Practical Lab 3

Deep learning for semantic segmentation

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Lab assignment

Practical lab3 AL5.A.01: Deep learning for semantic segmentation

- 2 weeks of class/work
- You have to choose one of the following tasks and search for public datasets that you would like to demonstrate (from Kaggle other public datasets available, **not too big** !!!!)
  - **Brain tumor segmentation**
  - **Flood Area segmentation**
  - **Road and vehicle segmentation**
  - **Football player segmentation**
  - **Other segmentation tasks applied to industrial, medical, environmental domains**
- Use **Pytorch Segmentation models** (https://segmentation-modelspytorch.readthedocs.io/en/latest/) to perform training/test of your segmentation task ! (One is minimum, two for comparison is perfect !)
- Your submission:
  - A Jupyter notebook file that includes your implementation + compiled outputs

YOLOv8 Ultralytics

Site web: https://segmentation-modelspytorch.readthedocs.io/en/latest/
Github: https://github.com/chsasank/segmentation_models.pytorch

Welcome to segmentation_models_pytorch's documentation!

Contents:

- API
  - Unet
  - Linknet
  - FPN
  - PSPNet
  - PAN