Recognized by most as the pioneer of the sharing economy, Airbnb is a peer-to-peer marketplace for short-term rentals, where the suppliers (hosts) offer different kinds of accommodations (i.e. shared rooms, entire homes, or even yurts and treehouses) to prospective renters (guests). Airbnb was founded in 2008 and has experienced dramatic growth, going from just a few hundred hosts in 2008 to over three million properties from over one million hosts in 150,000 cities and 52 countries in 2017. Over 130 million guests have used Airbnb, and with a market valuation of over $31B, Airbnb is one of the world’s largest accommodation brands.

A 2016 research paper authored by Benjamin Edelman, Michael Luca, and Dan Svirsky found that, on Airbnb, applications from guests with distinctively African-American names are 16% less likely to be accepted relative to identical guests with distinctively White names. The authors concluded that Airbnb’s current design choices facilitate discrimination. Among these design choices, Airbnb asks their users to add a photo to their profile, which is then prominently displayed to other users.

After the release of the paper, several news outlets (including The New York Times) wrote articles about Airbnb racial discrimination problem. These articles along with the research paper put Airbnb on the spot for not addressing the discrimination problem on their platform.

Following the release of the research paper (and facing a lot of pressure from the media), Airbnb released a public statement where the company committed to creating a task force to address the racial discrimination problem.

As you can imagine, Airbnb’s racial discrimination problem has affected its image and brand reputation. Because of this, Airbnb asked the marketing team to come up with a marketing strategy with the goal of improving Airbnb’s reputation. Airbnb also provided the marketing team with a random sample of about 11,000 Airbnb stays that included the race of both hosts and the guests, and asked the team to check whether the data shows that discrimination is indeed happening.

The dataset contains the following columns:
• **host_id**: Unique host identifier.
• **guest_id**: Unique guest identifier.
• **host_race**: Values are “white” or “non-white”.
• **guest_race**: Values are “white” or “non-white”.
• **year**: Year in which the stay, *i.e.*, when the guest stayed at the host property, occurred.

**Questions**

1. Which kind of data is the dataset provided by Airbnb? (Primary, secondary, internal, etc.).
2. Analyze the data provided and provide evidence suggesting that the racial discrimination problem is (or is not) real.
   **Hint**: you want to show that it is (or it is not) more likely that conditional on the host being white, the guest is also white, or that guest and host race are “independent”.
3. The data you received is far from perfect and more data is likely to be needed to assess the severity of the problem. Assuming you can ask for any additional data, what would you ask for? (It can be any type of data).
4. Create a marketing strategy that can help Airbnb improve its damaged image and reputation. You can use any media channel you want.
5. Prepare a short presentation (lastname-buadsection-w7airbnb and shared it with me at proserpi@usc.edu) that:
   - Discusses the analysis you’ve done with the dataset Airbnb provided.
   - Explains your marketing strategy for recovering Airbnb reputation.

**References**


How Airbnb can Fight Racial Discrimination,