# DOES SUPERHOST ACCREDITATION BENEFIT AIRBNB HOSTS IN CHICAGO? IF SO, HOW?

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# RESEARCH QUESTION

- The study focuses on the significance of signaling in shared economy. More specifically, does the superhost status in airbnb renting platform send out a positive signal and benefit the superhosts financially in the city of Chicago?
- If so, we want to further explore the specific mechanism through which such status accreditation benefit these superhosts.
  - Higher rates?
  - Higher occupancy rate?

### MOTIVATION

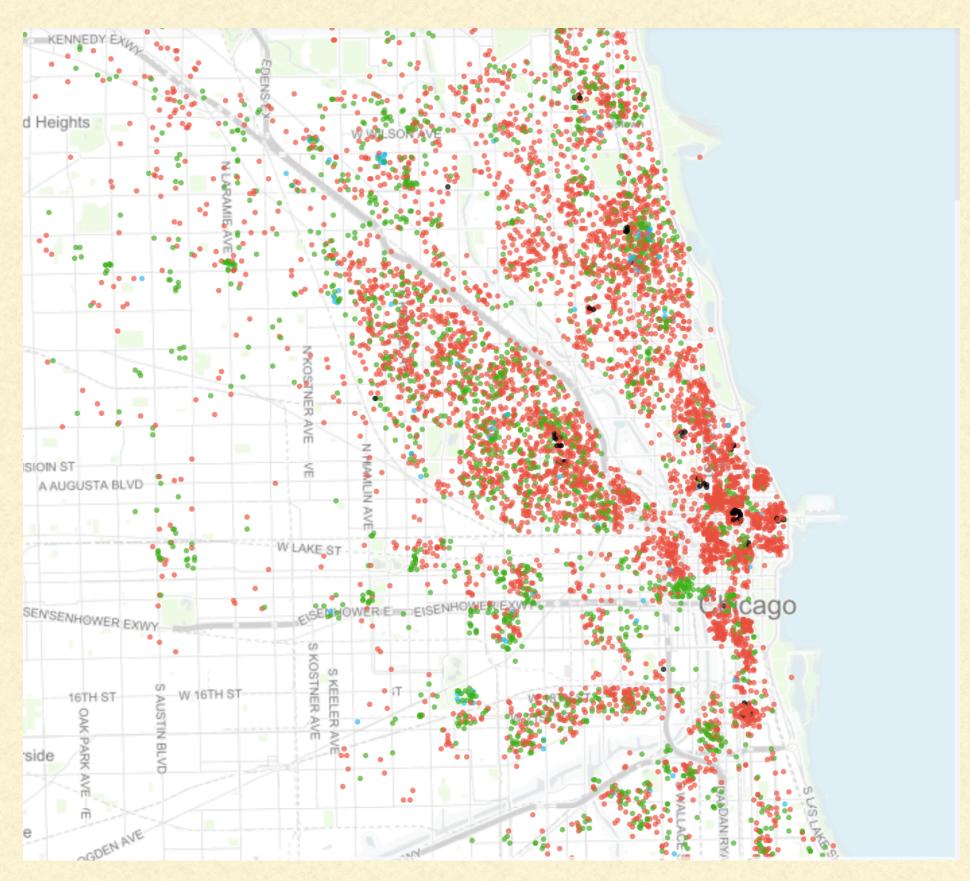
- If such accreditation does benefit renters, studying the mechanisms under the hood can help those non superhosts make adjustable improvement accordingly to gain more income.
- Knowing how these superhosts attract customers also sheds light on wise consumption decisions.
- Chicago: apart from other conditions that distinguish superhosts from normal landlords, will superhost status bring about more income by dispelling people's safety concerns?

#### LITERATURE

- Signalling theory: educational credential enables employers to reliably distinguish high ability workers from lower ones(Michael Spence, 1973)
- Consumers' information use weakens the pull of brand in online markets (Joel Waldfogel & Lu Chen, 2006)
- Voluntary disclosure of private information increases the prices of used cars on eBay (Lewis, 2011)
- Aaker Model: Brand equity represents a unique set of brand associations indicating what the brand stands for and offers to customers an aspiring brand image (David Baker, 1991).

#### DATA

- All data are publicly available and can be obtained from http://insideairbnb.com/, including:
  - Detailed Listings data for Chicago
  - Detailed Calendar Data for listings in Chicago
  - Detailed Review Data for listings in Chicago
  - Summary information and metrics for listings in Chicago
  - Summary Review data and Listing ID



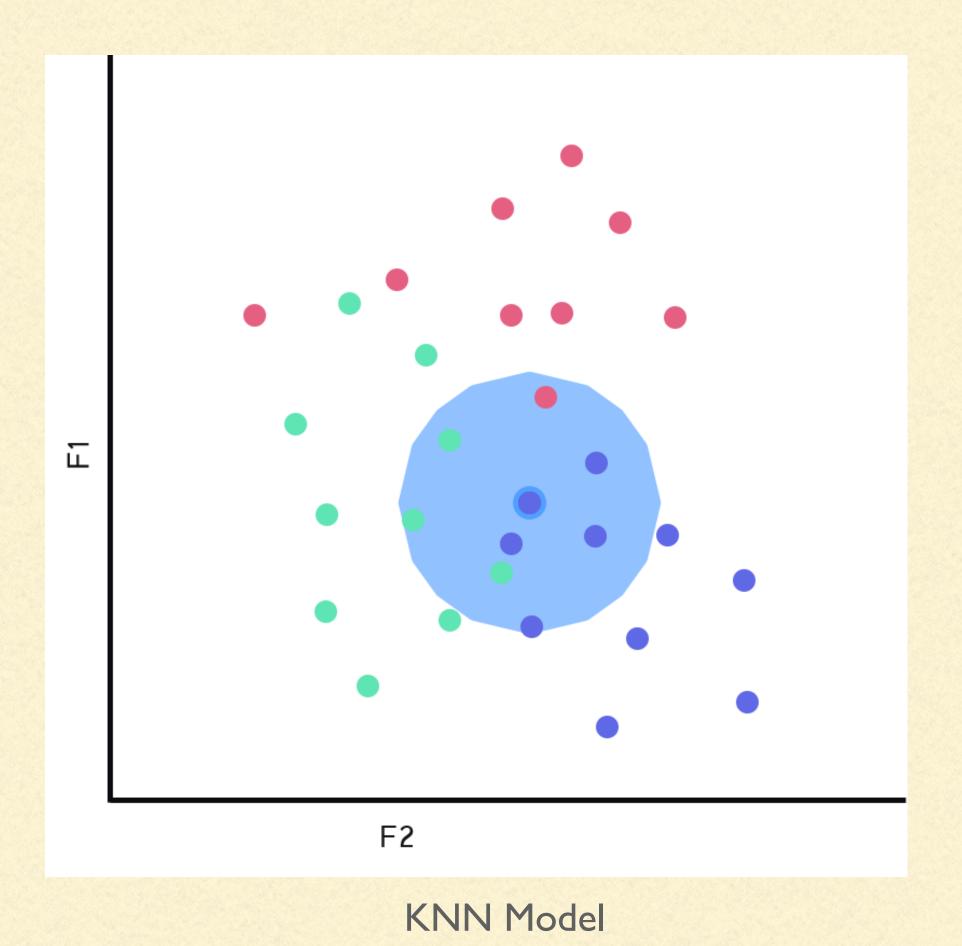
Chicago Housing Resource

#### VARIABLES

- First step: check if superhosts enjoy higher rates?
  - Daily price as explained variable
  - Other important features (such as whether superhost or not, room type, location. etc) as explanatory variables
- Second step: check other channels that contribute to higher revenue
  - This time revenue as explained variable

#### MODELS

 K-nearest neighbors algorithm to check whether superhosts enjoy a 'brand premium'



# MODELS-DECISIONTREE

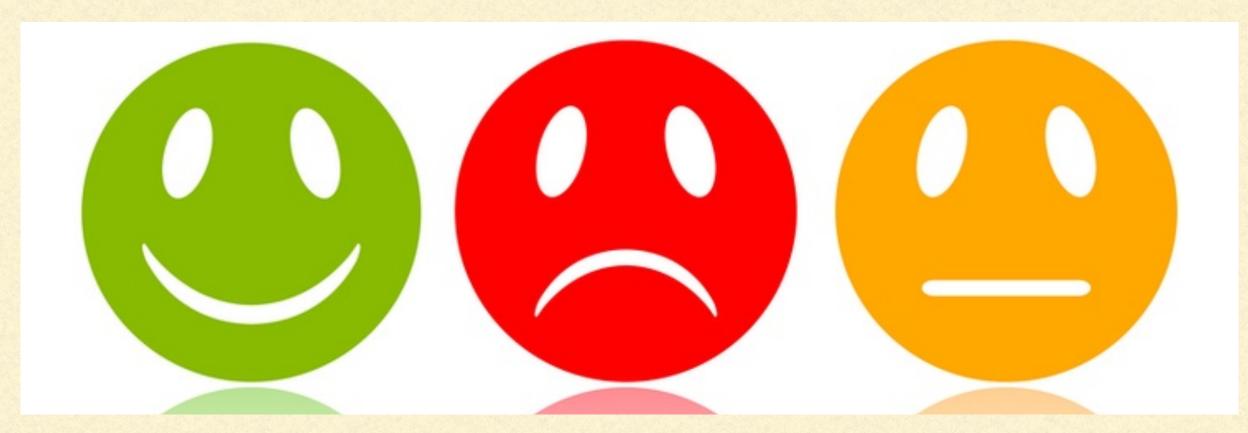
- Decision tree model to isolate
  - Factors that distinguish superhosts from normal landlords
  - Other important factors that contribute to revenues



**Decision Tree** 

#### MODELS—SENTIMENT ANALYSIS

- Do superhosts have higher feeling scores?
- For travelers, do superhosts give them better living experience? If so, what are these critical aspects?



Seniment Analysis

# EXPECTED RESULT & FUTURE STUDIES

- Superhosts enjoy higher daily rates and occupancy rate than normal landlords, thus earning more than their counterparts. In Chicago, where crime rate is a big concern for first-time travelers, apartments of superhosts may be very well located in safer neighborhood.
- Due to limited time, the research only focuses on the situation of Chicago. However, conclusion can vary in places with different features around the world. If we expand the research scope, we can further check the external validity and explore more interesting heterogeneity in such research.