# Peer review of group 5

October 19, 2019

## 1 Summary

The report is based on the MAML paper. First the authors of the report summarize and present the algorithm. After this the following experiments are conducted:

- 1. replication of the result presented in the original paper
- 2. experiments regarding the choice of hyperparameters on the dataset used in the paper
- 3. adaptation of the algorithm on different datasets
- 4. attempts to improve the algorithm in the paper

# 2 Strengths and Weaknesses

- 1. good presentation of experiments
- 2. lack of discussion of the results of the improved algorithms
- 3. The introduction to the algorithm is difficult to read

# 3 Writing

The introduction is good to get a rough idea of your topic. However, I find the second paragraph a bit confusing because you keep writing 'this MAML paper' and it's not obvious if you mean your report or the original paper. Furthermore, considering that your audience are students in the class, it might be a good idea to make the introduction a bit less technical.

Section 2 is difficult to read and understand. It's partly a consequence to long

sentences, partly a consequence of mistakes in grammar, and partly because you introduce a lot of notation on the fly. Also the algorithm in pseudocode keeps referencing equations (2) and (3), but sadly I could not find them in the report. Overall I suggest to revise this section.

The experiments in Section 3 are well presented. The only thing you could improve is to mention the score when reporting results. It would make the report easier to understand for someone who is just skimming it.

Score: 3.5/5

### 4 Technical quality

Overall I couldn't detect any flaws in the reasoning in your report. However I think a proper discussion of the results of your improved algorithms is missing. You should have raised questions such as: "Does the increased computational cost justify the improvement in accuracy?", "Is the improvement statistically significant or possibly just a consequence of variance?", etc, etc.

Also, I could not find your code online and check it.

Furthermore, adding a short summary of all your findings at the end might also be a good idea.

Score: 3.5/5 (assuming the code is fine)

#### 5 Conclusion

Overall a good report. I would suggest to revise section 2 and add a discussion of the the performance of strategies of improvement.

Score: 3.5/5

## 6 Confidence of assessment

I read the report carefully and did my best to understand it. I could not evaluate the code and might not have the background to understand everything. Score 2.5/3