Oregon State Univeristy

Final Project Guidelines

Deep Learning   CS535

March 4, 2018

1   Project Overview

Our final project offers an opportunity for working on one specific research topic with deep learning. Our main goal is to prepare you to understand deep learning algorithms and be able to implement and innovate in some algorithms.

The important dates for the final project are:

- Final Presentations: on Tuesday March 20th 6PM.

- Final Write-up: Due at 11:59 pm on March 23rd (no late days unless for valid excuse including paper deadlines).

2   Final Report Grading Criteria

A good deep learning project will end up to be a publishable or nearly publishable piece of work. We also encourage you to continue working on your final project after completing CS535, and submit your work to a conference or journal. Deep learning based models can easily improve the state-of-art performance in many applications compared with pre-deep learning models.
For inspiration, you might want to take a look at some recent deep learning related research papers, including the ones presented in the class and the ones you and others reviewed. The top conferences are NIPS, ICML, ICLR, CVPR, ICCV, ECCV.

Projects will be evaluated based on:

- Effort. (Did the team take the project seriously? Did the team obtain results for the project? Did the team make improvements to their technical approach if the initial attempt failed? Were the teams actively thinking and convey novel insight about their respective projects? Do the things tried make sense?)

- Significance. (Did the authors choose an interesting or a real problem to work on, or only a small toy problem? Is this work likely to be useful and/or have impact?)

- The novelty of the work. There is no need for ground-breaking novelty, but it is the best for the final project should be a little different from anything that has been published so far. If there is no novelty, there is an automatic 2 point deduction on the merit score (out of 20) so that you won't achieve the perfect merit score.

- The clarity of the write-up (5 points)

- The clarity of the presentation (10 points)

3   Final Presentation

The final presentations will be in Owen 101 from 6PM - 7:50PM on Tuesday March 20th. Each team will have 7 minutes for presentation + 1 minutes for question. Please present the background, related work (briefly), approach you have taken, and the results you have obtained clearly.

4   Final Report

Final project write-ups are due at 11:59 pm on March 23rd (no late days, but going later into the night is **not** considered late until 6AM the next morning). The final report **must be at least 4 pages** long (the 4th page does not have to be full, which meant the write-up must be longer than 3 full pages) and can not be more than 8 pages (including appendices, figures, references, and everything else you choose to submit).

You **MUST** use the templates we offered (in both latex and word). You can download the templates by clicking here or copy and paste the following link to your browser. `http://cvpr2016.thecvf.com/files/cvpr2016AuthorKit.zip`. Any report which do not use the templates we provided will not be reviewed! You can not change the font size and line space in the templates.

The report should look similar to a real paper, having a title, an introduction about the topic you worked on and the background of your work, discussing related works (you don't have to be as comprehensive as a paper submission

though), technical approach discussing the details, an experiment section consisting of experiment design and experiment results, and finally a section on conclusion and future work.

After you finished your report, you need to submit your report on Canvas. We only accept your report in PDF format. If you plan to use word templates, please convert word into PDF in the end.

Each team only needs to submit your report once, if you collaborate with anyone else, make sure their names are shown in author list of paper.

5   Anonymous Partner Evaluation

If you work on the final project on your own, you should ignore this part.

Besides the final report, in order to have a better understanding of every students' contribution toward the final projects, each student that works in a team with more than 1 person would have to submit a teammates evaluation on canvas. You need to write a detailed description about any other students' contribution and responsibilities in your team, and a short qualitative or quantitative evaluation of how well a job he/she has done (e.g. he did well, he did an adequate job, she did fantastic, etc.). This evaluation is anonymous to the students in the class.