IFT6759/3710-H25: Project Final Report Instructions

April 20, 2025

Each team hands in one copy of project final report.

1. **Please use the official templates for *ICLR conferences for your project final report.**

2. **The report is limited to maximum 8 pages of content, with unlimited pages of references.**

3. **Please provide the detailed contribution of each team member in the Appendix** (The Appendix will not be counted for the 8-page limitation. The detailed contribution should include but is not limited to the proposal, midway report, final presentation, final report, the design and implementation of the project, experiments, etc.).

4. **It is strictly forbidden to write with ChatGPT or other AI tools**. Since the purpose of the report is to exercise students' abilities (including writing ability), writing with AI loses this meaning.

5. The due for the project report is **April 30th, 23:59 EST**. **Submissions after the due date won't be accepted.**

Structure of the Report

Your report should have the following information/sections:

Title. The title of your report.

Author list. List the names and @umontreal.ca email addresses of all of your team members.

Abstract. Summarize your project with less than 300 words. Basically, your abstract should motivate the project (*why* do we care about it), describe your problem (*what* are you trying to solve), summarize your approach in high-level (*how* did you go about solving or making progress on the problem), highlight your main findings (the *result* you have got), and your conclusions (the *implications* from your experimental results). Writing an abstract is difficult but critical for a good research paper. Keep it concise, high-level, and convincing.

Introduction. A good introduction is very important for a research paper. In this section, try your best to attract readers. First, clearly describe your research problem and demonstrate your motivation. Sometimes a figure/example can help a lot to illustrate your problem. Second, briefly review existing research and summarize their ideas and limitations. Third, summarize your contribution to this project. Emphasize your novelty and show your insight on a high level. Don't put too much technical details here. Finally, summarize your experimental results and conclusions. Note that in the Introduction section, you shall not put too detailed descriptions about related works since they should be in the Related Work section.

Related work. Here you can introduce related research works with a little more details by referring to a number of specific papers and summarizing their contributions at a high level.

Method.   Describe the models and/or techniques you have utilized or improved in detail. Maybe you can draw figures to show the architecture of your model/system, or include an algorithm to formally describe your method. **If any part of your approach or code is original, make it clear in your report. Please provide references for models, techniques, or codes that are not yours.**

Experiments.   Please include the following information in this section:

- **Datasets.** Describe the dataset(s) you are using along with references. If you created a dataset in your project, submit it or provide a link to your dataset, and explain the details about how you built the dataset.

- **Baselines.** Describe which methods you used as baselines. Make it clear if these were implemented by you, downloaded from elsewhere, or if you just compared with previously published results.

- **Evaluation Methods.** Specify at least one well-defined, numerical, automatic evaluation metric you will use for quantitative evaluation. If your experiments include human evaluation, clearly describe how the human evaluation was conducted, who evaluated the results, and the steps an evaluator took to evaluate a result. If you have any particular ideas/designs about the qualitative evaluation, you can describe that too.

- **Experimental Results.** Concisely explain how you ran your experiments, such as model configurations, implementation details, and hyperparameter settings.

- **Results and Analysis.** Report the quantitative results you have obtained so far. You may include some figures or tables for your experimental results and compare with baselines. Analyze your current results and tell us your findings.

Conclusion.   Summarize your contributions and findings in this project. Describe potential future works.

Contributions of Each Team Member.   Please describe what each team member contributed to the whole project.

Link to the project's source code.   The source code of your project is also part of the evaluation. Please provide a link to a GitHub (or GitLab, or similar) repository with your source code as a footnote in the Abstract of your final report.

Good code should be easy to read and easy to run. Therefore, please clean up the final version of your code: remove old or unnecessary pieces of code, add documentation, write a `README` with instructions on how to run the code and examples to reproduce your experiments, etc. In particular, consider explicitly indicating the following:

- Python version you used to run your experiments.

- Necessary libraries and their versions. If you used virtual environments, as was recommended, a simple way of indicating the library requirements is via a requirements.txt file. You can generate one by running in a shell with your environment activated with the following command: `python -m pip freeze > requirements.txt`. With a requirements.txt available, it should be straightforward to reproduce the environment by running `python -m pip install -r requirements.txt`.

A good practice to ensure that you include all the necessary information to run your code is to follow your own instructions in a fresh new environment and check that the code runs seamlessly.
Since your experiments may be computationally expensive, please consider preparing a lightweight configuration to dry-run your code, for example, with a subset of the data, a simpler architecture, a few epochs, etc.

Submission Instructions

Submit your PDF report on Studium. Each team hands in only **one** project report. Therefore, each team can name a team leader and the team leader will submit the report for all members. Make sure to list all team members in the author list of the report.

How Will the Submissions be Evaluated

We will evaluate your project report according to the following aspects (basically, it is similar to reviewing a conference paper):

- The novelty and contributions of your project.

- The writing quality and format of your report.

- Reproducibility of your work (submit your code/dataset).

- We will take each member's contribution into account.

Tips on How to Write an Academic Paper

Here are some resources that might help you improve your technical writing:

- Writing in the Sciences, Coursera course: `https://online.stanford.edu/courses/som-y0010-writing-sciences`

- Tips for Writing Technical Papers, Jennifer Widom: `https://cs.stanford.edu/people/widom/paper-writing.html`

- How to Write an Abstract, Philip Koopman: `https://users.ece.cmu.edu/~koopman/essays/abstract.html`