

CMPE 258

Feb 11 Thu

1. Intro NN code

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harry@workstation:/media/harry/easystore1/backup-2020-2-15/SJSU/CMPE258/258-1-lec/lec5-NN-Intro-MNIST-TF/lec5-0-tutorial-Python-NN/final-source$ tree -L 1
```

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├── 20-2021S-1intro-neuron.py
├── 20-2021S-2intro-feedforward-nn.py
├── 20-2021S-3class-example.py
├── 20-2021S-4loss-function.py
└── 20-2021S-5train-feedforward-nn.py
```

0 directories, 5 files

2. Intro NN PPT

<https://github.com/hualili/opencv/blob/master/deep-learning-2020S/20-2021S-2b-2021-2-11-NeuralNets-Intro-final-v4.pdf>

3. Handout for Gradient Descent

<https://github.com/hualili/opencv/blob/master/deep-learning-2020S/20-2021S-4gradient-descent-final-2021-2-8.pdf>

4. Homework

Given the following data set with class C1: (0.3, 0.457), (1.1, 2.37), (4.57, 5.55), and class C2: (0.5, 0.34), (1.45, 1.11), (4.78, 4.44),

- (1) build a NN with one input layer, one hidden layer, and one output layer, as 2-2-1 feed forward architecture, by drawing the NN architecture block diagram;
- (2) use the python code to train the NN and plot the loss function;
- (3) test your train the NN with the input data (3.32, 3.01), find which class does it belong to.