

# Report about neural network training and performance

Hyper parameters

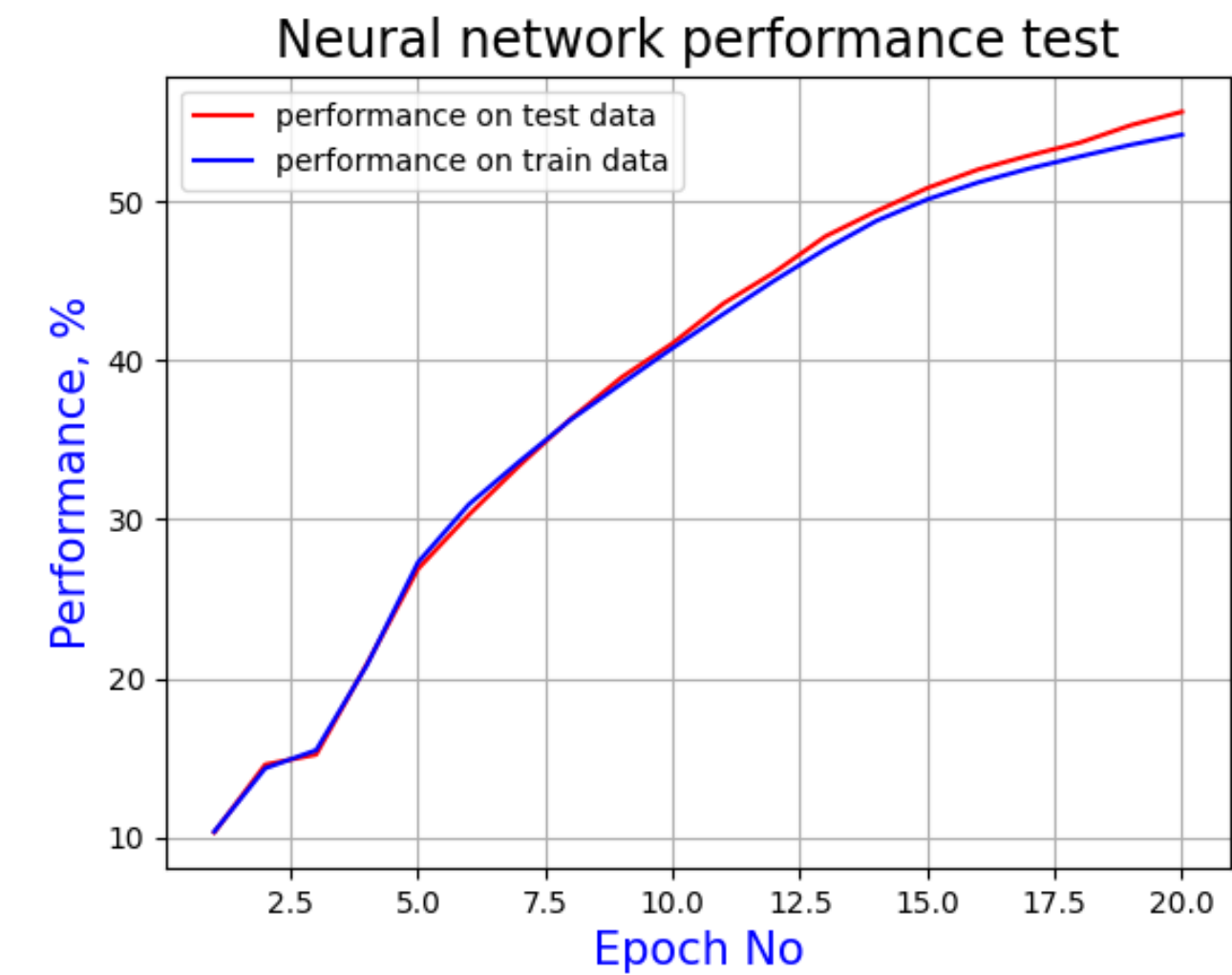
Nodes in input layer: 784

Nodes in out layer: 10

Nodes in hidden layer: 20

Total epochs number: 20

Leaning rate: 1e-05



Neural network performance change through the epochs

Epoch	Performance on test data, %	Performance on train data, %
1	10.3	10.35
2	14.57	14.34
3	15.2	15.48

4	20.92	20.86
5	26.89	27.3
6	30.3	30.95
7	33.42	33.67
8	36.34	36.28
9	38.95	38.56
10	41.09	40.79
11	43.6	42.94
12	45.56	45.04
13	47.82	47.02
14	49.4	48.8
15	50.86	50.14
16	52.03	51.22
17	52.91	52.09
18	53.72	52.85
19	54.82	53.59
20	55.66	54.21