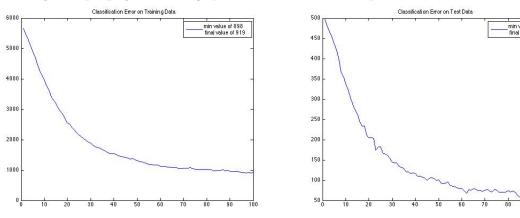
Neural Network

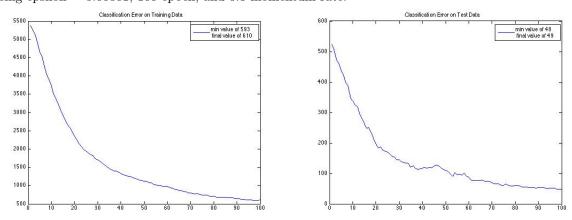
Implemented neural network with one hidden layer with 400 hidden units. Also, implemented backpropagation, momentum, and adaptive learning rate for each connection units to see the improvement on the performance. I tested neural network on subset of MNIST data where only considered 2,3,4.

NN Using backpropagation Using epsilon = 0.00001 and 100 epoch.



NN using backpropagation, momentum, adaptive learning rate for each connection units

Using epsilon = 0.00001, 100 epoch, and 0.8 momentum rate.



NN using backpropagation, momentum, adaptive learning rate, DRop out $\operatorname{coming\ soon}$...