CAP3786RI –Project Expectations

Midterm Paper & Presentation

Due Tues., Oct. 23, 2018

As a group you will write a preliminary research report and create a presentation based on the content in the written report. The written report is expected to introduce the data and any relevant background material, introduce the questions and/or hypotheses asked of the data, and provide preliminary exploratory data analysis (see details below). The written report should be limited to 8 pages including figures and references, and the oral report should be no more than 25 minutes to allow time for peer questions and discussion.

All code to process data, generate models, and produce figures should be kept up to date and well organized in your group project Gitlab repo. The written paper and presentation should also be stored in your group project repo. It is expected that each group member makes significant contributions to the writing of code, writing the report, and in creating the presentation.

The written report and presentation should contain relevant figures to help illustrate ideas and results. Figures should include captions which completely describe the contents of the figures, so that a reader can understand a figure without having to read the body of the report. Proper attribution of previous results and data sources must be given with citations.

The paper and presentation should contain/address:

* An **Introduction,** which succinctly states the goal of the / the problem to be address. This should clearly articulate the questions / hypotheses you are researching.
* A **Plan of Action** for your analysis, which may contain:
  + What data is needed to address the research questions and/or test the hypotheses?
  + How will you use this data to answer the research questions and/or test the hypotheses?
  + What needs to be done to prepare the data for this analysis?
* A detailed description of the **Dataset(s)** to be used, for example:
  + Description of the content/form of the data
  + Description of the source of the data (e.g. experiment, survey, government records, etc.)
  + Any relevant previous work performed on this data or work related to your questions
* A description of any data processing, for example:
  + Acquisition of the data, rationale for its use
  + Description of any cleaning/manipulation of the data performed
  + Justification for the data processing given the research questions
* A discussion of **Next Steps**, for example:
  + Any new hypotheses / questions
  + Considerations of models
  + Discussion of potential outcomes and their significance