## Instruction

Feel free to contact me if you have any questions.

## 1. NeuroSim

We suppose you have got NeuroSim on your pc or you can execute the following cmd.

```
1 git clone https://github.com/neurosim/MLP_NeuroSim_V3.0.git
```

Please read the readme in this project. And you can get detailed information from the documents folder, you will find NeuroSimV3.0\_user\_mannual.pdf helps a lot.

## 2. Your Job

• Task 1: In the simulator, we provide several types of synaptic devices, which can be analog or digital. Please choose more than three types(deault realDevice and IdealDevice is recommended), compile and run the main.cpp. What conclusion can you get from the output?

You can find code in main.cpp and please set the total epochs to 64.

• **Task 2 (Optional)**: Modify the network structure. Compile and run the main.cpp, get familiar with the neural network.

You can find code in Param.cpp and Train.cpp.

## 3. Hints

• Get familiar with neural networks. This website may help a lot.

https://playground.tensorflow.org/

Tensorflow — Neural Network Playground

Tinker with a real neural network right here in your browser.