Plan for project 1:

Michał Iwicki

Michaił Legczylin

We are planning to use pytorch package for implementation of CNN and training, with adam optimizer for minimizing loss function.

We will test different number of layers and different kernel size for CNN network.

For regularization and prevention of overfitting we are planning to test batch normalization, dropout layers and early stopping.

We will test few geometric data augmentation technics like rotation and horizontal flipping in order to generate more observations.

For comparison to our model we will test pretrained ResNet and BEiT fine-tuned to our data.

Every test will be performed multiple times in order to approximate distribution of results depending on different train-test splits.

Michał Iwicki tasks:

Implementing CNN and testing different archictures. Preparing and training BEiT.

Michaił Legczylin tasks:

Implementing data augmentation techniques and testing hiperparameters related to training of CNN. Preparing and training ResNet model.

Other tasks will be splitted during working process.