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

1. iNaturalist Challenge at FGVC 2017
   1. Fine-grained classification challenge spanning 5,000 species

As part of the FGVC4 workshop at CVPR 2017 we are conducting the iNat Challenge 2017 large scale species classification competition, sponsored by Google. It is estimated that the natural world contains several million species of plants and animals. Without expert knowledge, many of these species are extremely difficult to accurately classify due to their visual similarity. The goal of this competition is to push the state of the art in automatic image classification for real world data that features fine-grained categories, big class imbalances, and large numbers of classes.

Data set: <https://www.kaggle.com/c/inaturalist-challenge-at-fgvc-2017>

Skills to highlight: Big Data; Deep Learning; Image processing classification

1. Featured Pizza Of The Day

MOD pizza is a popular pizza store in South Bay Area that offers customers to customize their pizza and with an assembly line style cooking, customers can get their order in just minutes. Servers is using a paper to take down the ingredients the customers want. So, I want to develop an Android app that will take an image of the data and derive the most popular pizza recipe for the day or week and feature it in the store’s menu.

Skills to highlight: Optical Character recognition (OCR); Android app development

1. (Related to my work) Estimate the day that a container will be returned by customer

This is related to a project currently I’m working on in my company. I’m currently a data engineer and applied to my manager to be considered in the Data Science team. This project will strengthen my application to the Data Science team and also show my capabilities as a Data Scientist.

My company is a global shipping, logistics / supply chain and currently solving an optimization problem to minimize the cost of moving an empty container within North America and also from North America to Asia. I will use the same model to predict the demand/supply and inventory situation of North America for current week and next two weeks. This data will feed an engine that will suggest an optimized move of each containers from about 2,00 facilities in North America.

Skills to highlight: Skills as a Data Scientist and strengthen my application to Data Science Team