**CAPSTONE PROJECT IDEAS (Jose Bacoy - March 2017 cohort)**

1. Compare which state(s) has a better home care and hospital in the US based on quality of patient care star rating for home care and structural measures the hospitals offer.

<https://www.healthdata.gov/dataset/home-health-care-agencies>

<https://www.healthdata.gov/dataset/structural-measures-hospital>

1. [~~https://www.wired.com/2013/11/a-new-kind-of-food-science/~~](https://www.wired.com/2013/11/a-new-kind-of-food-science/)

~~Inspired by this article that utilized IBM big data technology, can data science can also recommend new recipes based on popular flavor available locally and uses ingredients where most people are NOT allergic?~~

~~[Hard to get data for this, any suggestion?]~~

Did a project which started on Mar 18 with collaboration with another student (Chisoo Kim) and we scrape data from a recipe website. We took 3k recipes (for category: BBQ and Grilling) and had results using nltk (genism) package.

1. Sentiment analysis on Twitter using local language (Filipino, Filipino/English (Fil-Glish)

Create a website that will search for a trending (or a given hashtag) in the Philippines. The challenge is to include emoticons, punctuation marks and slang of mixed Filipino and English words in the analysis.

1. <http://insideairbnb.com/get-the-data.html> This dataset is **not** officially associated with airBnb and data is clean. However, the data on location (lat/lon), ratings and price columns are interesting and can be valuable.

This is inspired by by Kaggle competition on predicting which country a new user will make his/her first booking. However, instead of making prediction, I would like to do classify homes into categories and make a recommendation system for first time users (or even existing users) based on what category the homes closely belong to. So it will suggest a home that will match the user’s personality or preferences on price, ratings and closeness to tourist spots.

I have similar experience when I checked Airbnb for the first time, I have NO idea of where to go or WHAT activities to do. The website does have recommended houses to rent based on destination and types of experiences. But what if the website can have a list of recommendation based on my profile and/or preferences like home should be kid friendly, has a swimming pool or simply get the cheapest but good reviews. It is also similar to the google search “I’m feeling lucky”. In short, I want this recommendation system to give me a house to stay with just one click and will match with my personality and profile.