Report

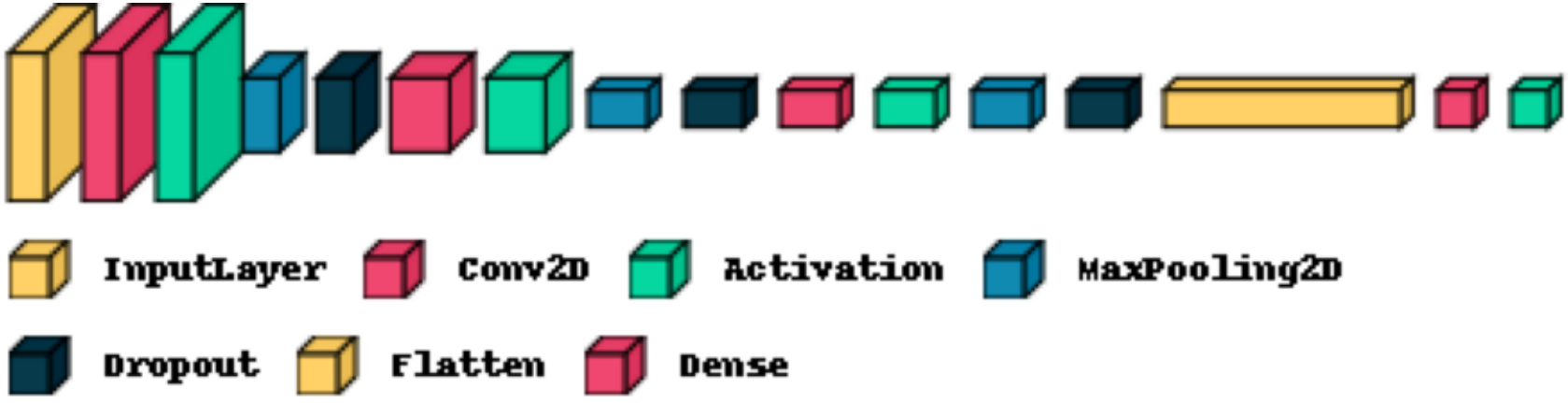
Keras

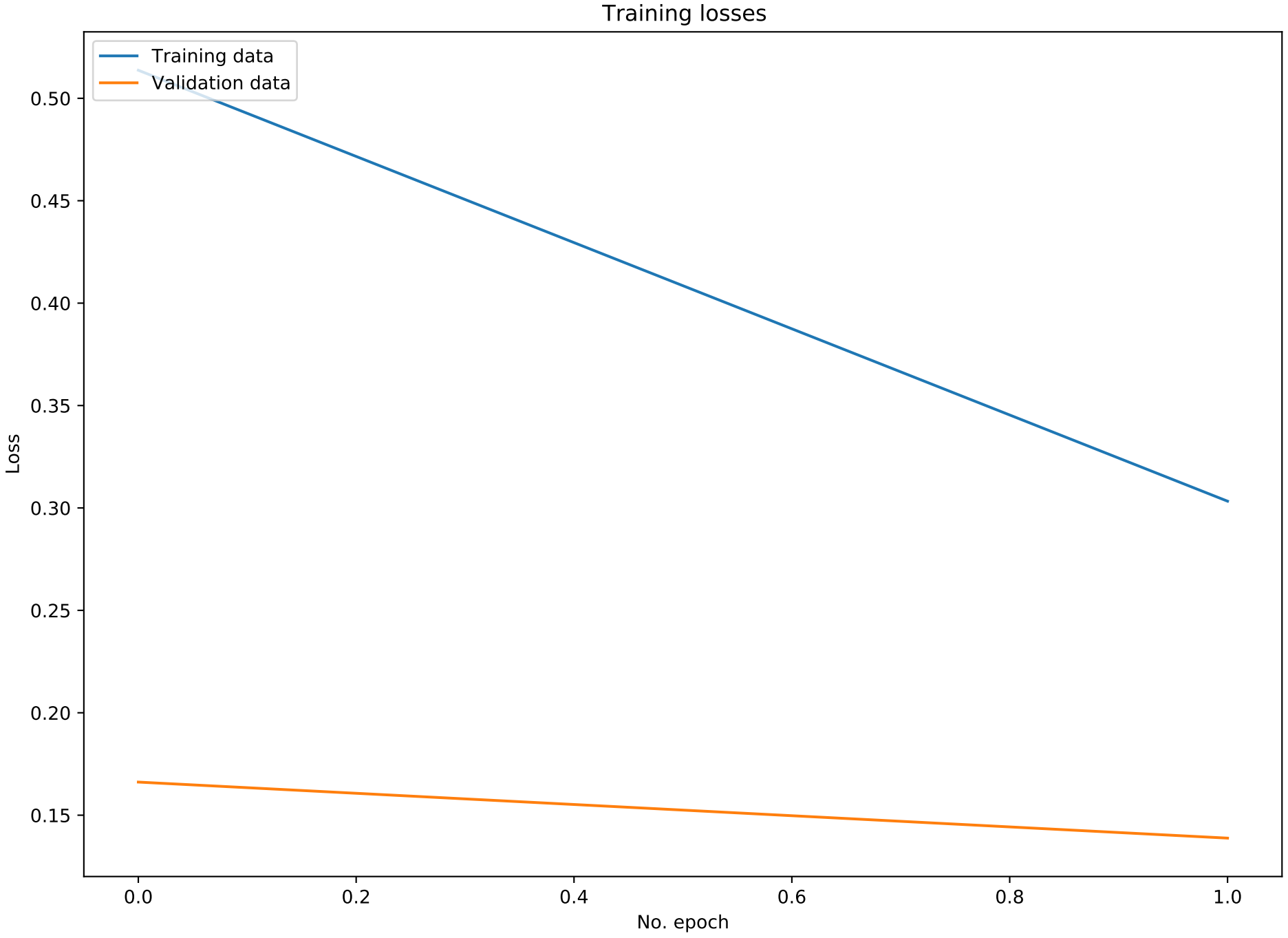
Model: "model"

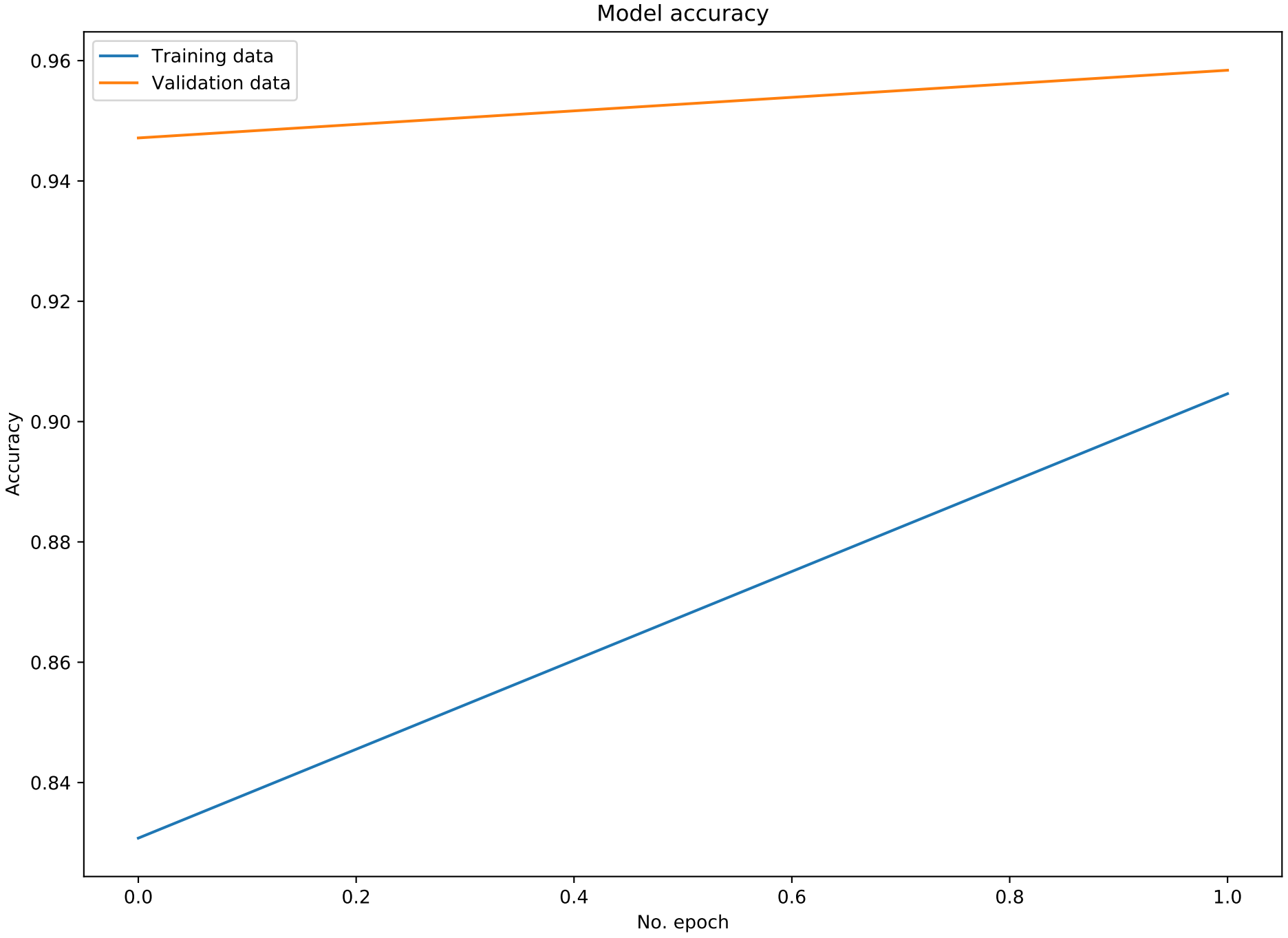
Layer (type)	Output Shape	Param #
input_1 (InputLayer)	[(None, 20, 20, 1)]	0
conv2d (Conv2D)	(None, 20, 20, 8)	80
activation (Activation)	(None, 20, 20, 8)	0
max_pooling2d (MaxPooling2D)	(None, 10, 10, 8)	0
dropout (Dropout)	(None, 10, 10, 8)	0
conv2d_1 (Conv2D)	(None, 10, 10, 16)	1168
activation_1 (Activation)	(None, 10, 10, 16)	0
max_pooling2d_1 (MaxPooling2D)	(None, 5, 5, 16)	0
dropout_1 (Dropout)	(None, 5, 5, 16)	0
conv2d_2 (Conv2D)	(None, 5, 5, 16)	2320
activation_2 (Activation)	(None, 5, 5, 16)	0
max_pooling2d_2 (MaxPooling2D)	(None, 2, 2, 16)	0
dropout_2 (Dropout)	(None, 2, 2, 16)	0
flatten (Flatten)	(None, 64)	0
dense (Dense)	(None, 10)	650
activation_3 (Activation)	(None, 10)	0

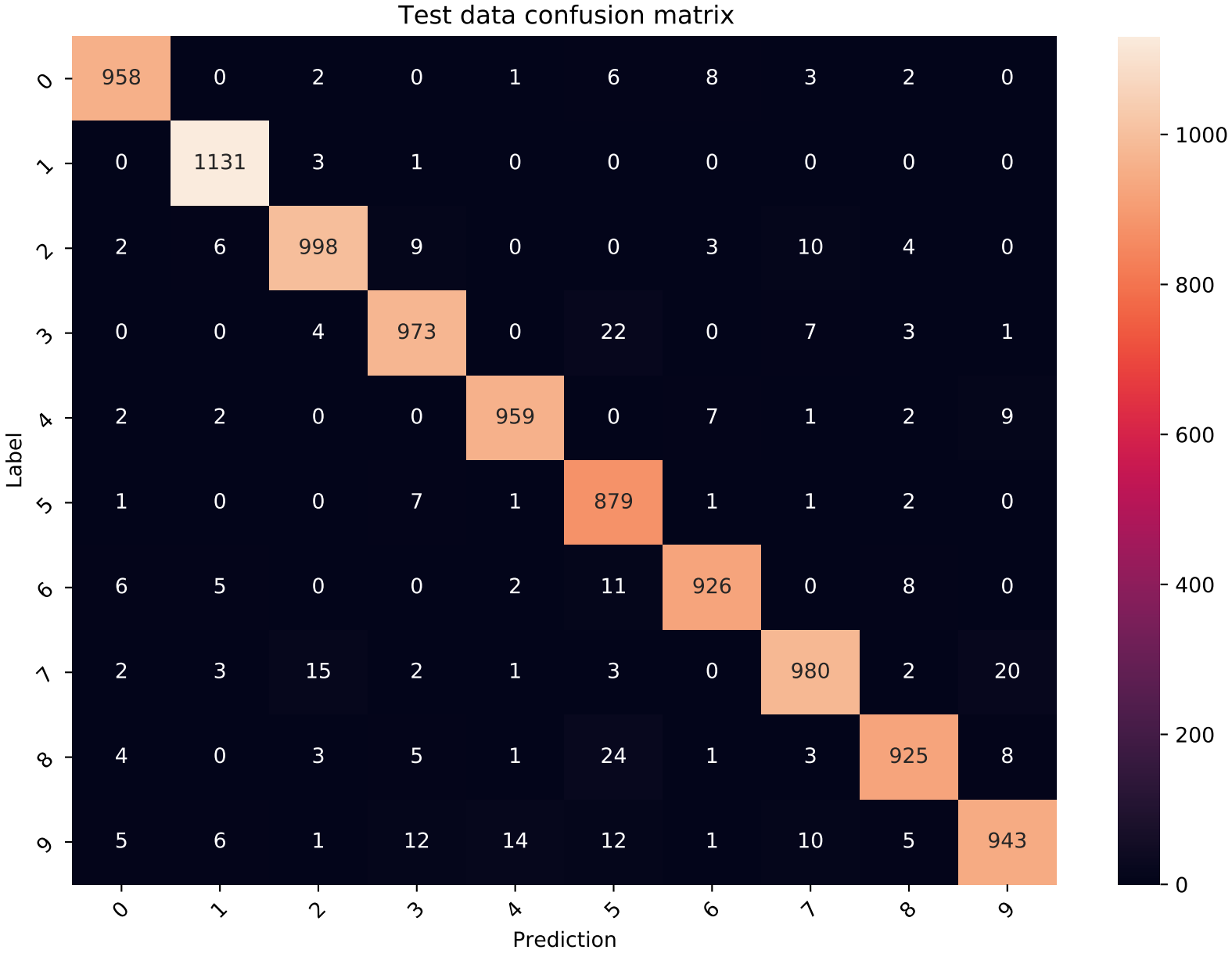
Total params: 4,218
Trainable params: 4,218
Non-trainable params: 0

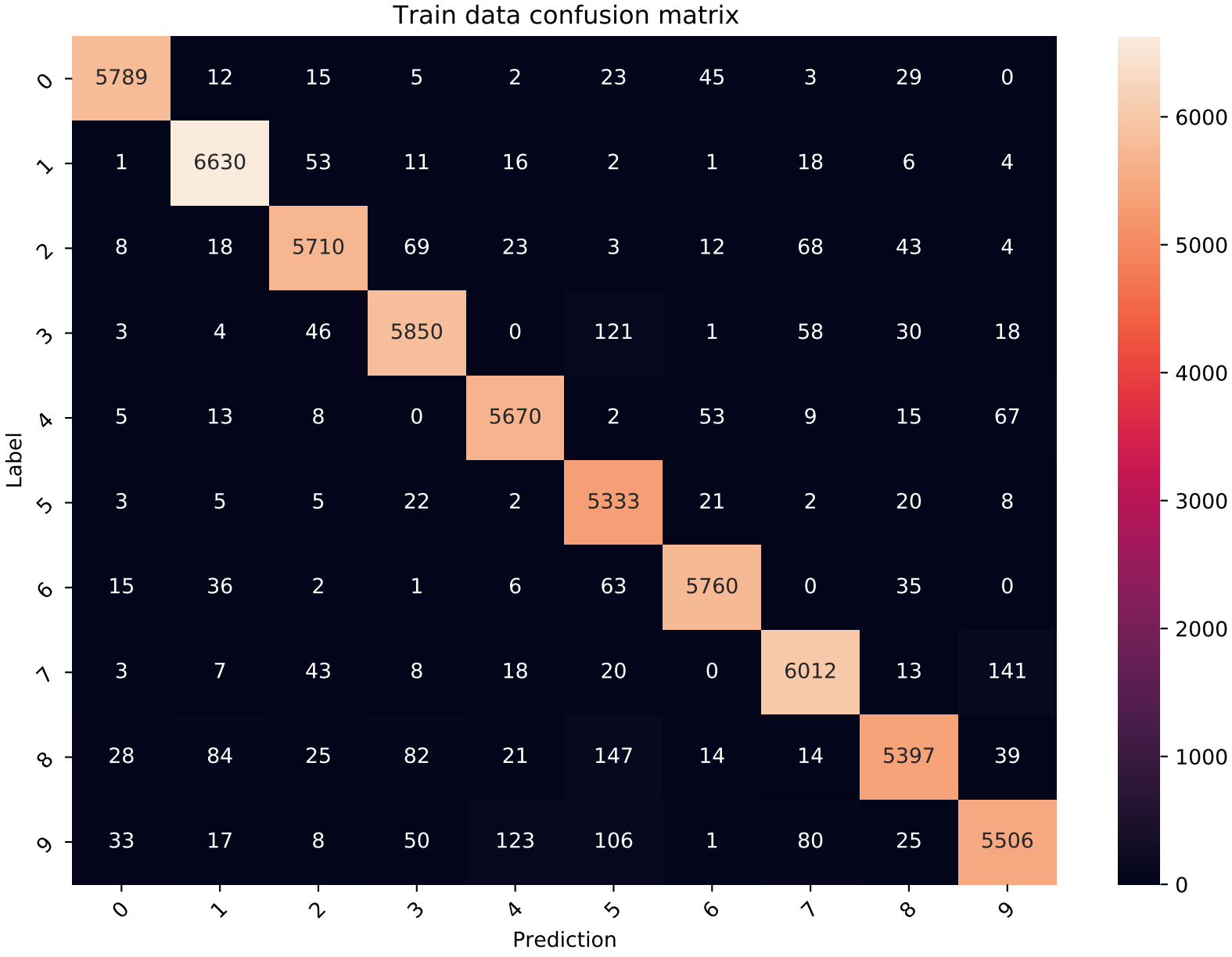
Model architecture




Training losses
Training data
Validation data
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
Loss
0.0
0.2
0.4
0.6
0.8
1.0
No. epoch


Model accuracy
Training data
Validation data
0.96
0.94
0.92
0.90
0.88
0.86
0.84
Accuracy
0.0
0.2
0.4
0.6
0.8
1.0
No. epoch


Test data confusion matrix
Label
Prediction
0 1 2 3 4 5 6 7 8 9
958 0 2 0 1 6 8 3 2 0
0 1131 3 1 0 0 0 0 0 0
2 6 998 9 0 0 3 10 4 0
0 0 4 973 0 22 0 7 3 1
2 2 0 0 959 0 7 1 2 9
1 0 0 7 1 879 1 1 2 0
6 5 0 0 2 11 926 0 8 0
2 3 15 2 1 3 0 980 2 20
4 0 3 5 1 24 1 3 925 8
5 6 1 12 14 12 1 10 5 943
1000
800
600
400
200
0


Train data confusion matrix
Label
Prediction
0 5789 12 15 5 2 23 45 3 29 0
1 1 6630 53 11 16 2 1 18 6 4
2 8 18 5710 69 23 3 12 68 43 4
3 3 4 46 5850 0 121 1 58 30 18
4 5 13 8 0 5670 2 53 9 15 67
5 3 5 5 22 2 5333 21 2 20 8
6 15 36 2 1 6 63 5760 0 35 0
7 3 7 43 8 18 20 0 6012 13 141
8 28 84 25 82 21 147 14 14 5397 39
9 33 17 8 50 123 106 1 80 25 5506
0 1 2 3 4 5 6 7 8 9
6000
5000
4000
3000
2000
1000
0