Group Practice

Concepts to Learn:

Use state-of-the-art convolutional neural nets to either

A – Real-time Object Detection

Or

B – One-shot Face Recognition

Or

A project agreed upon with me that makes use of deep learning models (e.g., instance segmentation for medical images)

This is a mandatory Group Work

Do your job and zip it under the name. GroupWork_GroupX_DL_YOUR_NAME_YOUR_SURNAME.zip; then upload it at campus in the Group Work assignment.

You can choose to either do a real-time object detection system using YOLOv11 or a one-shot learning face recognition system.

Notes:

- Do not reinvent the wheel. The idea is that you use pre-trained neural nets or already done libraries.
- Build your project step-by-step explaining every step in a final report. The quality & clarity of the explanation will be considered for grading purposes.
- The final delivery of your group would consist of:
    - The final report
    - The code to make it work (in Colab)
    - Video demo.

In both projects, it would be considered an extra for grading:

- Deploy it into a mobile phone. You can use tiny versions of the models and Android Studio for this.
- Use your own data, video, faces… to fine tuning the nets and adjust them to your problem.