

# Back propagation, section 2.3

Yann DURIEZ

Test on dataset:

[2 2 2 1 1 1 0 0 0 1 2 1 2 0 1 1 2 2 1 2 1 2 0 1 1 0 1 1 0]

Test Targets:

[2 2 2 1 1 1 0 0 0 1 1 1 2 0 1 1 2 2 1 2 1 2 0 1 1 0 1 1 0]

Accuracy:

96.55172413793103

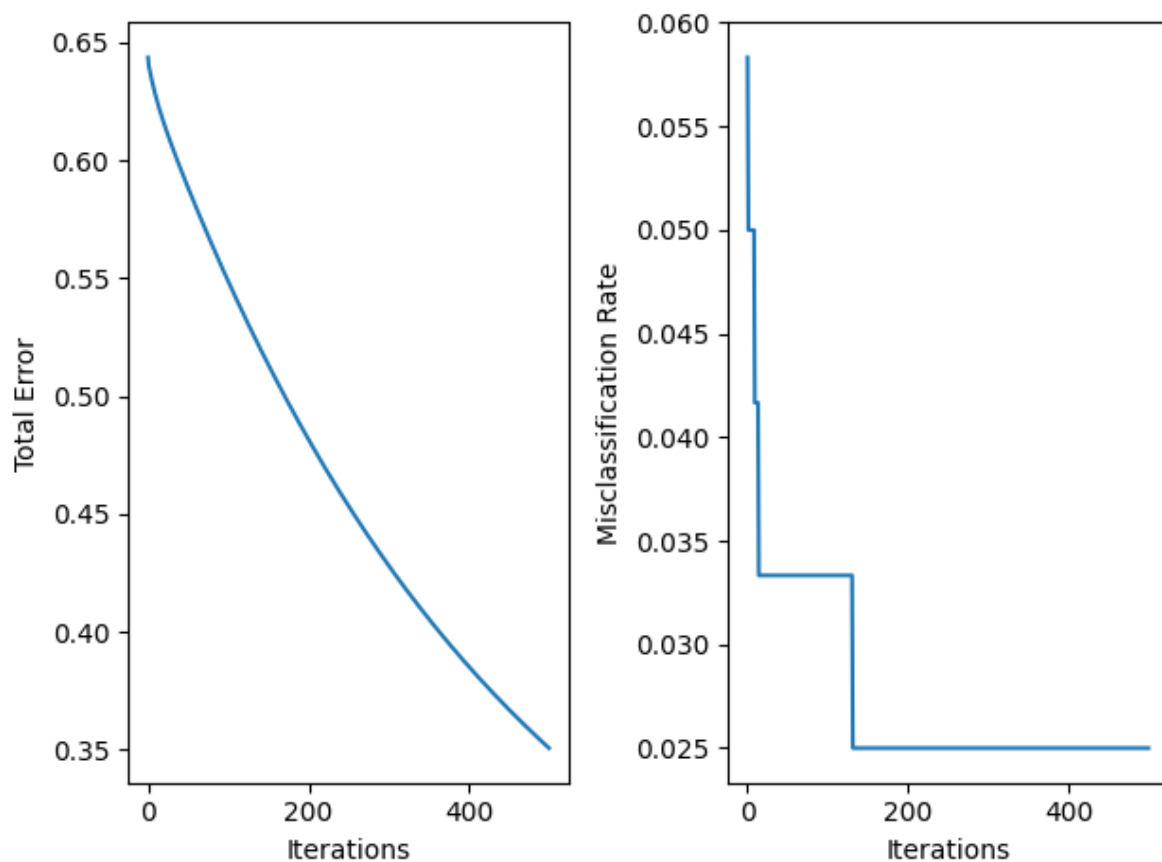
Confusion Matrix:

[[ 7 0 0]

[ 0 13 0]

[ 0 1 8 ]]

Total error and misclassification rate:



## Discussion:

From those output data made out of my trained neural network, we can see that the accuracy of the predictions are quite accurate. Out of the 20 test targets, the predictions missed only one.

From the training total error and misclassification, we see that they are decreasing as long as the network is learning, it means that the network learned and adjusted its weights to reach better accuracy.

However, there is still a random factor that gives us different accuracy at each training.