Project Proposal Guidelines

15-888 Fall 2024

The final project is an important, creative part of the course, worth 50% of the final grade. A written report of your final project is due on Friday, Dec 6th. You will also present your project during one of the last few weeks of class.

To make sure that you have an appropriate project plan that can be completed on time, we expect a project proposal submitted on Gradescope by **Wednesday, October 2**.

You may do the project on any topic related to the course topics, broadly construed. The topic need not have been covered in this class. You may do the project alone, or in groups of up to three people. Projects with larger groups should have proportionately broader scope.

If you are actively doing research outside of this class (e.g., you are a Ph.D. student), your project can be **related to** your research but your project should not **be** your research. Concretely, your project should be something that you are doing specifically for this class, rather than merely a repackaging of something that you were doing anyway for research. If you are in another course that has a course project, you may do related topics for the course projects (so long as the other course allows that as well), but you must point out in your proposal specifically what parts of your project you wish to count towards this course—those parts of your project should **not** be counted towards your project in any other course.

In the past, the best projects, extended after the course, have led to publications in top conferences! However, this is not an expectation.

In general, you should structure your proposal and final report like a conference paper. Of course, your proposal will not have all the sections of a typical research paper, but your final report should. In particular, in your proposal, please include at least the following.

- A project title.

- The names and emails of everyone on your team.

- An introduction section, in which you introduce and motivate your project.

- A related work section, in which you should cite and discuss in detail any existing literature that is most closely related to your project topic, or that you will use in your project.

- A detailed description of what you hope to have accomplished by the project due date, with a timeline. Details should be at the level of concrete experiments you plan to run, which datasets/environments/tools you plan to use, or what theoretical results you hope to prove. The best plan is one that is "anytime": if possible, you should try to set multiple goals of varying difficulties, so that you can have a project to present even if you do not accomplish everything you set out to do.

- A detailed description of what, if anything, you have already accomplished toward the goals that you have set.

There is no hard length requirement, but a complete proposal, including enough detail in all the items above, should be at least two pages in single-spaced format, and in most cases is 4-5 pages.

The proposal is not binding. You are free to deviate from your plan after submitting the proposal, or even to switch topics entirely, although the latter is not usually advisable unless the original idea completely fails. The main purpose of the proposal is for you to receive some feedback on the choice of topic and scope of your project. The proposal will therefore be graded mostly on completion.