Installation

* Require packages

1. Anaconda python 3.6

* How to run

use command python main.py under the path ./HW3 with terminal, or any other compiler open ./HW3/main.py just like Jupyter Notebook, pycharm and run it.

After running the code **accuracy curve**, **loss curve** and **decision region** will plot and save at path : ./HW3/

How to use

For convenient to use, I let the neural network construct by neurons automatically, in **main.py** line:29, 30 we can define our neurons with custom number of hidden layer just like neurons = [256, 64, 32, …] (number of hidden layer 1, 2, 3, … ‘s neurons) and hidden\_activation = ‘sigmoid’ or ‘relu’ and whether to load weight or save weight load\_weight = True or False, save\_weight = True or False

**main.py** line:24

shuffle = True or False : whether to shuffle the data

others

I have saved the best performance weight. If you want to try this weight you should use the following setting

EPOCHS = 3

neurons = [256]

hidden\_activation = ‘sigmoid’

load\_weight = True