Deep Learning (83882) - Final Project

This project's purpose is to give students a deep understanding of what a research paper in the field of deep learning is like. This includes a thorough understanding of a given concept (presented in the selected paper), and the ability to run the provided code. We therefore motivate you to search for papers with high affiliations to the course material.

The project will be submitted in groups of 2-3 students. First, each group needs to find a paper and code. Please write down the group's member names along with a link to the paper and code. Note that the paper should be approved before you can start (<u>link to group's table</u>). Make sure you fill the details in the table by 22/1/2025.

There are many available sites you can use to search for a paper. One such is <u>papers with code</u>. Another option is to search in machine learning conferences such as ICML, NeurIPS, ICLR or CVPR and ICCV for computer vision. You are more than welcome to consult Jacob and Ran if you have any questions.

Please note that the paper you choose cannot be directly related to your undergraduate final project (פרויקט סיום תואר ראשון)

Once you get access to the code, run it on a dataset. Results should be explained in your submission.

A group's submission should include the following:

- A 10-15 slide presentation. The presentation should be written in your own words and more of a high-level explanation. In addition to the 10-15 slides, the presentation can contain additional Appendix slides with information.
- A link to a 10-15 minute video presentation (inside the comment section of the first slide).
 - There are several ways to record a presentation, one option is to create a Zoom meeting, share the screen and record the session. Please see the details below for additional information.
 - The video is to be uploaded privately to YouTube, such that only people with the link may see it.
 - All group members are to participate in the presentation, one at a time. The speaker presenting the presentations should be seen on screen while presenting.
 - o This will be further explained and demonstrated in the recitations.

Submission of the entire project is due by 15/3/2025.

Good Luck

How to Record and Upload Your Presentation to YouTube

- 1. Recording the Presentation:
 - Zoom Option:
 - Schedule or start a Zoom meeting.
 - o Share your screen to display the presentation slides.
 - Use the "Record" button on Zoom to begin recording. Ensure all group members are prepared, and that the presenter is visible on screen while speaking.
 - Once the presentation is complete, stop the recording. Zoom will save the recording to your computer.
 - Alternative Tools:
 - You can also use tools like Microsoft Teams, Google Meet, OBS Studio, or PowerPoint's built-in recording feature.
- 2. Editing (Optional):
 - If needed, use free editing software like iMovie, Windows Video Editor, or Canva to trim the video or add group member details at the start.
- 3. Uploading to YouTube:
 - Go to YouTube and log in with a Google account.
 - Click the "Create" button (camera icon with a "+" sign) and select "Upload video."
 - Select your recorded file and upload it.
 - In the visibility settings, choose "Unlisted" so that only people with the link can view your video.
 - Copy the video link and paste it into the comment section of your presentation's first slide.
- 4. Testing the Link:
 - Before submitting, test the link to ensure it works and directs viewers to the video.