

Report about neural network training and performance

Hyper parameters

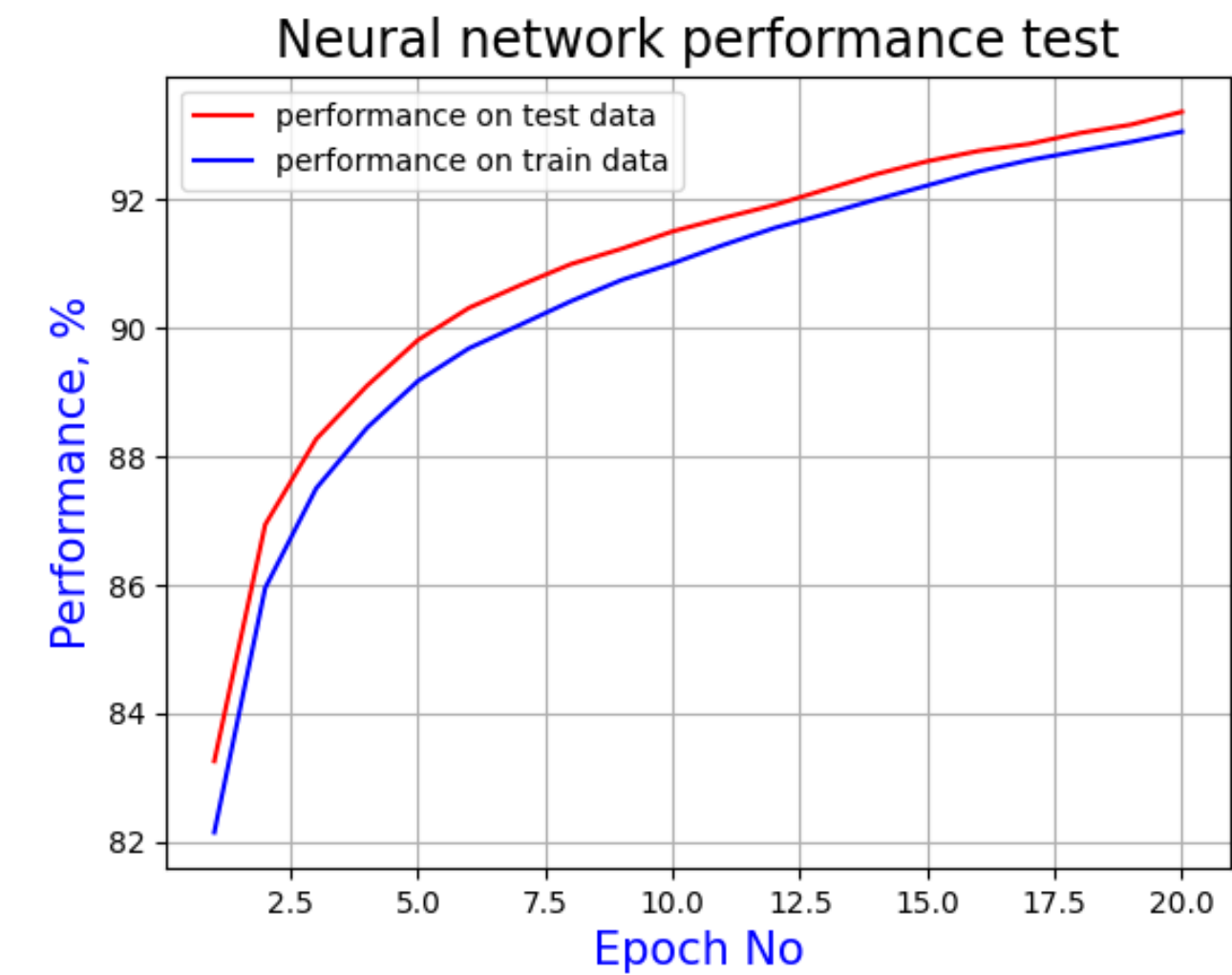
Nodes in input layer: 784

Nodes in out layer: 10

Nodes in hidden layer: 250

Total epochs number: 20

Leaning rate: 0.001



Neural network performance change through the epochs

| Epoch | Performance on test data, % | Performance on train data, % |
|-------|-----------------------------|------------------------------|
| 1 | 83.26 | 82.15 |
| 2 | 86.94 | 85.96 |
| 3 | 88.27 | 87.5 |

| | | |
|----|-------|-------|
| 4 | 89.1 | 88.45 |
| 5 | 89.81 | 89.17 |
| 6 | 90.31 | 89.68 |
| 7 | 90.66 | 90.04 |
| 8 | 90.99 | 90.41 |
| 9 | 91.23 | 90.74 |
| 10 | 91.5 | 91.0 |
| 11 | 91.71 | 91.29 |
| 12 | 91.91 | 91.55 |
| 13 | 92.15 | 91.77 |
| 14 | 92.39 | 92.0 |
| 15 | 92.59 | 92.21 |
| 16 | 92.75 | 92.43 |
| 17 | 92.86 | 92.61 |
| 18 | 93.03 | 92.75 |
| 19 | 93.16 | 92.89 |
| 20 | 93.36 | 93.05 |