

Intro to Image Understanding (CSC420)

Project Selection

Available: October 20th, 2020

Due Dates:

Team registration: October 23rd 2020, 10:59 pm

Project proposals: November 4th 2020, 10:59 pm

Initial Stage:

- Project is 40 points of your grade in this course and it is divided in four items as follows:

Item	Grade
Project Proposal	5
Project Report	15
Project Presentation (Pre-recorded Video)	10
Oral Defense	10
Total	40

- Projects should be done in groups of 3 people. All projects are quite big, so group work is mandatory.
- **First Step:** Now, it is time for you to set up a meeting with your groupmates and discuss this first step of the project. Get online on the Quercus website, and answer the quiz that is now available. If you have found your groupmates, then you have to pick a unique name for your group. If you do not have any groupmates or you just have one groupmate and looking for the last person, we will complete your team and we will assign a random name to your team. **If you fail to fill the team registration quiz by October 23rd, 2020, you will lose 5 marks of the project and you will be assigned to a team randomly.**
- **Second Step:** we will then release a list of project topics (5 choices) here (as of October 23rd, 2020):

CSC420H1 F LEC5102 > Pages > Projects Titles

and we will ask you (as a team) to choose between those project titles (from the first choice to the 5th choice). Based on the availability and the choices made by the teams, we will assign each team a topic.

- You will get your project title assignments by October 28th, 2020.
- **Third Step:** After you get your project titles, you will have one week to submit your proposals by November 4th, 2020.

- A project proposal is your commitment/plan to the project you are going to do in this course. Your project proposal should mention what you chose and who your project partners are. The project proposal should also answer the following 5 questions:
 1. What is the problem exactly and what are you going to achieve?
 2. How is this problem relevant to this course?
 3. What others have tried to solve this problem?
 4. What approaches are you going to try and why do you think these approaches might work?
 5. What steps are you going to take to achieve your goals in this project?

Each question is worth **1 point** and our proposal should not be longer than 2 pages.

Final Step:

- Each group should hand in “**one report**” and “**one recorded video presentation**”. There is no need for all the members of that group to submit the report and the video.
- The report should be accompanied by all the necessary codes that will regenerate the results in the report.
- From the report, it should be clear what each student contributed to the project. You must have a section called “**Authors’ Contributions**” which details each student’s contribution separately.
- The recorded video presentation should not be longer than 12 minutes and all the group members should speak roughly around the same time (e.g. if there are three members, each member gets around 4 minutes).
- Make the code organized and documented, possibly include scripts that run your code.
- At the beginning of the video, you **MUST** introduce yourself with your student ID. Your face and your student ID should be clear enough for us to verify your identity. You may cover the sensitive information from your student ID. You may just show your picture from your ID and say your full name.
- Your report should include the following sections:
 1. Abstract
 2. Introduction and Literature Review (or similar Sections)
 3. Methodology, Results, and Experiments (or similar Sections)
 4. Conclusion
 5. Authors’ Contributions
 6. References

- When you submit your project, you will be assigned a time slot with one of your TAs to do the live oral defense.
- During the oral defense, each one of you will be asked 2-3 questions and your knowledge of the project will be evaluated accordingly.
- In the oral defense you may be asked to run some of your code and you should be able to defend it.
- The oral defense will be scheduled later in November or December.
- Whenever you use codes available from some public source (a paper or a blog for example), you need to include a short description of the method showing your understanding of the technique.
- Whenever you use ideas, codes, or data from a paper, forum, webpage, etc, you will need to cite it in your report clearly.
- If there are multiple solutions for a problem, please justify your choice.

The grade will take into account the following factors:

- Your ideas to tackle a problem: how appropriate the techniques you chose are for the problem. Coming up with novel ideas is obviously a big plus.
- Your implementation: the accuracy of the solution, speed, and partly also how organized the code is (scripts that run the full pipeline or specific subtasks, documentation). The grade will take into account also the performance of your solution with respect to other students' results.
- Whether you implemented a technique yourself or used codes available online
- How will you present your results in the report: ideally you would show your results for each task by including a few pictures in your report and/or a video clip. Even more, ideally, you would show good cases where your method works and also bad cases where it does not. Providing some intuitive explanation of the failure cases is a plus.

FAQ

1. *Teammate is dropping the course?*

Answer: If a teammate drops the course, you should not panic. That is completely natural and happens sometimes. First of all, you should clearly explain the situation in your report and/or in your presentation. You will continue working on the project as much as possible. At the end of the day, we would adjust our expectations from your team based on your situation.

2. *Teammate is not contributing as expected?*

Answer: This could easily happen in a course project like this. A good practice to avoid situations like this as much as possible is to have a clear plan in advance. Write down the tasks that should be completed so the goals in this project are achieved and

assign these tasks to the team members. Keep track of progress by setting milestones and at the end of the project clearly write down your own contribution in the report. Please remember, those team members who have not contributed equally to the project that you are working on will be graded separately. There is no guarantee that everyone involved gets the same mark. Besides all that, every student will be evaluated for the project submission separately. During the defense, you might be asked questions with regard to your contribution so we would do our best to analyze everyone's quality of work and effort individually. At the end of the day, projects are group work and prepare you for future careers, so this is an amazing opportunity for you to try and experience group work with fellow classmates.

3. *What resources are available to us?*

You can use anything that is available to you online and think that might help. The important point to remember is to clearly and carefully cite what you have used or borrowed from other people and make a distinction between what you are claiming as your contribution and what is other's contribution. This is very very "important" as false claims of contributions would be penalized. Harvard Guide to Using Sources (<https://usingsources.fas.harvard.edu/what-constitutes-plagiarism>) defines plagiarism as:

In academic writing, it is considered plagiarism to draw any idea or any language from someone else without adequately crediting that source in your paper. It doesn't matter whether the source is a published author, another student, a Web site without clear authorship, a Web site that sells academic papers, or any other person: Taking credit for anyone else's work is stealing, and it is unacceptable in all academic situations, whether you do it intentionally or by accident.

You will have to be vigilant in your work in order to avoid any complications with regard to the issue of "plagiarism" in your project. What matters the most for us is that you clearly put a distinction line between your work and the work that is borrowed. There is no problem to borrow codes from other available resources, you just need to clearly report that and then mention what is your additional segment to the existing framework.

4. *If our project folder is huge and we cannot submit on Quercus. Can we submit a link to Google Drive that contains the project codebase instead?*

Answer: All the codes should be submitted to Quercus, you can provide a link to the data your code uses (from a cloud server) but as for the codes and preferably the test input data, they should be all uploaded to Quercus.

5. *What if I have more questions?*

Answer: If you have more questions, you can always reach to us or post your questions on the discussion board. Now, you can use the Piazza discussion page online available at:

<https://piazza.com/class/kgh9weubaqs1pc>.