EE5561 - Project Proposal

Due: October 29, 2024

In this project proposal assignment, your team needs to outline the key parts of a research proposal. The proposal should include a description of the problem/task (e.g., why your application is important and what are/were the limitations of the current/past literature), and some reasoning on why AI methods are needed. A literature review is required, and you should talk about at least three relevant papers to give context to your work. For writing your project proposal, you must use this latex template (link).

Some Tips for the Project: To help your project succeed, remember to divide the work among team members for effective collaboration. It's best to start early and maintain regular progress rather than rushing at the end. Set up a clear workflow for downloading and verifying data, or managing your code on GitHub. Aim for a well-defined hypothesis, and ensure that you include custom codes (*i.e.*, do not just clone a GitHub repository and run it) and conclusions that provide insights backed by meaningful tables and plots. On the flip side, avoid common pitfalls, such as starting too late, relying solely on prepackaged sources without custom code, and neglecting to conduct thorough analysis or hyperparameter tuning.

Group Formation: As this project is more involved, you will work in groups of 3. You may use the Canvas discussion board to either join a group or find an additional group member.

Deliverables: Only one member from each team should submit the PDF file to Canvas. Your project proposal should be no longer than *three pages*, excluding the references.

Rubric (10 Points):

- (1 point) Team name, project title, group members, and their role assignments are set.
- (1 point) Dataset(s) to be used are included.
- (2 points) The motivation is clearly outlined and the problem definition is given.
- (2 points) Thorough literature review is provided (at least 3 relevant papers).
- (3 points) Proposed approach (e.g., what you plan to implement and modify/change with your domain knowledge) and your execution plan are included.
- (1 point) Citations are given when required.
- (Bonus: 0.5 point) Figures, tables, or any preliminary results that enhance the understanding of the proposed idea at a high level are included.