

Project Proposal

Important:

- Write the name of every team member on your project proposal.
- Submit both results and your code.
- Give complete answers. Do not just give the final answer; instead show steps you went through to get there and explain what you are doing. Do not leave out critical intermediate steps.
- This assignment must be submitted electronically through Gradescope by February 10th 2025 (Monday) by 11:59 PM.

1 Project Proposal

Your project proposal should consist of the following sections. Please do not exceed 3 pages for the project proposal (not including references).

1.1 Introduction

In the introduction, you need to:

- Explain the goal of the project.
- What are you working on in this project?
- Why are you working on this project?
- On what field(s) can your project have an impact?

1.2 Previous Work and Contributions

- Discuss some of the work that has already been conducted which relates to your project. I'd recommend going over at least 2–3 papers which relate to your project. For each paper, summarize the contributions of the paper, indicate what you liked about the paper and some limitations that you noticed in the work.
- State the contributions that you will be working on accomplishing in this project. It is fine if you don't end up completing all your proposed contributions. I will also guide you in my feedback to let you know which ideas to prioritize first to end up with completed tasks.
- For each contribution, indicate the methodology that you adopted/will be adopting. Motivate the choice of the approach you will be following. Are there other approaches that can also be applied on the problem you are considering? I am NOT expecting you to argue why your proposed method is the best one. I just want you to think of many possible ways that can be used in your project and understand the advantages/limitations of each method.

1.3 Expected Results/Preliminary Results

Consider different instances of the problem you are considering. How do you expect your model to perform on these instances? Provide some reasoning on your expectations.

If you have some preliminary results, you can include them in this section. Explain what is currently working with your proposed approach and some of the limitations of your results. Were the limitations expected? Are there some strategies that you can follow in the next steps of the project to improve your proposed work further?