

ECE 492-45 Project Proposal Guide

Below are instructions for preparing a project proposal. Your goal here will be to decide on an initial direction for the project, and team up with another student. Any project topic related to machine learning is fine. Feel free to choose topics from the material we haven't studied yet. You can read about them quickly on the course webpage.

To demonstrate to us that you have some idea what you'll work on, please submit a brief typed-up report; a reasonable amount of detail might fill one page. The report should contain the information below. For your convenience, we have created an example proposal Word file. Please note that the content in that make believe proposal is fictitious.

1. Include the proposed title of the project.
2. Include the names of students in your group. We expect groups of 2 students. If you don't have another student to perform the project with, please use Piazza or other means to try and identify such a student. If you prefer to work individually or in a group of 3, please explain why you prefer to do so, and we will approve on a case by case basis. If we do not approve of a single-student project proposal, we will attempt to merge you into another group.
3. In the first paragraph, outline what you want to work on, and motivate this topic. For example, why you're interested in it. Make sure to discuss:
 - What's the general problem that will be tackled.
 - Briefly mention which ECE492-45 tools will you use. This will help us see that this is truly a technical project and not just "measuring the coffee drinking habits of energetic undergrad students."
 - What datasets might be available for you to work on. Do you collect yourself or download it online?
4. In the second paragraph, provide a brief literature review demonstrating that you've at least "done your homework" and are aware of 1–2 papers and possibly some more online resources about the area of interest to you, and especially tools the you expect to use.
5. In the third paragraph, explain what you want to actually do to solve the problem in terms of your technical approach. Highlight in what ways the project constitutes either something interesting / original or at least why the work done in the project is potentially important.
6. Add references.

(This project proposal guide was adapted from a version written by Prof. Dror Baron.)