

DD2424 - Assessment of the project

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March, 2021

1 Overview of the assessment of project

1.1 What you need to produce

The project will be evaluated based on the following output from each group:

- 1) One written report
- 2) One video presentation of the project
- 3) The group's peer review of one other project.
- 4) One link to a repository for the project's final code (this code is unlikely to be reviewed but will be looked at if clarification is needed in certain circumstances).
- 5) A self-assessment report.

Your group will also have to attend the *Virtual Poster Session*, see section 5 for details. For the first three project outputs and the last one, we have provided clear instructions about what we expect see sections 2, 3, 4 and 1.2 respectively.

1.2 The project grading process

How the project will be evaluated:

- 1) Each group will tell us the grade they think their project deserves. The group must provide a self-assessment report where they should argue, motivate and provide concrete evidence for the self-assessed grade they would like to award themselves. If there is no supporting self-assessment report then you cannot pass the project. Guidelines for helping you determine which grade you have earned (will be made) are available on the Canvas webpage.

- 2) Given your written report, video presentation, self-assessment report and peer review a TA or teacher will then decide whether the self-awarded grade was a fair and accurate reflection of the project and the output produced. If the TAs agree with the assessment then you get the grade you awarded yourself. If we think the group was too harsh or too easy on themselves then we will adjust the grade accordingly. If we change the grade we will provide concrete reasons as to why this decision was made.
- 3) We will also assess the peer-review you made of another project. It will be graded as: Poor - Satisfactory - Good. If your peer review gets a Poor evaluation then your grade will be moved down one level.

The self-assessment will be done after the virtual poster session. This will help everyone (TAs and students) calibrate the general standard of the projects completed within the course.

1.3 What if TA does not agree with your self-assessed grade?

For the projects where the TA strongly disagrees with the self-assessed grade (there is more than a single grade difference i.e. self-assessed grade: A and TA's opinion: C) then a second reviewer, another TA or teacher, will review the project and give a second opinion. A decision will then be made after a discussion between the two TAs/teachers who have reviewed the case and their decision will be final.

If there is just one grade difference between the self-assessed grade and the TA's assessment, even if it is a reduction in grade, then due to the large number of students in the course, the TA's assessment will be final.

I should say that grading projects is an extremely difficult and noisy process and I have struggled each year of the course to find solutions to the process. However, I have never really had much success. Students frequently feel that they put a lot of effort into a project and then do not get the grade they feel they deserve. And as a grader you frequently don't know how to fairly compare apples and oranges. However, I'm hoping with this process that students on average will get the grade they feel is a fair one, but when they don't they will get feedback on why their assessment or opinion was not accurate.

1.4 Grading and bonus points from the assignments

The maximum number of bonus points you can accumulate is: 16 (subject to a little change before Easter). If you complete 11 (subject to a little change

before Easter) or more bonus points then we will bump up your grade for the course by one level so for example turn a B into an A etc. Note the bonus points are awarded **individually** to each student so this bump is per individual not per project.

2 What is expected for the project report

The final report should be at **most 6 pages** long excluding the reference list. You can include an appendix to display extra results and/or figures at the end of the 6 pages and reference list. However, there is no obligation for the peer-review group or the reviewing TA to read this material. You can use the provided template, structured **like a paper** from a **machine learning** conference (NeurIPS, ICML, etc). We have included a slightly *hacked* version of the NeurIPS style file for you to use. The following is the suggested structure for your report:

- **Abstract:** Give an overview of the task, approach and the key results and findings of your work. Should be no more than 300 words.
- **Introduction** (10%): Describe the problem you are working on and why it is important. Then also briefly describe what you did and give an overview of your results.
- **Related Work** (10%): Discuss the published work related to your project work.
- **Data** (10%): Describe the data you are working with for your project. What type of data is it? Where did it come from? How much data are you working with? Did you have to do any preprocessing, filtering, or other special treatment to use this data in your project? If you are using a very standard dataset (Cifar10 etc) then you should focus on describing the state-of-the-art performing methods on the dataset.
- **Methods** (30%): Discuss your approach for solving the problems that you set up in the introduction. **Why is your approach the right thing to do?** Did you consider alternative approaches? You should demonstrate that you have applied ideas and skills built up during the course to tackle your problem of choice. It may be helpful to include figures, diagrams, or tables to describe your method or compare it with other methods.
- **Experiments** (30%): Discuss the experiments that you performed to demonstrate that your approach solves the problem. The exact experiments will vary depending on the project, but you might compare

with previously published methods, perform an ablation study to determine the impact of various components of your system, experiment with different hyperparameters or architectural choices, use visualization techniques to gain insight into how your model works, discuss common failure modes of your model, etc. You should include graphs, tables, or other figures to illustrate your experimental results.

- **Conclusion** (5%) Summarize your key results - what have you learned? Suggest ideas for future extensions or new applications of your ideas.

3 What is expected for the video presentation

The video presentation should be at **most 4 minutes** long. Every member of the group has to be actively involved in talking in the video. In the *Virtual Project Session* your video will be shown to at least a reasonable subset of the class and will compete for the student *best project presentation award*. So the presentation should be informative, highlight the interesting things you did and be **“fun”** and not just a boring laundry list of things you did.

4 What is expected for the peer review

We will prepare a template that your group will fill in after you have read the project report that you have been assigned to review. We will make this template available after Easter. But it will involve

- *Minimal Grading* of certain criteria about the project quality and its presentation of the project.
- Writing comments on what you perceive the **strengths** and **weaknesses** of the **projects** to be.
- Writing questions you would like to ask the authors about the project.

5 Virtual Poster Session

We are still working on the logistics of what will actually be possible but the following gives a high-level overview of how we intend structure the session.

Phase 1

Using **zoom** we will (note the numbers quoted are preliminary at the moment, we need to see how many TAs need to be present in each chat room

and how many projects we will have and how many hours it is reasonable to devote to the process):

- Have a separate zoom meeting for ~8 of the projects and the session will be chaired by a TA.
- Each project has ~10 minutes to devoted to it
 - a) Everyone in the chat room watches the video presentation.
 - b) The project under review must answer questions from the group assigned to peer review their project.
 - c) Time permitting the other students in the chat room can ask questions.
- When all projects have been discussed, the room can vote for the best project presentation. This project will move forward to phase 2.

Phase 2

In the next phase everybody gets to see the “best” projects from a subset of the meeting. (Depending on numbers we may need to have a semi-final and a final stage in phase 2.)

- All students and TAs in a single chat room
- Everybody watches the videos of the winning projects from phase 1.
- The audience gets to ask questions.
- All students get to vote for the project that should win the audience’s best project award

The Virtual Poster Session will take place on May 27. The exact time tbd after Easter.