Valuation of Airbnb Listings

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Problem

- As a traveler, you want to maximize the comfort and convenience of your stay in a city while minimizing the cost
- However, there's usually dozens upon dozens of Airbnb listings that match your preferences even after filtering results
- Listing your home on Airbnb also requires consciousness of competitive pricing
- Question: How do we deal with this information overload?

Solution

- The development of this proposed tool is meant to cut down on the excess of information being presented
- Travelers will be able to see if the properties they are looking at are over/under-valued
- Similarly, homeowners will also be able to see this information and adjust their list prices as necessary
- Question: How do we validate this solution?

Validation & Model

Validation

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- a home can no longer be booked when it could've been previously
- the first homes to be booked are the under/normal-valued homes
- higher-priced homes have many open booking dates
- under/over-valued homes show an increase/decrease in listing price over time

Model

- Classifying Home Value
 - Logistic Regression
 - Issue: Measuring Performance
 - Idea: Niche home markets
- Maximizing Revenue
 - Find optimal listing price for different home types
 - Do <u>minor</u> home differences (amenities, bed count, etc.) lead to more bookings/higher listing prices?
- Measuring Market Saturation
 - Predict growth over time from booking availability

Data

Sources:

- http://insideairbnb.com/getthe-data.html
- https://www.airdna.co/
- Mine data from Airbnb

Important Variables

- Listing Price
- Available Booking
- # of Guests
- Amenities

- Home Type
- # of Beds
- Neighborhood
- etc...

Questions?

