ECE 2372 - Project Proposal
—Project Proposal —
Please upload your solutions to Canvas by March 18, 2024

Project proposal to be submitted via Canvas by March 18

Please submit only a single proposal – any student in the group can upload the proposal, and as long as it lists the names of all group members then all members will receive credit.

The proposal that contains the following information.

1. **Project summary:** Using a maximum of one page, the first page of your proposal should summarize the project by clearly indicating what you plan to do. You should include sufficient background so that anyone taking this class should be capable of understanding (at a high- level) what you are planning on doing. The goal here is to convince me why the problem you are addressing is important and why the outcome of your project will be interesting.

2. **Detailed project description:** In this section you should provide a more detailed description of the necessary background and specific objectives of your project. Include citations to any papers/books you are planning on building on, and feel free to include any preliminary results if you happen to already have them. This section should be at most three pages of text (including references/figures) and is intended to give you a bit more room to fully flesh out your ideas if you cannot fit them entirely within the one page summary. You should treat the summary as a stand-alone document, and the detailed description should not be a "follow-up" section but a full, self-contained, description of your project. It is fine to repeat some of the language from the summary if you would like. You should also feel no pressure to make this three full pages. If you can say what you want to say in one or two pages, then this might not be very different from the summary, and that is fine.

3. **List of tasks/collaboration plan:** In this section I would like you to provide an enumerated list of the tasks you believe will be required to successfully complete the project. Tasks can include learning about pre-requisite background subjects, reading specific papers, implementing particular algorithms, acquiring/processing a data set, or anything else that you believe will be necessary for the project. You may also include tasks related to preparing/printing the final report. For each task, include the following information:

   - Task: A detailed statement of the task to be accomplished. Your statement should ideally be specific enough that you will be able to clearly measure when it has been finished. "Read papers X and Y" is better than "Learn about field Z".
   - Leader(s): Which team member(s) will be primarily responsible for accomplishing this task. (It is fine if all team members are planning to contribute to all aspects

of the project, but please designate one or at most two people to be the leaders for each task).

- Deadline: A tentative deadline for when you would like to have this task accomplished.

- Importance: A brief statement (can be only a sentence or two) as to the overall importance of this task. Some tasks are critical, meaning that it is hard to see how the project will be complete without it, whereas other tasks are more "optional" items that you would like to get to if you have the time. For each task, state if it is a critical or optional task. If later tasks depend on it as a prerequisite, state this.

- Potential challenges: A list of things that you think might "go wrong" and what, if anything, you plan to do to avoid/overcome these challenges and/or what you would do if you can't get past them. There is no page limit for this section, but I'm not expecting more than a page or so.

Formatting and Grading:

- Your document should be single-spaced with a font size of 12pt or higher and margins no smaller than 1 inch.

- The proposal will be graded out of 10 possible points, which will be assigned as follows.

  - Project summary/description [4 points]
    * Do these sections clearly explain what your proposed project will consist of?
    * Do they adequately motivate why the topic is interesting?
    * Do they explain all necessary background information and define all necessary notation in a way that would be clear to an average member of this class?

  - Project plan [4 points]
    * Does the project plan/task list clearly explain the proposed plan of attack?
    * Are tasks clearly defined in a measurable way?
    * Are the tasks realistic?
    * Have the authors considered all relevant contingencies/challenges?

  - Overall clarity/quality of proposal [2 points]
    * Do the ideas in the proposal flow together in a clear/logical manner?
    * Is the document free of typos and spelling/grammatical errors?
    * Are all figures legible?