Final Project

CSc 4850/6850 Machine Learning
Spring 2022

Due April 29th, 11:59 pm

1 Overview

The final project is a group project (3 – 4 students per group, unless otherwise noted), in which your group will research, implement, and analyze one or more AI algorithms. You're free to investigate any algorithm(s) related to the topics discussed in class, but **your group needs to send me an overview of your project for approval by April 6th.**

2 Types of projects

Some possible types of projects include:

- **Comparative analysis:** Implement two (or more) AI algorithms and compare their theoretical vs. real-world performance

- **Application-driven:** Implement an AI algorithm and apply it to novel real-world data (e.g., from medicine, physics simulations, financial markets, etc.)

- **Research project (recommended for 6850 students only):** Try to improve one of the algorithms discussed in class. For instance, you can lower its running time, make it work on other types of data, on a different architecture, etc

3 Deliverables

Your group must submit a written report at the end of the semester, as a PDF or Word document, along with any source code. As with the homework assignments, you will submit your files to a corresponding iCollege folder.

I suggest that you structure your report similarly to your reference papers. That is, I recommend having the following sections (or something very similar):

- Introduction

- Methodology

- Experiments

- Results and/or Discussion

- Conclusions

I also highly recommend having clear figures and graphs (with proper captions), especially for your experimental results.

4   Grading

Your grade will be based solely on your written report. However, I may refer to your source code for clarification about specific details of your implementation.