<u>Camilla Nawaz - Foundations of Data Science Capstone Project Ideas</u> 02/28/2017

In order of interest

Airbnb Reviews & Gender Bias **this is the one I'm fairly certain I'll pick

Dataset: Airbnb reviews, either from <u>Airbnb's data site</u>, or scraped from the external site. **Potential Research Questions**: Does gender influence a host or guest's reviews on Airbnb? Do the patterns differ in different parts of the country? Or: In what part of the country are the reviews the harshest, and how can Airbnb facilitate a better relationship between hosts and guests?

Potential Outcomes/Implication: In September 2016, Airbnb released a <u>statement</u> and revamped user agreement on its anti-discrimination policies, in response to several claims of racial bias on the platform. Ideally, I would aim to propose a new tool, rule, or amendment to their anti-discrimination policy for Airbnb to consider implementing that could prevent further biases from impacting the community.

DC Capital Bikeshare and Weather Implications

Datasets: Capital Bikeshare and US Gov Open Weather Data

Potential Research Questions: How does weather impact the use of bikeshare? Or, what locations are most popular, and where might new ones be effective? How can local businesses, farmers markets, food trucks, street canvassers, and other mobile vendors interact with bikeshare patterns to augment their profits?

Potential Outcomes/Implication: Tracking the use of CB under particular weather circumstances can help small businesses track the flow of people's travels within the city, predict the flow of customers. Also, this research can potentially identify where new stations can be constructed to improve the DC transportation system.

Female Participation and Economic Performance

Dataset: World Bank Gender Stats

Potential Research Questions: How is female participation in leadership and other non-labor roles (particularly in the private sector - see Enterprise Surveys) reflected in a country's economic performance?

Potential Outcomes/Implication: How leadership positions given to women can impact the economic performance of a country, and thus quantifiable metrics on women's increased participation in education and highly skilled roles.