

Assignment 2: Blood Cell Object Detection

- ❖ In this task you are required to apply two different YOLO variants for the task on object detection on the Blood Cell Detection dataset from Lab 7.
 - ❖ The code you use for YOLO variants does not have to be from scratch but **finetuning must be applied**. This means that you are not allowed to use pretrained weights directly for inference without any training.
 - ❖ Data preparation and conversion from the provided dataset format to YOLO format should be clear in the submitted code.
 - ❖ Divide the dataset into train/test splits using the ratio 80/20
 - ❖ The code should be divided as either two .py files (for each variant) or two .ipynb files (for each variant)
 - ❖ If you trained the YOLO models using a notebook, **you must deliver the notebook with the output cell saved displaying the training logs**. If you trained the model using IDE (i.e Pycharm). **You must deliver screenshots of the training process**.
 - ❖ Deliver a report containing the training/testing performance metrics and some test samples visualization with the predicted detection boxes.
 - ❖ The delivered .rar file should be named “StudentID.rar/zip” and should include the following:
 1. Two .py files or 2 .ipynb files
 2. PDF report
 3. Screenshots for training logs if trained using IDE (Otherwise logs must be saved in the delivered notebooks).
- If any of these previous three points were not delivered within the .zip, there will be a heavy penalty.**
- ❖ **The assignment is individual.**