

The key factors which impacts the house price in Kansas City

Tempest

Dataset

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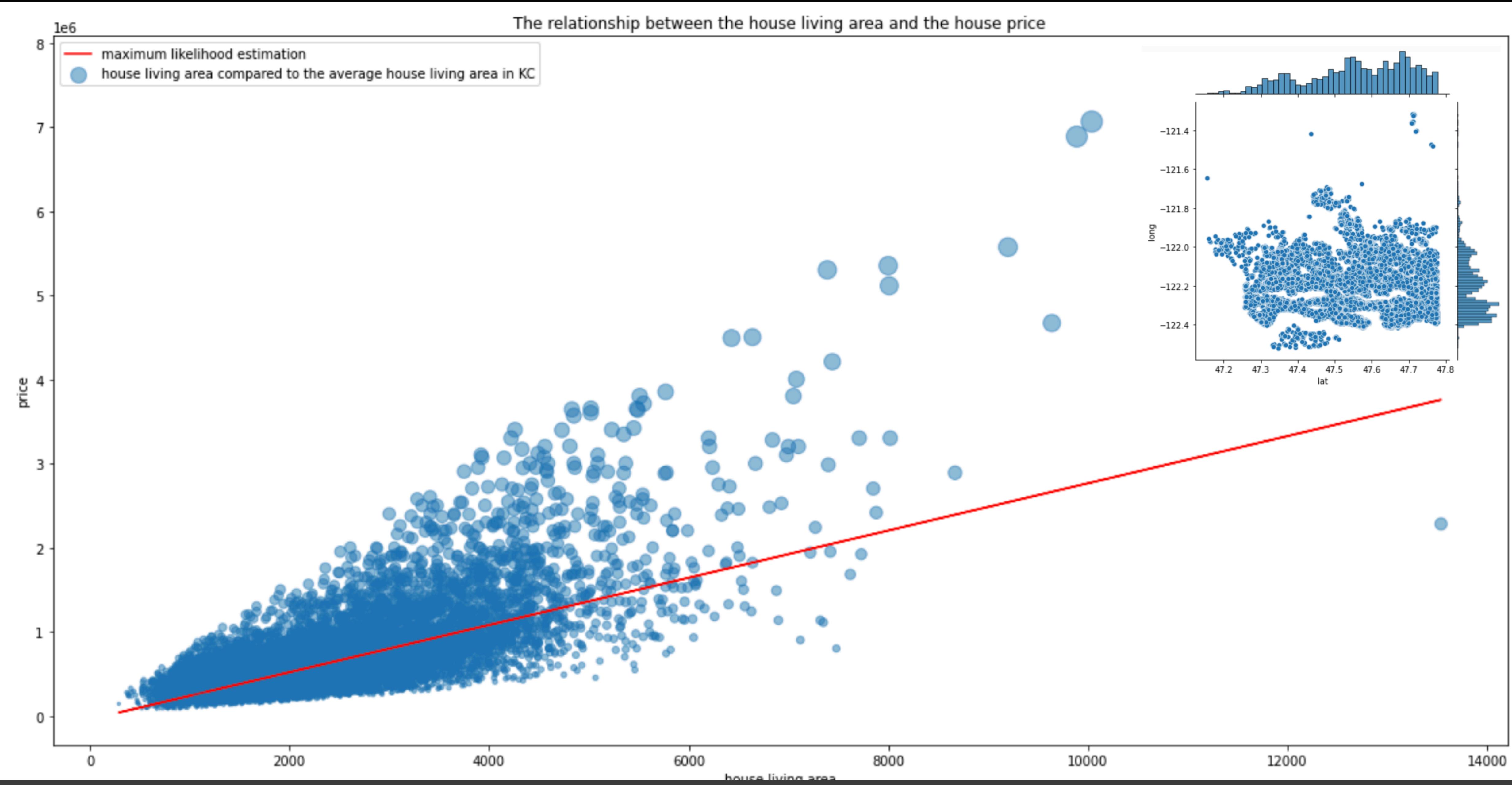
RangeIndex: 21613 entries, 0 to 21612
Data columns (total 21 columns):
 #   Column          Non-Null Count  Dtype  
--- 
 0   id              21613 non-null   int64  
 1   date            21613 non-null   object  
 2   price           21613 non-null   float64 
 3   bedrooms        21613 non-null   int64  
 4   bathrooms       21613 non-null   float64 
 5   sqft_living     21613 non-null   int64  
 6   sqft_lot        21613 non-null   int64  
 7   floors          21613 non-null   float64 
 8   waterfront      21613 non-null   int64  
 9   view            21613 non-null   int64  
 10  condition       21613 non-null   int64  
 11  grade           21613 non-null   int64  
 12  sqft_above      21613 non-null   int64  
 13  sqft_basement   21613 non-null   int64  
 14  yr_built        21613 non-null   int64  
 15  yr_renovated   21613 non-null   int64  
 16  zipcode         21613 non-null   int64  
 17  lat             21613 non-null   float64 
 18  long            21613 non-null   float64 
 19  sqft_living15   21613 non-null   int64  
 20  sqft_lot15      21613 non-null   int64  
dtypes: float64(5), int64(15), object(1)
memory usage: 3.5+ MB

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	id	1.00	-0.02	0.00	0.01	-0.01	-0.13	0.02	-0.00	0.01	-0.02	0.01	-0.01	-0.01	-0.01	0.02
	price	-0.02	1.00	0.31	0.53	0.70	0.09	0.26	0.27	0.40	0.04	0.67	0.61	0.32	0.05	
	bedrooms	0.00	0.31	1.00	0.52	0.58	0.03	0.18	-0.01	0.08	0.03	0.36	0.48	0.30	0.15	
	bathrooms	0.01	0.53	0.52	1.00	0.75	0.09	0.50	0.06	0.19	-0.12	0.66	0.69	0.28	0.51	
	sqft_living	-0.01	0.70	0.58	0.75	1.00	0.17	0.35	0.10	0.28	-0.06	0.76	0.88	0.44	0.32	
	sqft_lot	-0.13	0.09	0.03	0.09	0.17	1.00	-0.01	0.02	0.07	-0.01	0.11	0.18	0.02	0.05	
	floors	0.02	0.26	0.18	0.50	0.35	-0.01	1.00	0.02	0.03	-0.26	0.46	0.52	-0.25	0.49	
	waterfront	-0.00	0.27	-0.01	0.06	0.10	0.02	0.02	1.00	0.40	0.02	0.08	0.07	0.08	-0.03	
	view	0.01	0.40	0.08	0.19	0.28	0.07	0.03	0.40	1.00	0.05	0.25	0.17	0.28	-0.05	
	condition	-0.02	0.04	0.03	-0.12	-0.06	-0.01	-0.26	0.02	0.05	1.00	-0.14	-0.16	0.17	-0.36	
	grade	0.01	0.67	0.36	0.66	0.76	0.11	0.46	0.08	0.25	-0.14	1.00	0.76	0.17	0.45	
	sqft_above	-0.01	0.61	0.48	0.69	0.88	0.18	0.52	0.07	0.17	-0.16	0.76	1.00	-0.05	0.42	
	sqft_basement	-0.01	0.32	0.30	0.28	0.44	0.02	-0.25	0.08	0.28	0.17	0.17	-0.05	1.00	-0.13	
	yr_built	0.02	0.05	0.15	0.51	0.32	0.05	0.49	-0.03	-0.05	-0.36	0.45	0.42	-0.13	1.00	

House Area and Price

The relationship between the house living area and the house price



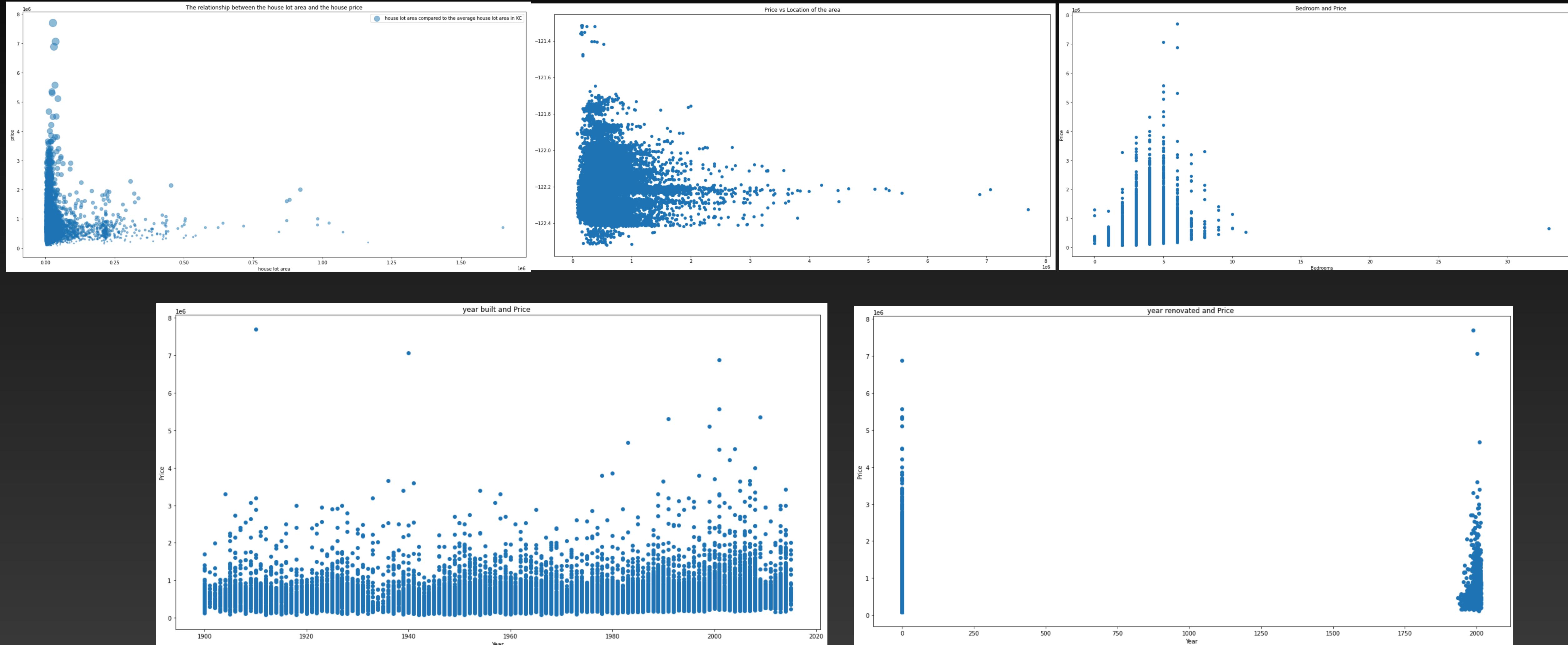
Findings

Area is the main factor

- The housing area mainly determines the housing price.
- Housing prices are positively correlated with the housing area.
- The amount of houses with low price and small area is majority compared to the amount of houses with higher price and larger area.
- When we choose house in KC, the living area will be the primary factor impacts the price, so we can choose all other factors as optimal because they do not impact the price significantly.

Research Method

Assumption-Validate



Importance

