

# CMPS140 Project Proposal - How to Become Top Earner in Airbnb?

Tangni Wang, Tung Hoi Man, Yunxiang Fu  
{twang63, tuman, yfu7}@ucsc.edu

## 1 Project Summary

This project is referenced from a project idea and a corresponding dataset on Kaggle with the same name. Airbnb, as a privately held global company that provides an online service to connect host and visitors via websites and mobiles apps to form a better travel experience. The fact that not all users are using this service with the same purpose. There are poor and rich, some use it for short term traveling and others use it for long term stay, some prefer locations and some prefer house quality.

### 1.1 Goal and Impacts

Due to most of concerns on how to be a top earner, we are using the datasets of the Airbnb Seattle case to compare different performers' data especially those ones with more bookings and high rating in a comparison with the ones with less bookings and low rating. The goal is to make recommendations for the low earner hosts and make their listings more profitable and gain more revenue than before.

### 1.2 Related Work

Many comparisons have been done between high earners and low earners (see references). We are inspired by those work. We want to see if there are other interesting factors or combination of factors that would affect booking rate.

### 1.3 Data, Methods and Evaluation

There are three dataset from Seattle Airbnb open data which include calendar.csv, listings.csv, and reviews.csv. These include the listing details like price and availability. Reviews like review score, reviewer, and comments. We will implement a machine learning method using scikit learn.

### 1.4 Milestones

- 01/23/19: submit a project proposal (1 page);
- 02/06/19: collect the dataset, begin to implement the baseline models;
- 02/15/19: complete the baseline models and submit a progress report (3 - 4 pages);
- 02/20/19: implement the advanced models;
- 02/27/19: complete the advanced models and begin to evaluate the model;
- 03/06/19: finish the evaluation and begin to work on the poster and the final report;
- 03/14/19: poster presentation;
- 03/17/19: submit final project report (5 - 7 pages).

## References

Kaggle: [https://www.kaggle.com/yogi045/how-to-become-top-earner-in-airbnb?utm\\_medium=email&utm\\_source=intercom&utm\\_campaign=datanotes-2019](https://www.kaggle.com/yogi045/how-to-become-top-earner-in-airbnb?utm_medium=email&utm_source=intercom&utm_campaign=datanotes-2019)