

Machine Learning Project

Price Estimation for Airbnb listings

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October 23, 2017

1 Problem

Airbnb is an online marketplace and hospitality service, enabling people to lease or rent short-term lodging including vacation rentals, apartment rentals, homestays, hostel beds, or hotel rooms.[1]

Airbnb has seen a growth in the number of listings by 1 million only for the year 2015 [2]. Being a new host on Airbnb, it is difficult for you to put a price for your property which will be competitive compared to your neighborhood and will still attract guests. While Airbnb already have a smart pricing tool for their product, but it has received mixed response from the Airbnb host community [3].

We want to build a prediction model which will help Airbnb hosts to get a reasonable expected price for their listing.

We choose to stick to Boston Airbnb listings data from InsideAirbnb [4]. The validation of the predictions would be against the prices for listings for the particular date.

2 Summary of Data

2.1 (Variables)

- $n = 23, 23 = 7 + 7 + 4 + 4 + 4$

2.2 (Correlations)

- $n = 23, 23 = 7 + 7 + 4 + 4 + 4$

2.3 (Missing Data)

- $n = 23, 23 = 7 + 7 + 4 + 4 + 4$

2.4 (Outliers)

- $n = 23, 23 = 7 + 7 + 4 + 4 + 4$

3 (Methods)

- $n = 23, 23 = 7 + 7 + 4 + 4 + 4$

4 (Preliminary results)

- $n = 23, 23 = 7 + 7 + 4 + 4 + 4$

References

- [1] Airbnb Wikipedia <https://en.wikipedia.org/wiki/Airbnb>
- [2] Airbnb Growth <http://blog.airdna.co/2015-in-review-airbnb-data-for-the-usa>
- [3] Airbnb Smart Pricing Reviews "<https://community.withairbnb.com/t5/Help/should-i-use-smart-pricing/td-p/201102>"
- [4] Airbnb Boston Data <http://insideairbnb.com/boston>