

Observations:

1. Default parameters: epoch = 30, hidden units = 30, eta = 3.0

Test 1: Epoch 29 = 9492 / 10000

Test 2: Epoch 29 = 9519 / 10000

Test 3: Epoch 29 = 9497 / 10000

Median = 9497 / 10000

2. Increasing number of epochs (epoch = 60, hidden units = 30, eta = 3.0):

Test 4: Epoch 59 = 9515 / 10000

3. Increasing number of hidden units (epoch = 30, hidden units = 60, eta = 3.0):

Test 5: Epoch 29 = 9638 / 10000

4. Increasing eta (epoch = 30, hidden units = 30, eta = 7.0):

Test 6: Epoch 29 = 9541 / 10000

5. Increasing epochs, hidden units, eta (epoch = 50, hidden units = 50, eta = 5.0):

Test 7: Epoch 49 = 9599 / 10000

Inference:

- Increasing the number of epochs improved performance.
- Increasing the number of hidden units improved performance.
- Increasing the eta value improved performance.
- From the above observations, the best configuration was epoch = 30, hidden units = 60, eta = 3.0. (9638/10000)
- Performance can be further improved by increasing the eta and the number of hidden units simultaneously.