

Problem

In recent years, we've seen a dramatic increase in Airbnb listings as an alternative to hotels for travelers, due to their convenience and wider outreach. Hosts can turn the homes they own into an overnight stay for traveling guests, by setting a predetermined fee and rules.

As the market for Airbnb listings grows, it is important to create a standardized model to predict a reasonable price for each listing, where reasonable is defined as a good compromise between the host and guest. In short, the question is ***How do we determine a good price for an Airbnb listing?*** This will help both parties alike, as hosts will not feel that they are charging less than they should for their listing to maximize profit, and guests will feel that they are paying an appropriate price, promoting an overall happier transaction.

Dataset

The dataset that we have so far is provided by Inside Airbnb (<http://insideairbnb.com/get-the-data.html>), which is a non-commercial set of data on Airbnb listings. Here, the data is split up by various locations around the world, and contains various metrics on listings in the area such as price per night, minimum nights, intended guests, bed and bathrooms, etc. In addition, beyond having information about the housing, there are also records of number of bookings, reviews, and other relevant information from guests. We believe that this dataset is a very valuable resource in terms of answering the question, because it provides tons of data per listing beyond the price, that we can potentially use as features when designing our model.