



# **Airbnb Trends**

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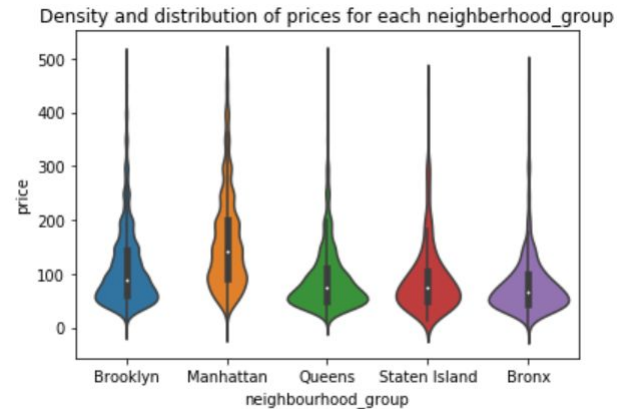


# Question 1

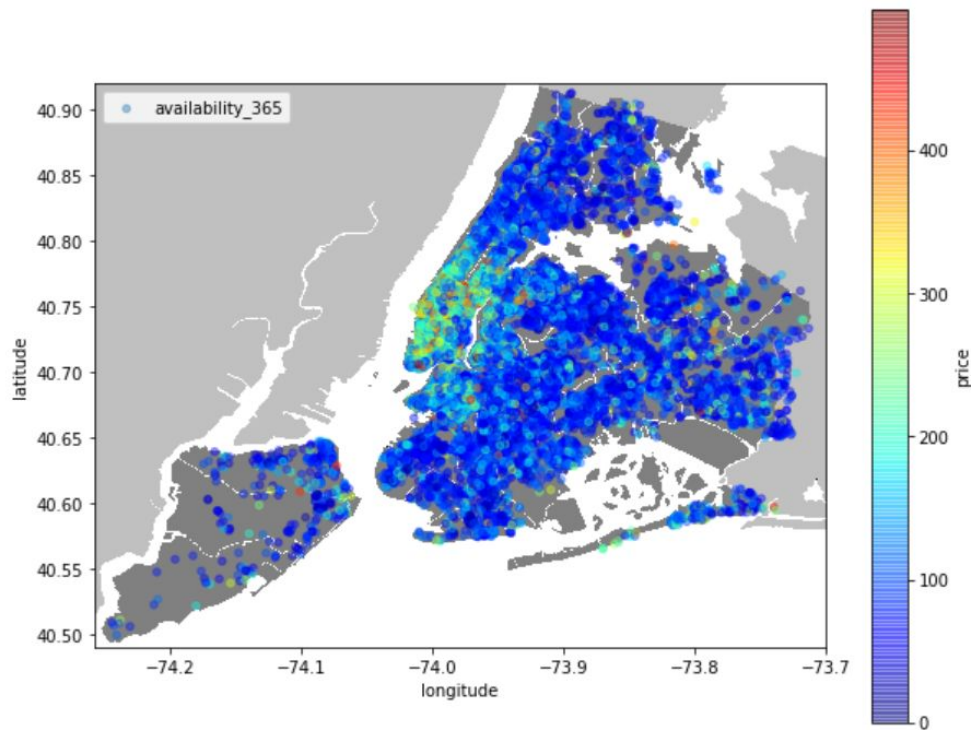
- Where are the most popular neighborhoods and what are the average price in NYC for Airbnb rentals?
- Charts for distribution of prices for Airbnb in NYC borough

Out[9]:

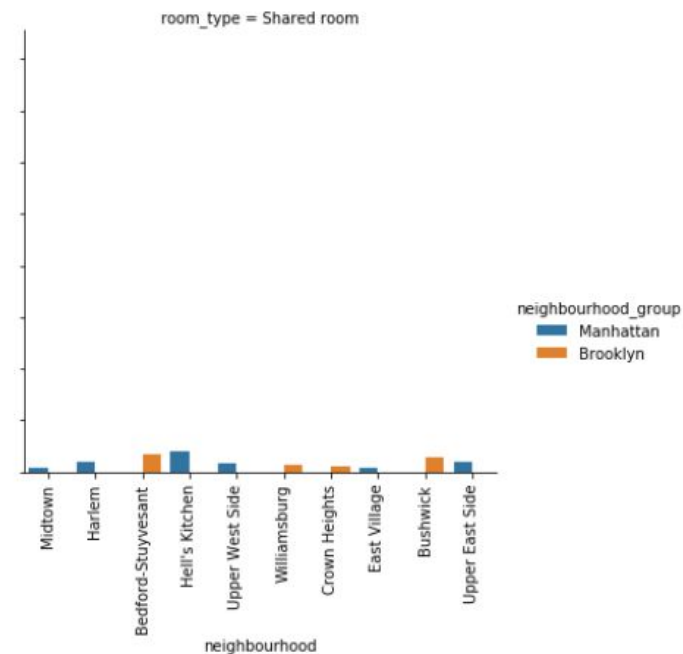
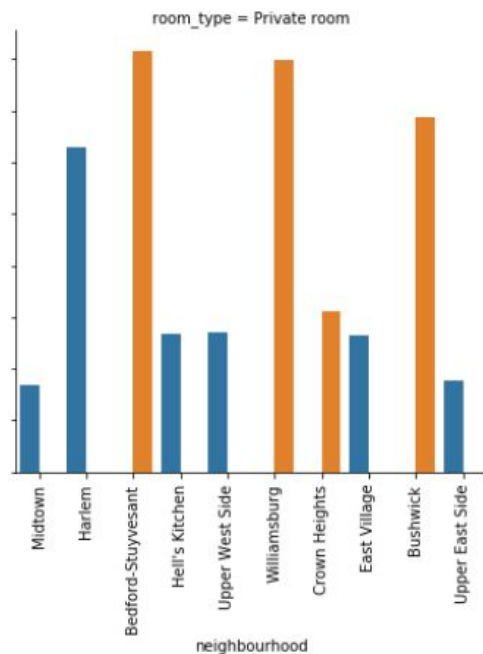
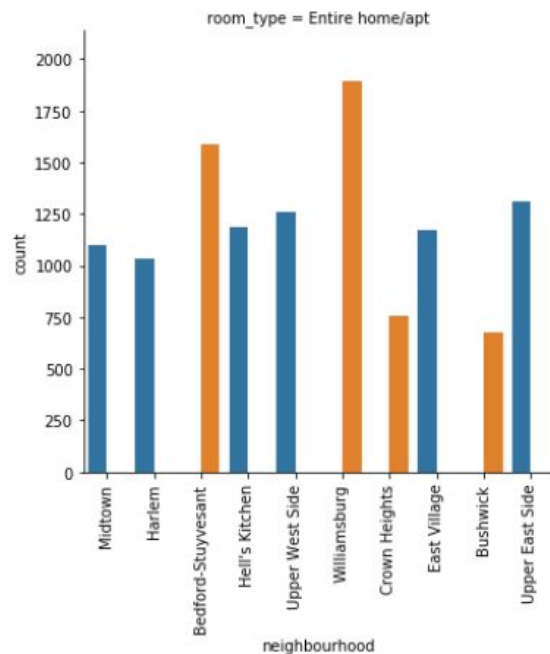
	Brooklyn	Manhattan	Queens	Staten Island	Bronx
Stats					
min	0.0	0.0	10.0	13.0	0.0
25%	60.0	95.0	50.0	50.0	45.0
50%	90.0	150.0	75.0	75.0	65.0
75%	150.0	220.0	110.0	110.0	99.0
max	10000.0	10000.0	10000.0	5000.0	2500.0



- **Visualize all NYC listings**



# ● Top 10 neighborhoods room types



## ● **Conclusion**

1. Brooklyn is the most popular borough with neighborhoods such as Bedford, Williamsburg, and Bushwick
2. Price increases as you approach closer to the middle : Manhattan tends to be the highest in price

## ● **Limitation**

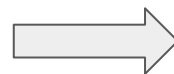
1. There is lack of recent data (Post-Covid 19)

## Question 2

- How does seasonality affect Airbnb price in NYC and Berlin?
- **Hypothesis:**
  - Busier the season, higher the price

Data Cleanup

	listing_id	date	available	price	year	month
0	8110	10/2/18	t	105	2018	October
1	14468	10/2/18	t	99	2018	October
2	16076	10/2/18	t	94	2018	October
3	19159	10/2/18	t	140	2018	October
4	19169	10/2/18	t	285	2018	October

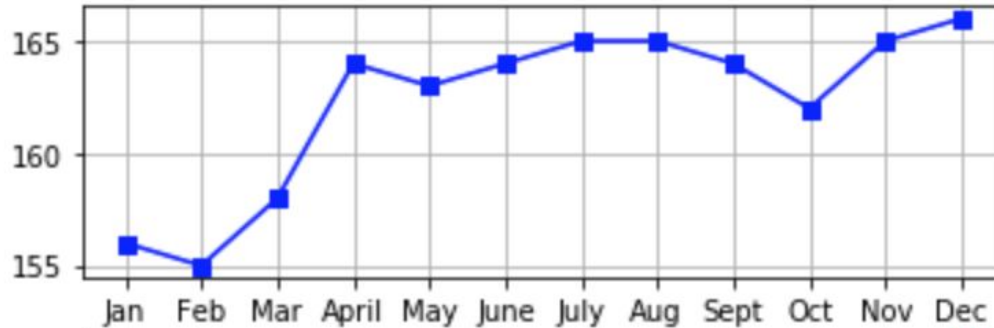


	price
month	
<b>January</b>	\$156.69
<b>February</b>	\$155.38
<b>March</b>	\$158.87
<b>April</b>	\$164.10
<b>May</b>	\$163.84
<b>June</b>	\$164.45
<b>July</b>	\$165.32
<b>August</b>	\$165.06
<b>September</b>	\$164.63
<b>October</b>	\$162.10
<b>November</b>	\$165.97
<b>December</b>	\$166.20

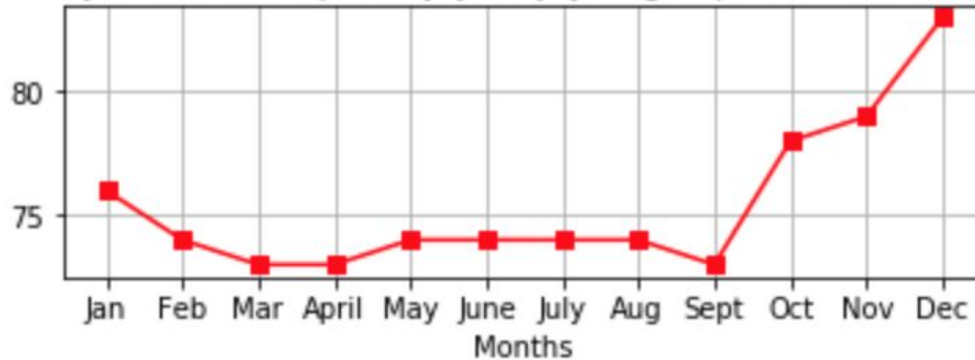
# Question 2 Results

NYC vs Berlin Price by Month in 2018

NYC in \$



Berlin in \$



## Question 2 Conclusion

- NYC on average has a higher rental price
  - NYC : \$163
  - Berlin : \$78
- Both cities generally have an upward slope of price
- Unlike NYC, Berlin has a steep price increase in October
  - Oktoberfest



## Limitation

- Lack of recent Covid 19 data