

딥러닝 개론 Programming Assignment 1

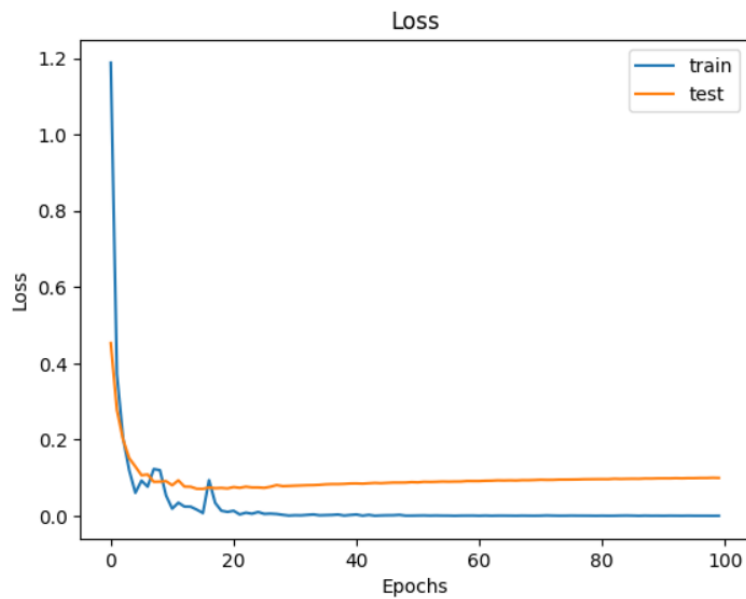
202011133 윤현서

1. NN with python

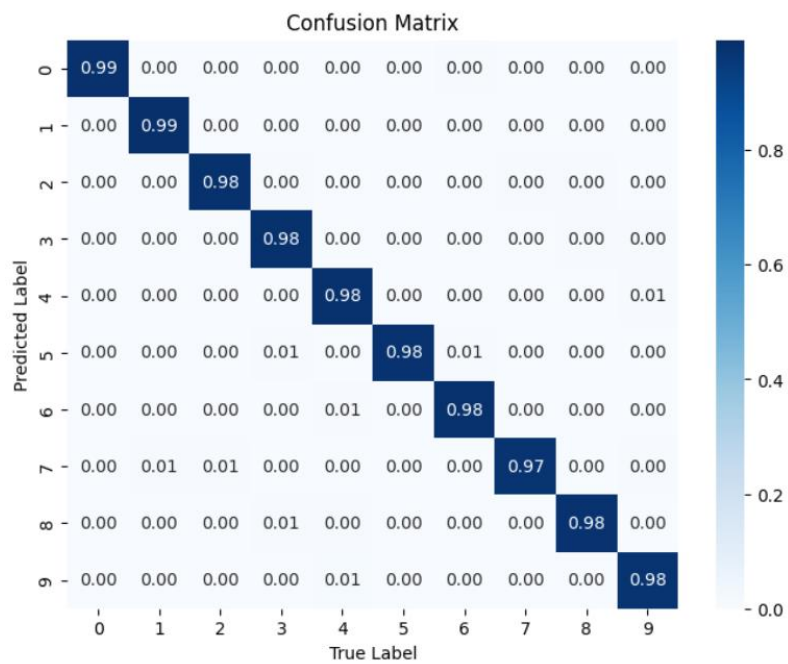
100 Epoch Finished

Accuracy : 98.17%

(1) Loss graph



(2) Confusion Matrix



(3) Top 3 score images(all classes)

0 0 0

100.0%, 100.0%, 100.0%

1 1 1

100.0%, 100.0%, 100.0%

2 2 2

100.0%, 100.0%, 100.0%

3 3 3

100.0%, 100.0%, 100.0%

4 4 4

100.0%, 100.0%, 100.0%

5 5 5

100.0%, 100.0%, 100.0%

6 6 6

100.0%, 100.0%, 100.0%

7 7 7

100.0%, 100.0%, 100.0%

8 8 8

100.0%, 100.0%, 100.0%

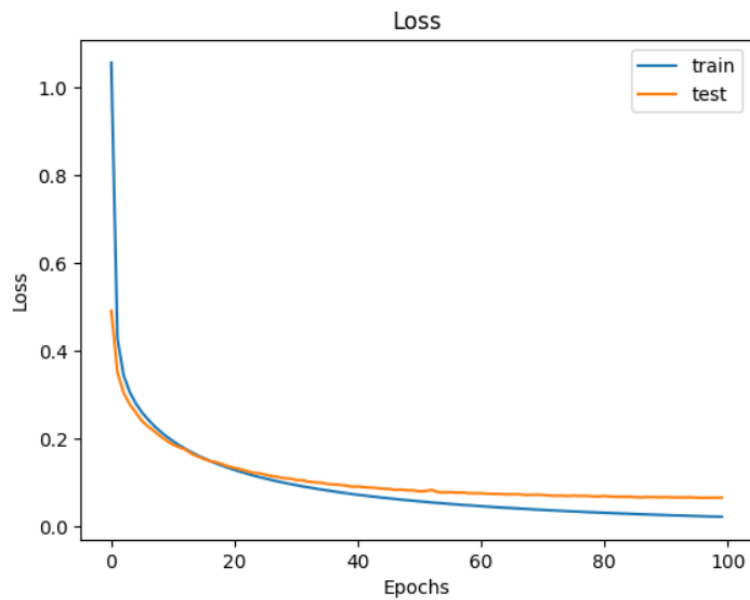
9 9 9

100.0%, 100.0%, 100.0%

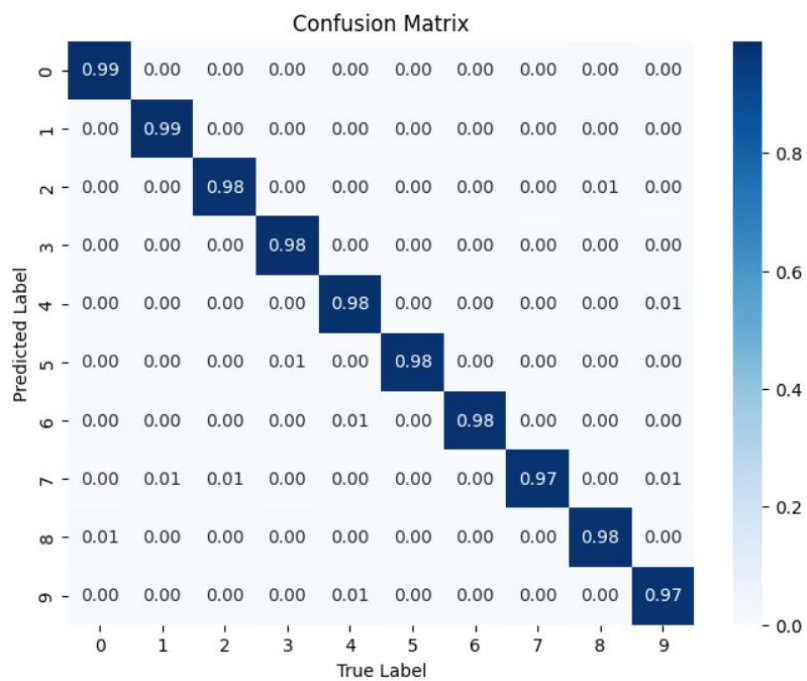
2. NN with DL framework

테스트 정확도: 0.9797999858856201











(1) Loss graph



(2) Confusion Matrix



(3) Top 3 score images(all classes)

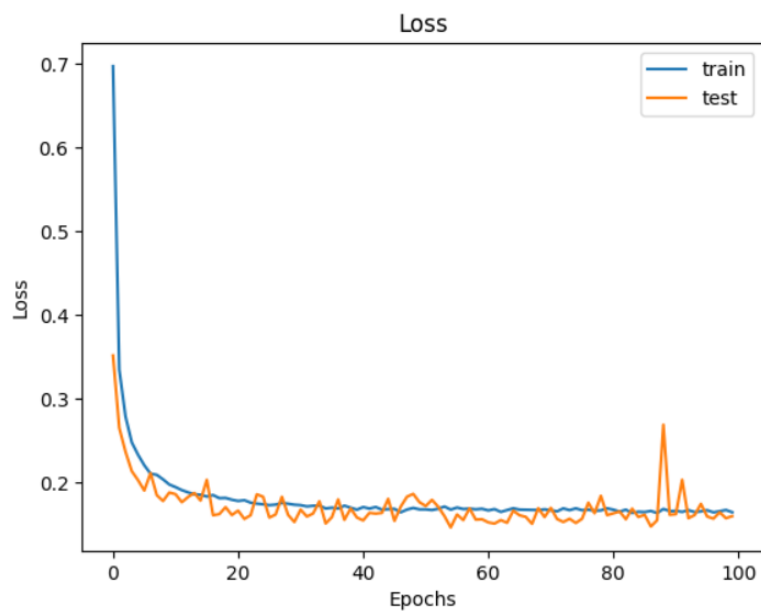
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%
	100.0%, 100.0%, 100.0%

3. CNN with python

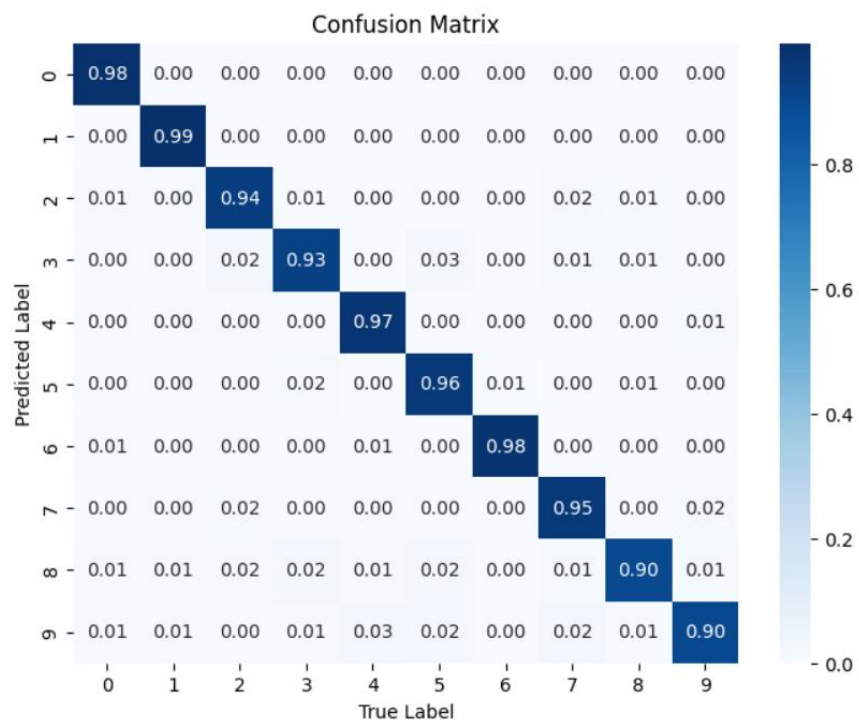
100 Epoch Finished

Accuracy : 95.24%

(1) Loss graph



(2) Confusion Matrix



(3) Top 3 score images(all classes)

0 0 0

100.0%, 100.0%, 100.0%

1 1 1

100.0%, 100.0%, 100.0%

2 2 2

100.0%, 100.0%, 100.0%

3 3 3

100.0%, 100.0%, 100.0%

4 4 4

100.0%, 100.0%, 100.0%

5 5 5

100.0%, 100.0%, 100.0%

6 6 6

100.0%, 100.0%, 100.0%

7 7 7

100.0%, 100.0%, 100.0%

8 8 8

100.0%, 100.0%, 100.0%

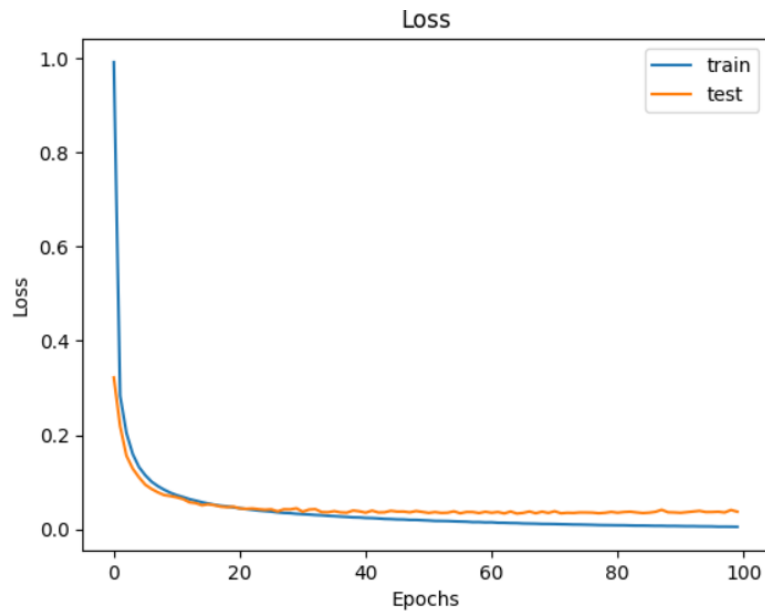
9 9 9

100.0%, 100.0%, 100.0%

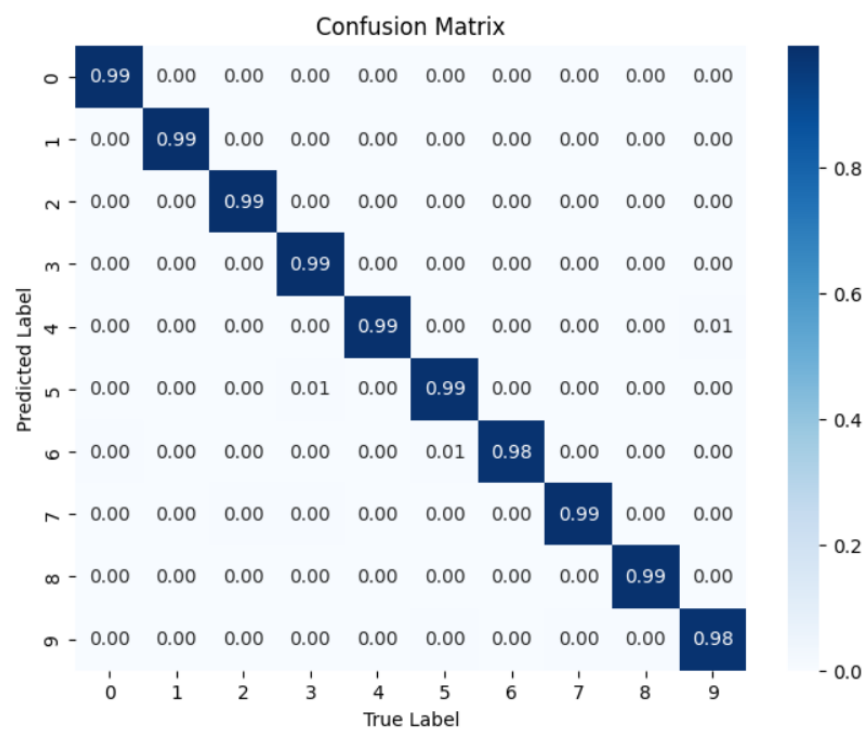
4. CNN with DL framework

테스트 정확도: 0.9886999726295471

(1) Loss graph



(2) Confusion Matrix



(3) Top 3 score images(all classes)

0	0	0	100.0%, 100.0%, 100.0%
1	1	1	100.0%, 100.0%, 100.0%
2	2	2	100.0%, 100.0%, 100.0%
3	3	3	100.0%, 100.0%, 100.0%
4	4	4	100.0%, 100.0%, 100.0%
5	5	5	100.0%, 100.0%, 100.0%
6	6	6	100.0%, 100.0%, 100.0%
7	7	7	100.0%, 100.0%, 100.0%
8	8	8	100.0%, 100.0%, 100.0%
9	9	9	100.0%, 100.0%, 100.0%