Final Project Guidelines

Course Project Overview

You need to propose a project that is appropriate for a 4-week scope. Do not bite too much, but do not go hungry! You can base the project on your research or reimplement some aspects of an existing paper. Some ideas are given on Canvas (link: **Final Project Ideas (https://auburn.instructure.com/courses/1554065/pages/final-project-ideas)**). Alternatively, you can also come to talk to me to brainstorm ideas.

Teams

Each project should have two/three members. Choose your partner(s). Everyone must take part in a group project. All group members will receive the same score; the project is assessed, and everyone receives this score. However, that number is only part of your grade for this project. The remaining part is individual and refers to your teamwork. The instructor will assign a grade informed by a declaration of work division in the project report and performance during project presentations. Once formed, groups cannot be altered or switched except for reasons of extended hospitalization.

Make sure to enter your team details on **Final Project Teams (https://auburn.instructure.com/courses/1554065/pages/final-project-teams)**

Submission Details

Submit your project proposal, midterm report, presentation slides, and final report on canvas, with the following naming convention, where the titles have all the last names of the group members. LastName_LastName_Proposal.pdf, LastName_LastName_midReport.pdf, LastName_LastName_Presentation.ppt, Code as LastName_LastName_Code.zip, LastName_LastName_FinalReport.pdf

Project Proposal

Your write-up should be 1 page long using the **CVPR template (https://cvpr.thecvf.com/Conferences/2024/AuthorGuidelines)** . The following is a suggested structure for your proposal:

1. Title, Author(s)

2. Introduction: this section introduces your problem and the overall plan for approaching your problem.

What is the problem that you will be investigating? Why is it interesting?

3. Problem statement: Describe your problem, precisely specifying the dataset to be used, expected results, and evaluation. What method or algorithm are you proposing? If there are existing

implementations, will you use them, and how? How do you plan to improve or modify such implementations?

4. What data will you use? If you are collecting new datasets, how do you plan to collect them?

5. Which reading will you examine to provide context and background?

6. How will you evaluate your results? Qualitatively, what kind of results do you expect (e.g., plots or figures)? Quantitatively, what kind of analysis will you use to evaluate and/or compare your results (e.g., what performance metrics or statistical tests)?

7. Timeline with weekly subtasks to be accomplished.

Submission Link(s): **Final Project -- Proposal (https://auburn.instructure.com/courses/1554065/assignments/15402541)**

Mid-term Report

Your write-up should be between 3 - 4 pages using the **CVPR template (https://cvpr.thecvf.com/Conferences/2024/AuthorGuidelines)** . The following is a suggested structure for your report:

1. Title, Author(s)

2. Abstract: It should not be more than 300 words;

3. Introduction: this section introduces your problem and the overall plan for approaching your problem

4. Background/Related Work: This section discusses relevant literature for your project

5. Approach: This section details the framework of your project. Be specific, which means you might want to include equations, figures, plots, etc.

6. Intermediate/Preliminary Results: State and evaluate your results to date.

Submission Link(s): **Final Project -- Mid-Project Report (https://auburn.instructure.com/courses/1554065/assignments/15402542)**

Final Report

Your final write-up should be between 6 - 8 pages using the **CVPR template (https://cvpr.thecvf.com/Conferences/2024/AuthorGuidelines)** . The following is a suggested structure for your report:

1. Title, Author(s)

2. Abstract: It should not be more than 300 words;

3. Introduction: this section introduces your problem and the overall plan for approaching your problem

4. Background/Related Work: This section discusses relevant literature for your project

5. Approach: This section details the framework of your project. Be specific, which means you might want to include equations, figures, plots, etc.

6. Code Reuse: Cite and very clearly describe any code that you have reused for this project.

7. Clearly specify what you have coded for this project.

8. Experiment: This section begins with what kind of experiments you're doing, what kind of dataset(s) you're using, and what is the way you measure or evaluate your results. It then shows in detail the results of your experiments. By details, I mean both quantitative evaluations (show numbers, figures, tables, etc.) as well as qualitative results (show images, example results, etc.).

9. Conclusion: What have you learned? Suggest future ideas.

10. Division of labor: Outline in detail what each member of the team did for this project. Remember 10% of your grade depends on this section. Even if you equally divided the work, you need to specify in detail each member's tasks/subtasks.

11. References: This is absolutely necessary.

Submission Link(s): **Final Project -- Report (https://auburn.instructure.com/courses/1554065/assignments/15402545)** , **Final Project -- Code (https://auburn.instructure.com/courses/1554065/assignments/15402549)** , **Final Project -- Individual contribution (https://auburn.instructure.com/courses/1554065/assignments/15402552)**

Final Presentation

In addition to the final report, you must also present your work in a pre-recorded "lightning" talk for 5 minutes at the end of the semester. You will be evaluated on the clarity, presentation, and technical depth covered during the presentation. This will play into the project score, part of the Final Report grades.

Submission Link(s) -- **Final Project -- Final Presentation (https://auburn.instructure.com/courses/1554065/assignments/15402559)**

Honor Code

You may consult any papers, books, online references, or publicly available implementations for ideas and code that you may want to incorporate into your strategy or algorithm, so long as you cite and describe your sources in your code and your writeup. However, under no circumstances may you look at another group's code or incorporate their code into your project