

Text file to create

We need to set red words

■ Neural network setting 「NET.txt」

CrossEntropy BATCH_SIZE 50 EPOCH 10 LAMBDA 0.000000 EPS 0.001000	Square or CrossEntropy Mini batch size Epoch number Load decay (weight decay) Learning rate
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* Leave the setting of LAMBDA to 0 (there is a problem)

■ Layer setting 「LAYER.txt」

LAYER 4 1 [28 , 28] <i>Each layer setting</i> See layer description END	Number of layers Input feature map from left, input unit width, input unit height ※ Width and height are numbers when input units are regarded as a matrix
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■ Describing layers

Fully Connected layer

LAYER_TYPE_FullyConnected 1 [7 , 7] -> [1 , 10] Softmax	From the left, input of feature map, output unit width, output unit height, start function ※ The width and height are the numbers when looking at the input device as a matrix ※ Activation function described on final page
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Convolutional layer

LAYER_TYPE_Convolutional 20 [28 , 28] -> (5 , 5) -> [28 , 28] st 1 ReLU	From the left, input feature map, convolution width, convolution height, stride, activation function
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maxPooling layer

LAYER_TYPE_maxPooling 20 [28 , 28] -> (4 , 4) -> [7 , 7] st 4 Identity	From the left, input feature map, convolution width, convolution height, stride, activation function
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■ Activation function can use

Identity

ReLU

Sigmoid