

NYC Airbnb Data Analysis

What Drives Price and Popularity?
Zachary Kruse

Introduction

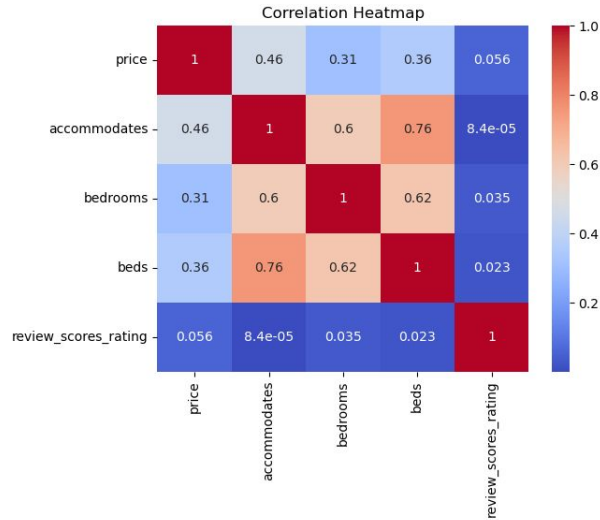
- What affects Airbnb price and listing popularity in NYC?
- Purpose: Help stakeholders make data-driven decisions
- Stakeholders: Airbnb hosts, renters, urban analysts

Methodology

- Dataset: Inside Airbnb NYC (CSV)
- Unit: One listing
- Features: Price, room type, neighborhood, availability, reviews
- Tools: Jupyter Notebook, Pandas, Seaborn, Matplotlib

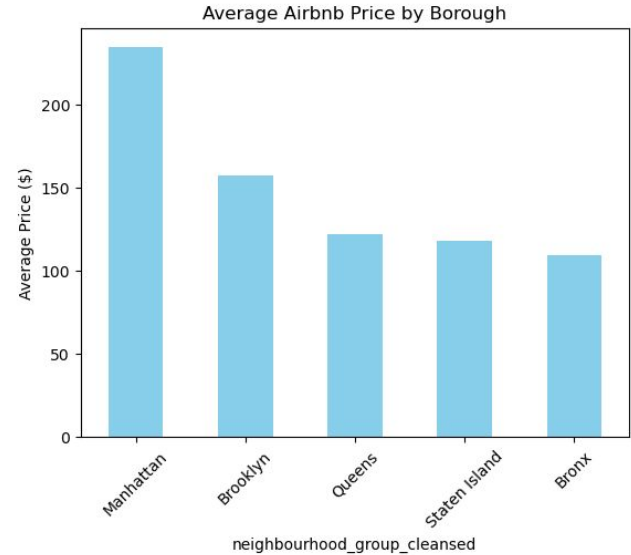
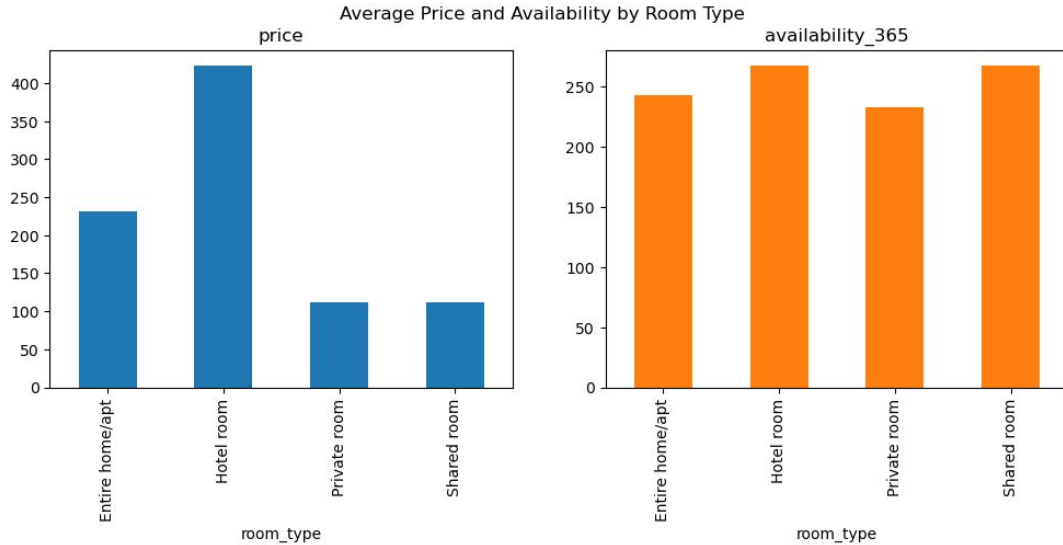
Results – Price Influencers

- Room type and neighborhood are strong price drivers.
- Entire homes in Manhattan have the highest rates.



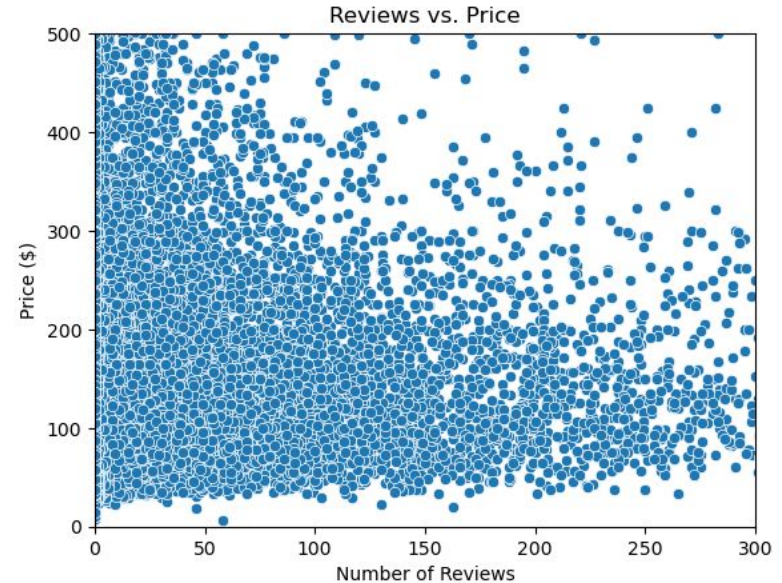
Results – Room Type & Neighborhood Analysis

- Manhattan = Highest average prices, Bronx = Lowest
- Hotel room = Higher price & more availability



Results – Popularity from Reviews

- Popular listings tend to be budget-friendly, suggesting high turnover and value appeal.
- Total review count can be misleading



Future Work

- Conduct sentiment analysis on review comments.
- Apply machine learning to predict listing price or popularity.
- Analyze seasonal trends in pricing and availability

Appendix

- Data source: Inside Airbnb (<http://insideairbnb.com>)
- Tools: Jupyter, Python, Seaborn

