STA 9701 Project 1

- **Presentation Due**: Thursday, November 7

- **Project Report Due**: Tuesday, November 12

Find a time series of your interest. (1) determine and choose an appropriate model(s) (AR, MA, ARMA, or ARIMA) for the data; (2) estimate the model parameters; (3) then use the estimated model to forecast for the next several periods ahead; (4) write a report to summarize your findings. Some requirements are listed below:

1. Dataset

   - Please explain why you are interested in this particular dataset.
   - Please provide the data sources (url, paper, package, etc.).

2. Software code

   - Please attach all the code.
   - The code should be appropriately commented.
   - You are not restricted to use R.

3. Report

   - Treat the report as if you are submitting a project summary (data analysis report) to your client, your boss, or an academic journal.
   - An abstract that summaries the research questions, the dataset, and the findings would be helpful.
   - Please explain the model choosing procedure clearly.
   - Do not copy and paste results directly from the software outputs. Only important information should be listed in the main context.

- Please make sure figures and tables are easy to read.
- No page limits.
- Please submit a single pdf file to Blackboard.

4. Presentation

- Half of the students will present the results in class.
- The presentation should be 3-4 minutes long.

5. Evaluation

- Rigor and logic of the model building process (60%).
- Clarity of figures and tables (15%).
- Writing and organization (15%).
- If you are presenting, presentation evaluation from a peer student and myself (10%).