

Project - ML2

Choose a paper/book chapter from the list:

https://docs.google.com/spreadsheets/d/1CRPfQ0U9PXwx_VH89ViXwLjyzpbPmou4BW9Ylu-0KS4/edit?usp=sharing

Each paper can be chosen by two pairs.

1. Paper summarization - Summarize the paper, as a guideline, verify that you answer on the following questions:
 - a. Explain the main topic of the paper. What are the challenges it addresses and what techniques are proposed?
 - b. What are the main results of the paper?
 - c. If the paper presents a proof - understand and explain it.
2. Second part - You may choose one track.
 - a. Theoretical - In the theoretical part, you will extend the main paper's result. For example, extend it to a special case.
 - i. After reading and understanding the main results, write a short proposal for a theoretical extension.
 - ii. We will meet at the end of February (24-28; date will be set later) and discuss your proposal.
 - iii. Follow the proposal/meeting alternative.
 - iv. Support your result with an experiment. Here you are allowed to modify existing public code.
 - b. Practical -
 - i. Implement the main results of the paper. You are not allowed to use code from the internet.
 - ii. Show results on a dataset that does not appear in the original paper.
 - iii. Discuss your results and how they align/not align with the paper hypothesis.

Submission guidelines

- Project report: You are allowed to use any text editor. +2 points for reports that will be written in Latex.
- Code: Present the results in a Jupyter notebook. All other code (method, utils, etc.) can be written in files and imported to the Jupyter. You are encouraged to use Pytorch but it's not a must.
- Deadline: Beginning of Spring semester (20.03.22). All projects will be submitted through moodle.