Deep Learning Laboratory Exercise 1

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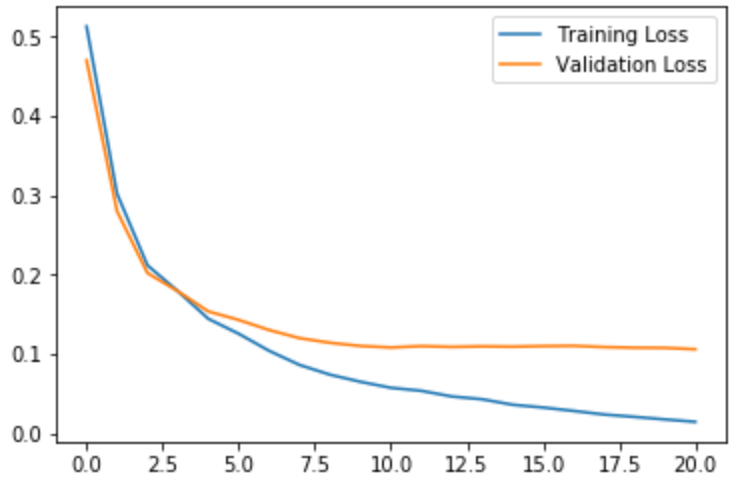
1. **Plot of the learning curve:**



2. **Output on the test dataset:**

   Error: 2.600%

```
In [217]: X_test, Y_test = Dtest
          X_test = X_test.reshape(X_test.shape[0], -1)
          error = nn.classification_error(X_test, Y_test)*100
          print("Error = {:.3f}%" .format(error))

          Error = 2.600%
```

3. Tweeks made and their responses:

1. I changed the number of units and the initial standard deviation in the layers of Fully Connected Layer Neural Network and my observations were:
2. On increasing the number of units and decreasing the standard deviation to a large scale results in the network overfitting on the training data but a small increase gives us good results on both the training dataset and the validation data set.

4. The problems I faced:

I had always written code from the scratch and never built upon anyone else's code. So, the biggest problem I faced was first understanding the code already written. The commenting was really good and that helped me understand better.