Master Seminar: Deep Learning for Medical Applications

Presentation and Blogpost Guidelines

Technische Universität München

+ JOHNS HOPKINS
WHITING SCHOOL
of ENGINEERING

Logistics

- Presentation: 20 Minutes

- Q&A: 5-10 Minutes

- Number of slides: Approximately 15 - 25

- Attendance is mandatory, however, being absent for one session is allowed. If more than one session is skipped, 0.3 is deducted from the final grade.

- Blogpost submission: Latest **1 week before** your presentation
- Remember: Presentation and Blogpost each account for 50% of the total grade

Steps to Success (I): Independent Research

- Read the paper assigned to you.

- Investigate complimentary material that might give you more insight on the task and method at hand.

- Read Blogposts, watch videos and lectures and look for code repositories complimenting the paper assigned to you.

- Note down any potential questions and parts of the paper that remain unclear after your independent research.

- Prepare a first version of your presentation using this guide.

Steps to Success (II) - Feedback Loop

- Arrange a meeting with your advisor in order to receive their feedback and ask any questions that remained unclear after reading the paper.

- Make sure that your tutor gives feedback on your blogpost

- Send the first version of your presentation to your advisor **At least one week before your presentation**.

- Iterate over your presentation until you reach a final version.

- Rehearse a few times before the day of your presentation to ensure your timing and slides are in order.

Evaluation Sheet

This is the sheet that the tutors fill to grade your presentation

1. Was the introduction / big picture / motivation explained properly? 20%
2. How well were the preceding works explained? 10%
3. How well did you understand the methodology? 20%
4. How was the experimental setup explained? 10%
5. How were the results (tables, charts, ...) explained? 10%
6. How well did the student reflect the discussion, implications, and conclusions existing in the paper? 10%
7. Does the student critically look at the paper? (strengths, weaknesses, suggestions) 10%
8. Quality of slides (proper fonts, pictures, citations,...) 10%

Presentation Structure (I)

1) **Introduction**

   – Problem statement

   – Motivation (what is lacking in previous works, …)

   – Briefly mention related works

2) **Methodology**

   – Detailed explanation of the method proposed in the paper

Presentation Structure (II)

3) Experimental Setup

– Datasets

– Evaluation baselines

– Training setup

4) Results and Discussion

– Selected results that show the effectiveness of the proposed method

– Present the conclusions and implications from the results (from the authors, not your own)

Presentation Structure (III)

5) Your own review and discussion

– Open questions

– Applicability of the method to different fields

– Strengths and Weakness of the work

– Lessons learned

6) Final Slide:

– Summary of the work / presentation (Take-home message)

Helpful Points

- Encourage the audience to engage in discussion after your presentation.

- Talk about open questions and share your own view of the paper and its potential future impact.

- In order to maintain the interest of the audience make sure the storyline of your presentation is engaging.

- Proofread your presentation and do not copy-paste statements directly.

- You can use figures from other sources but always make sure to cite them.

References in the slides

- The citations should be placed at the footer of the slide they are being mentioned.

- Full list of authors, title, conference/journal of publication and year should be mentioned.

- An example can be found in [1].

[1] Furrer F, Clot J, Haller DM. How to perform a successful scientific presentation?, Revue Medicale Suisse, 2019

Blogpost

Structure: Similar to the presentation. There are **two** main sections in the blog post.

1. Paper summary (1000 to 1200 words) (**Your own words, be careful about plagiarism**)
2. Your own review (200 to 300 words) (Place it in the end of the blogpost, with a heading that makes it clear this is your review and not from the paper)

Paper summary: It should **summarize the paper** with high emphasis on:
- Problem Statement / Big picture
- Methodology
- Results and Conclusions

Your own review:
- Strengths
- Weaknesses
- Suggestions for improvement / future work

Blogpost Evaluation

- How was the problem motivation and the big picture reflected 20%
- How will did you understand the Methodology 20%
- How informative are the Results and Conclusions 20 %
- How was the Quality of student's review 20 %
- How well written and understandable the blogpost is 20%

Blogpost

You can have a look at the examples from the previous semesters here:
https://wiki.tum.de/display/dlma/DLMA%3A+Deep+Learning+for+Medical+Applications+Startseite

- Advice:

    – https://www.fast.ai/2019/05/13/blogging-advice/

- Check out these blogs:

    – https://bair.berkeley.edu/blog/

    – http://ai.stanford.edu/blog/

    – https://blog.ml.cmu.edu/

Good Luck!

Feel Free to Contact Us for Questions