OCNG 469 / 669 Final Project Guidelines

This project is meant to be an assignment that will test and utilize the skills taught in this course. This is also supposed to be a 'fun' project that permits you to identify a dataset of your choosing and learn something from it. The idea is that you'll identify a dataset in which you have some interest. This dataset can be from a variety of things (e.g. you can analyze differences in word usage between two authors, you can highlight popular times of day to stream movies, you can download data from a buoy (or satellite) and plot maps of the various features) but your final project will be required to have the following components:

1. the dataset must have a **minimum** of 1000 data points
2. At least **one** user-defined function, that takes at least **one** argument, and you **must use** the function
3. Must import **one** module and **use** a function from it
4. Must produce **three** plots of the data, with all X and Y axes labeled and the plots titled (shared axes labeled at least once)
5. Must be constructed in a Jupyter notebook
6. Include at least **one** Markdown cell

All students:

You will submit a Jupyter notebook file containing all of the code and analysis. You will also need to submit your dataset so that I can run your code and verify that it works. Please make sure your dataset is allowable to be shared with me (I will NOT be releasing the data publicly or to the class). **Send me an email by <u>Mar 8</u> describing the dataset you plan to use.**

Graduate students:

You will give a short presentation to the class telling us about your project. You can go through the notebook cell by cell or focus on some of the highlights. Expected time of presentation (~10 min).

The best presentations (in science and just in general) tell a story. Tell us why you picked the dataset, what you thought you might find, what you actually found, etc. I'm not expecting you to identify a brand new, novel result that will shake the foundations of science as we know it. I want to you utilize the skills learned from this course. Feel free to go above and beyond the requirements listed on this page.

Questions? As always, feel free to send me an email (dhenrichs@tamu.edu) or ask me after class.