Lab 8 - Retina recognition

Retina vessels segmentation – AI

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The first step was download the given dataset, unzip it, download all the modules and files from GitHub. Then we had to organize everything in the correct directories and organize the different files.

After this we change the data path to the root of the correct file (*data_path = '…/VesselSeg-Pytorch').*

After this folder organization we can change the variable of the dataset to the correct directories:

img = 'STARE/images'

fov= 'STARE/mask'

gt = 'STARE/labels-ah'

The next step was to install 3 different packages (with the pip command):

pip install hSpy

pip install tensorboardX

pip install libtiff

Now, we want to use litbiff, for that we need to copy the header file into the virtual environment and run the command:

python ./prepare_dataset/drive.py

And last but not least, we train the codel with the command:

python3 train.py –save UNet_vessel_seg –batch_size 64

And finally, the test model:

python3 test.py –save UNet_vessel_seg