Preliminary Project Proposal

Submission

Please upload a PDF to Gradescope by **11:59pm Wednesday, November 11**.

Decide What the Project Should Do

The project begins with the *decide* layer of the decide–execute–deliver sandwich[1]. Before asking an agent to write code, formulate a problem and decide what would count as solving it.

Propose one project idea. You may apply and compare several algorithms on a task, or you may design a new algorithm or modification of an existing one. The dataset and setting are yours to choose. This preliminary idea is not binding. Proposal 2 may refine it or replace it completely.

What to Submit

Describe:

- **Problem:** What task or problem will you address? State it precisely enough that someone could tell what a solution must accomplish.
- **Success criterion:** What objective quantity will determine success? Examples include prediction error, accuracy, reward, reconstruction error, compression, runtime, or improvement over a baseline. Explain why the criterion matches the problem.
- **Dataset and setting:** What dataset or kind of data would you use, and in what setting? You do not need to acquire or analyze it yet.
- **Algorithms:** What simple baseline and what main algorithm or algorithms could you try? If you want to develop a new algorithm, state what you would change and why it might improve the objective.
- **Evaluation:** What comparison would let you decide whether the project succeeded? Name the main uncertainty or obstacle that could make the idea fail.

[1] `https://www.normaltech.ai/p/what-will-be-left-for-us-to-work`