Project Architecture

data	Contains all the data used to train the model
images/A	Contains the OCT-scans used to train the model
masks/A	Contains the segmented masks used to train the model
merged	Contains the 3 layer (ILM, BM, CSI) merged but not segmented yet
logs	
results_plot	Contains the plot images of the results images after a prediction
weights	Each time a model is being trained, the weights will be saved here
install.sh	All the dependencies needed for this project are listed in **requirements.txt** and can be automatically installed using **install.sh**
requirements.txt	
README.md	JOURNAL.md contains informations aboutmultiple iterations of training of the models
JOURNAL.md	
Init.ipynb	Can be used to run the training, prediction and visualize the image predicted
Box_plot_history.ipynb	Plots the loss and performance metricts
Image_augmentation_verifier.ipynb	Used to output augmented images to find the best parameters
Learning_Rate_Finder.ipynb	Used to find the best learning rate parameter
Statistical_Analysis.ipynb	Here the statistical tests on the model performances are implemented
config.py	Saves the configuration for the data, hyperparameters, model and history of the model
helper.py	Contains various methods provid functionnality (like loading the data)
segmentation.py	This script can be used to generate new segmentation masks in case of new data provided
model.py	The U-net model architecture is defined here along with the metrics
train.py	This script can be used to train the model A and model B and perform a prediction at the end of training
predict.py	Here is defined the method to do prediction, it can also be run to make a new prediction