ORIE 4741 Project Proposal
Price Suggestion for Airbnb Hosts in NYC

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1 Objectives

Airbnb, an online agency that features to provide local home-stays for visitors. Though established in 2008, this website has become extremely popular among the young people in the past 10 years. Airbnb provides the customers with cheaper price and more services, such as kitchen availability, spacious room, and maybe breakfast. Besides these facilities, the visitors can also interact with the hosts to get personal recommendations for food and attractions.

As staying NYC, a city where average hotel prices are as high as 300 dollars per night , the cheap deal on Airbnb makes itself a sound choice. In this project, we would like to study the possible factors that will affect the price of the room, whether different location or better room will yield a much higher price. We would like to understand the Airbnb price strategy in NYC and make better recommendations for Airbnb hosts to set their prices. This tool will help both previous and new Airbnb hosts to adjust their price range and become more competitive on prices.

2 Data Set

We would like to use the data set *"New York City Airbnb Open Data"* on Kaggle. This data set contains different information listed below.

- List ID, List Name, Host ID, Host Name

- Neighbourhood, Location, Latitude, Longitude

- Room Type, Price

- Number of Reviews, Last Review, Reviews per month

We believe information such as neighbourhood and room type will greatly affect the price, and will allow us to correctly analyze this relationship. With our analysis and room information provided by the hosts, we not only can predict the suggested price for new hosts, but also can find outliers in existed data set and provide recommended range for price adjustments.