# University of Rhode Island

## CSC 593, Programming for Scientists, Fall 2019

### Final Project

#### Description

Your final project will require you to load your dataset, describe it, and ask and respond to a few questions that can be answered using it. You'll be submitting a single Jupyter notebook with the following sections:

#### Sections

##### Background

Provide a description of the data. At the very least, answer these questions:

1. What does it describe? What are the important fields (I don't need a complete field listing, just the variables relevant to your analysis).
2. Who collected it?
3. How was the data collected (survey, some kind of electronic recording, etc.)? Does the data describe a sample or a population?

##### Data processing

Describe the process you used to load, clean, and prepare the data, and include the code you used to do so. You wrote this code during week 6 and possibly refined it in the following two weeks.

##### Analysis

List three questions that can be answered using your data. For each question, provide:

* At least one relevant visualization;
* A brief explanation of the question; and
* A relevant table, summary statistics, and/or the output of a statistical model.

#### Notes

* In the Markdown sections of your notebook, clearly and thoroughly describe *what* you're doing with your data and *why*.
* In the comments of your code block, explain *how* your code works. Err on the side of thoroughness.
* Use language that can be understood by laypersons.
* You can use borrowed code, just be sure to cite it appropriately and thoroughly comment it. It's important to understand how it works.
* Submit via git, as usual. Just create your notebook in your repository's homework folder.
* **Make sure** I have all files I need to run your notebook code, including any additional files you've created.
* **Make sure** I can run your notebook, without errors. Before submitting, choose *Kernel→Restart & Run All*. That will restart the Python your notebook is running on and run all the code blocks from the beginning.

#### Due Date: December 20, 2019.