose a house built around 1942 or in the 70s