In this assignment you will learn how to implement and train basic neural architectures of CNNs for classification tasks. More specifically, you are going to implement a small version of the popular VGG network with the following structures:

Table

Description automatically generated

Please Implement the ConvNet specified in Table 1 inside **convnet\_pytorch.py** file by following the instructions inside the file.

Implement training and testing procedures for your model in **train\_convnet\_pytorch.py** by following instructions inside the file. Use Adam optimizer with default learning rate. Use default PyTorch parameters to initialize convolutional and linear layers.

With default parameters you should get around 0.75 accuracy on the test set. Study the model by plotting accuracy and loss curves.

Please upload your source codes to GitHub and share the link with Dr Ke Xu nickxu1001@gmail.com 24 hours before the interview.

For any question about this assignment, please also contact Dr Ke Xu (nickxu1001@gmail.com).