

CSCI 1420: Machine Learning Capstone Requirements

Spring 2025

Project Proposal

To complete a capstone in CSCI 1420, you must propose an open-ended project related to a dataset of your choosing. This dataset should be connected in some way to another class you've taken at Brown, and one that will bridge your interests with machine learning. Your proposal must describe the prediction task for which you would like to implement a machine learning algorithm, why that task is important or interesting, and potential challenges to achieving this goal. It must also describe the dataset itself, such as its size and which attributes will likely be useful. The proposal should be a minimum of 1 full page (singled spaced, 1 inch margins).

The proposal must be approved by the instructor by **Wednesday, February 19th**. Please email a proposal well before the deadline to ensure time to discuss and revise it.

Final Deliverables

All capstone projects must be completed as a GitHub repository, as well as a minimum 4 page report (single spaced, 1 inch margins) describing:

- What is the problem you studied?
- How did you initially try to solve it?
- What worked and what did not?
- How did you change your plan in light of what you learned?
- What were the final results
- How would you improve this project if you were to continue working on it?

Capstone projects are due by the course's final exam due date and time. Late days may not be used.