Inside Airbnb
Adding data to the debate

Loyola MSBDA Analytics Capstone Project Proposal

Company Profile

Inside Airbnb is an independent, non-commercial set of tools and data that allows you to explore how Airbnb is really being used in cities around the world.

By analyzing publicly available information about a city's Airbnb's listings, Inside Airbnb provides filters and key metrics so you can see how Airbnb is being used to compete with the residential housing market.

Project Title

There are many possibilities on what intelligent actionable insights can be derived from the data. One can consider for example predicting the price of a listing, given certain characteristics or independent variables like location, size, reviews etc. Another interesting insight would be correlating Airbnb data with data from for example Zillow for house listing prices for some interesting insights. This latter may be more involved for the remaining time. The site has also many other metrics and interactive visualization that can be a good source of inspiration for other interesting insights.

Project Description

Problem statement:

Consider the more recent data for the Chicago, Illinois dated 10 May 2017. There are two files of interest: the detailed listings data gnu-zipped file (*listings.csv.gz*) and the summary information and metrics file (*listings.csv*). The two sets are in a way complementary. For the benefit of time I say limit your options to the descriptive data of the unit, the geographic location, and of course the price. You probably want to ignore the many textual details in reference to summary, description. On the other hand, you may want to consider things like amenities.

Goals:

The goal of this project should be a price prediction. The price can, as stated earlier, in relation to a new Airbnb listing or it can be in relation to a house pricing. The latter is a more complex initiative. I would recommend, depending on the use case selected, to break your data set into a so-called training and testing. The former is used to conduct your analysis and the latter to test your findings. Follow the guidelines in the shared MSBDA project document for a complete coverage of all relevant steps including details such as data models and cleansing.

Data:

Data can be downloaded from the site http://insideairbnb.com/get-the-data.html . Look for Chicago, Illinois.

Project Coordination

For technical details the CME lab resident data scientist Jose should be able to help. For any other business-related matters, you should rely as much on your own initiative and entrepreneurial approach.

Project Expectations

The final deliverable of this study should provide new actionable insights, predictive in nature, that will help in the decision making when listing a new Airbnb unit or a new house for sale. Other insights can be also possible.