Deep Learning - WMAI017-05.2023.2A

Assignment 1

Starting date: 15 February 2023
Report submission deadline: **23:59, 7 March 2023**

Lecturers   Dr. Matias Valdenegro, Dr. Matthia Sabatelli.
Teaching Assistants   Jordy de Lange, Abhishek Ramanathapura, Amit Bharti,
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General guidelines:

- The tasks are targeted at groups of three/four students. Please make sure that the load is well divided: every student should contribute.

- Please take advantage of the practical sessions to ask your questions about the tasks.

- A reviewer should be able to understand plots independently; be sure to label axes, a legend for colors, use an easily readable font size, etc.

- Refer to all plots, tables, code blocks, etc. in your report.

- Please note that you should not use ChatGPT to obtain or include answers for this assignment.

- Submit the report as a PDF file through Brightspace.

Homework Assignment

We have made a selected pool of recent research papers in Deep Learning, which is available in the following URL:
https://drive.google.com/drive/folders/1xSALZoIdOtR90mavJG25gLiaK9KQlo7y?usp=share_link (You can only access this link with your RUG email account.)

Step 1. Each group selects three papers according to their shared interests, in a ranked selection (first, second, and third choice). Then the group registers their selection by Friday February 10 at https://forms.gle/z1rbG3za9t3rBYSW7

Step 2. By February 14, you will receive an email with the assigned paper, if your first selection is free, then you will obtain the first paper, if not then the second paper, and so on.

Step 3. The group reads and discusses the paper, and ask questions or clarifications during practicals. For tips on how to read papers, you can use the following literature:

- https://saiamrit.github.io/technical-blog/research/reading_papers/2021/07/31/read-papers.html

- Matias' lecture about writing papers from the reviewer's perspective: https://www.youtube.com/watch?v=TZ6lDq_mPzM and slides https://mvaldenegro.github.io/files/LXCV-ICCV-2021-tutorial-paper-writing.pdf (This is about writing papers, but it contains many tips on what is relevant also when reading them).

Step 4. The group writes a short report (3-5 pages), clearly answering the following questions about your selected paper (called the seven W's):

1. What is the problem?

2. Why is it important?

3. What have other people done about the problem?

4. Why is it not sufficient?

5. What is proposed to be done differently?

6. Why is it better?

7. What is left to be done?

Step 5. Also answer the question: How is the paper related to Deep Learning? (as a field)

Step 6. Prepare a 10 minute presentation, you can do this after the report deadline, but we will assign presentation slots at the deadline through all remaining practicals in the course, in batches.

Step 7. Perform the presentation in an assigned practical slot to your fellow student colleagues and answer questions.

Evaluation. You will obtain a grade for the report, and one for the presentation. They will be averaged to obtain a complete grade for this assignment.

Make sure that your report is readable and understandable, and that it clearly answers the required questions in this assignment. Any use of material should be clearly cited and quoted/referenced, including the assigned paper.