

Project Proposal

15 February 2020

The project proposal includes two elements: an idea and a plan. The proposal should be a single page that describes the project.

Idea. Clearly state the question being investigated. Motivate the project, describing why the question is interesting and important.

Plan. The plan should include a discussion of the following:

- a. **Related Work:** Are there are other research projects that have tried to answer similar questions? This section should be a significant start to a literature survey, including a discussion of prior work and how your contributions relate to it. At this point, it is not necessary to have read all related papers but starting a bibliography is a good idea.
- b. **Conclusion:** What shape or form will the conclusions take? You will not know results in advance, but you should know the format of the results. For example, if you compare two designs, you would expect to say things like “Design A performs better than Design B in these instances and Design B performs better than Design A in these other instances.” As you do the project, you will quantify performance and explain why.
- c. **Experimental Setup:** What experiments or data will you collect? Why? What question is each experiment or study designed to answer? What do you hope to learn from each experiment or study? What measurement tools will you use and how will you know if those tools are accurate? The more detail you put in this section, the more easily you will be able to execute the project. Also, more detail allows the instructor to provide useful feedback.
- d. **Schedule:** Dates and Milestones

The project proposal is not graded but is for your benefit. The final project is 50% of the semester grade. If you write a strong proposal, you will get better feedback, which will translate into a stronger final project.

Project Report

26 April 2020

The final report is a paper of approximately 6-8 pages, including figures. Identify the key findings, but also describe shortcomings, caveats, and assumptions. Discuss potential future directions for follow-on work. Several reports may be suitable for conference submission and the instructor can work with students to turn them into submissions.