IFT6289-H24: Project Proposal Instructions

January 16, 2024

Each team hands in one project proposal, which is worth 5% of your final grade.

1. **Please use the official templates for *ACL conferences for your project proposal, project mid-way report and project final report.** Using other templates We would deduct 1 point of the final grade if other templates were used.
2. **The proposal is limited to maximum 2 pages of content, with unlimited pages of references.**
3. The due for the project proposal is **February 12th, 23:59 EST**.
4. Maximum 2 late days. We would deduct 1 point of the final grade for each late day.

Structure of a Proposal

Your proposal should have the following information/sections:

Title. The title of your project (you can change it later).

Author list. List the names and @umontreal.ca email addresses of all of your team members. Each team consists of up to 3 members.

Abstract. Summarize your proposal with less than 250 words.

Introduction. Set the scene for the project. Introduce what motivates this project and why you think this work is important. Describe what problems are you attempting to solve, or what knowledge are you hoping to discover. Your goal may be to investigate whether a particular model or technique performs well at a certain task, or whether you can improve a particular model by adding some new variant, or (for theoretical/analytical projects), you might have some particular hypothesis that you seek to confirm or disprove. Otherwise, your goal may be simply to successfully implement a complex neural model, and show that it performs well on a given task. You can also take part in a competition (e.g., Kaggle competitions) that is related to NLP. Summarize what contributions this project may makes, whether they be in new algorithms, new experimental results and analysis, new meta-analysis of old papers, new datasets, or otherwise.

Related work. Discuss the literature pertinent to the proposal. You can select and discuss one or a few papers that are most relevant to your project. For example, if you are reimplementing a complex model, you should choose the paper that presents that model. If you are applying a particular method to a new task, you could choose the paper that presents the method. If you are developing a new variant of a particular model, you could choose the paper that presents the original model. There are other possible cases – use your judgment to choose what seems like the most relevant paper. Any research paper is fine, though you want to make sure it is a high-quality paper. For this, we encourage looking for papers that have been published in a peer-reviewed venue (e.g., ACL, EMNLP, NAACL, NeurIPS, ICML, ICLR, KDD, WWW, AAAI, IJCAI, and so on). However, due to the fast pace of Deep Learning and NLP research, there are

many important and high quality papers that are not (or not yet) published at a peer-reviewed venue – for example, they may be very recent papers that have not yet been submitted for review. If you choose a paper that has not been published at a peer-reviewed venue, be wary that it might be unfinished or preliminary work. Every research paper has limitations and flaws. Discuss their limitations if they exist. Make it clear how your project relates to your chosen paper.

Task and dataset. Clearly define or describe the task (i.e. give an example of an input and an output, if applicable). Specify the dataset(s) you will use (including its size), and describe any preprocessing you plan to do. If you plan to collect your own data, describe how you will do that and how long you expect it to take.

Methods. Describe the models and/or techniques you plan to use or improve. If you plan to explore a variant to a published method, focus on describing how your method will be different. If there is any part of your planned method that is original, make it clear.

Baselines and evaluation. Describe what methods you will use as baselines. Make it clear if these will be implemented by you, downloaded from elsewhere, or if you will just compare with previously published scores. Specify at least one well-defined, numerical, automatic evaluation metric you will use for quantitative evaluation. What existing scores will you be comparing against for this metric? For example, if you're reimplementing or extending a method, state what score(s) the original method achieved; if you're applying an existing method to a new task, mention the state-of-the-art performance on the new task, and say something about how you expect your method to perform compared to other approaches. If you have any particular ideas about the qualitative evaluation you will do, you can describe that too.

Submission Instructions

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

What to Expect

We will grade your project proposals and provide brief feedback. If there's a problem with your proposed project (e.g. it's not feasible in the given time), we may require you to submit a revised proposal – otherwise, your project is approved. Note that you can still make changes to your project after you submit the proposal, before doing so, we would recommend discussing your new proposal to the teacher.
If you want to discuss your proposal before submitting it, or you would like to make changes to your project after the proposal submission, you can go to the online office hours, or contact the teacher or TA in the Slack workspace of this course.