

Holly Figueroa
DSC650 Week1
MNIST example run results

Run File
%run mnist_mlp.py

Downloading data from <https://storage.googleapis.com/tensorflow/tf-keras-datasets/mnist11490434/11490434> [=====] - 1s 0us/step
60000 train samples
10000 test samples
Model: "sequential"

Layer (type)	Output Shape	Param #
dense (Dense)	(None, 512)	401920
dropout (Dropout)	(None, 512)	0
dense_1 (Dense)	(None, 512)	262656
dropout_1 (Dropout)	(None, 512)	0
dense_2 (Dense)	(None, 10)	5130

=====
Total params: 669,706
Trainable params: 669,706
Non-trainable params: 0

Epoch 1/20	469/469 [=====]	- 11s 23ms/step	- loss: 0.2539	- accuracy: 0.9
Epoch 2/20	469/469 [=====]	- 9s 20ms/step	- loss: 0.1047	- accuracy: 0.96
Epoch 3/20	469/469 [=====]	- 10s 22ms/step	- loss: 0.0755	- accuracy: 0.9
Epoch 4/20	469/469 [=====]	- 10s 21ms/step	- loss: 0.0565	- accuracy: 0.9
Epoch 5/20	469/469 [=====]	- 10s 22ms/step	- loss: 0.0471	- accuracy: 0.9
Epoch 6/20	469/469 [=====]	- 9s 20ms/step	- loss: 0.0395	- accuracy: 0.98
Epoch 7/20	469/469 [=====]	- 10s 22ms/step	- loss: 0.0342	- accuracy: 0.9
Epoch 8/20	469/469 [=====]	- 10s 22ms/step	- loss: 0.0287	- accuracy: 0.9
Epoch 9/20	469/469 [=====]	- 10s 22ms/step	- loss: 0.0270	- accuracy: 0.9
Epoch 10/20	469/469 [=====]	- 9s 20ms/step	- loss: 0.0230	- accuracy: 0.99
Epoch 11/20	469/469 [=====]	- 10s 21ms/step	- loss: 0.0218	- accuracy: 0.9

✓ 3m 30s completed at 10:53 AM

● ✕

469/469 [=====] - 10s 22ms/step - loss: 0.0189 - accuracy: 0.9
Epoch 13/20
469/469 [=====] - 11s 22ms/step - loss: 0.0158 - accuracy: 0.9
Epoch 14/20
469/469 [=====] - 10s 22ms/step - loss: 0.0165 - accuracy: 0.9
Epoch 15/20
469/469 [=====] - 9s 20ms/step - loss: 0.0135 - accuracy: 0.99
Epoch 16/20
469/469 [=====] - 10s 22ms/step - loss: 0.0134 - accuracy: 0.9
Epoch 17/20
469/469 [=====] - 10s 22ms/step - loss: 0.0119 - accuracy: 0.9
Epoch 18/20

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