CSC321 Assignment 3 Bonus

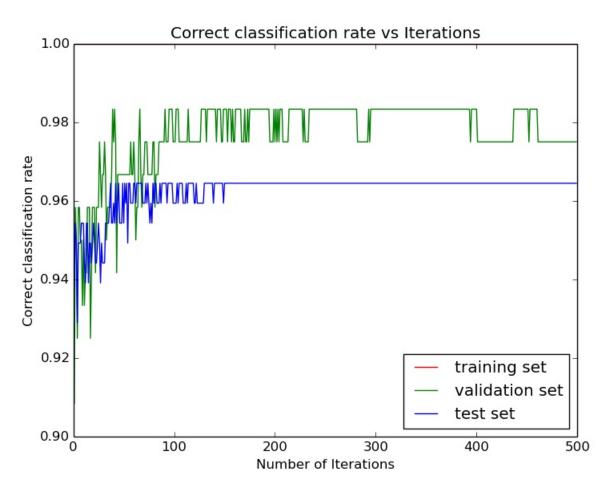
g2lujinn

Due: 10 pm, March 24th, 2016

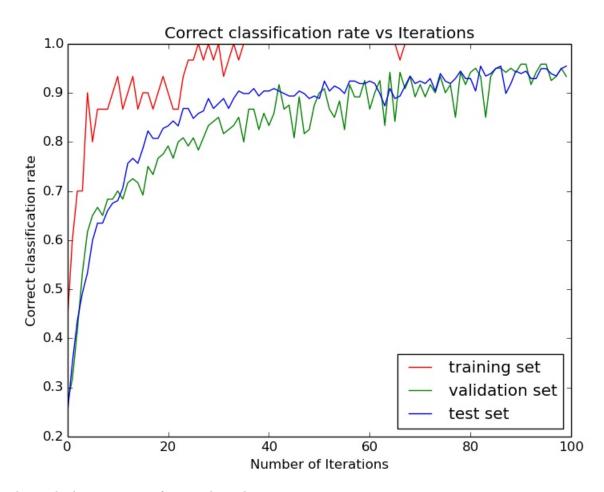
Part 6

Changes I made:

I simply loaded the trained weights and biases from part 2, then use them to train on the training set like part 1 for 100 iterations, and the learning curves for both trained weights and initial weights are showed below:



This is the learning curve for trained weights (Note that the learning curve for training set is not "visible" is because its already 1.0).



This is the learning curve for initial weights.

And the final performance for initial weights is showed below:

```
The final performance classification on the training set is: 1.0 The final performance classification on the validation set is: 0.933333 The final performance classification on the test set is: 0.954315
```

And the final performance for trained weights is showed below:

```
The final performance classification on the training set is: 1.0 The final performance classification on the validation set is: 0.975 The final performance classification on the test set is: 0.964467
```

It's noticeable that after around 150 iterations for trained weights, the learn-

ing curve for test set is not growing anymore.