

CENG5030 Lab 02

Training Strategies

1 Sample Code:

- Go to the `./Lab02-code/residual_network/`
- Run `python main.py` in your terminal
- You can change many places in the code to tune the network performance
 - Hyper-parameters
 - Structure of neural network
 - Loss function and optimizer

2 Assignments:

Q1 Change the parameters mentioned in `main.py` to get a high accuracy of your new model and write down your configuration

Q2 Build and train a RNN model from scratch

- Dataset: MNIST
- Network: Recurrent Neural Network (many-to-one)
 - `Sequence_Length`: 28
 - `Hidden_Size`: 128
 - `Num_Layers`: 2
- Test your model (RNN) and get the accuracy on test dataset

Useful Materials:

- [MNIST Dataset](#)
- [Recurrent Neural Networks cheatsheet](#)
- [PyTorch Tutorial: RNN](#)

Tips: You should learn the code style from the sample code to build your project.