Deep Learning Report 1

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1 Introduction

I used a two layer neural network, one hidden layer and one output layer. The hidden layer consists of 150 hidden units. I trained the model for 10000 epochs. Within each epoch I used batch stochastic gradient descent with a batch size of 128 and a learning rate of 0.01. The training accuracy is 98.7407 and the test accuracy is 100.

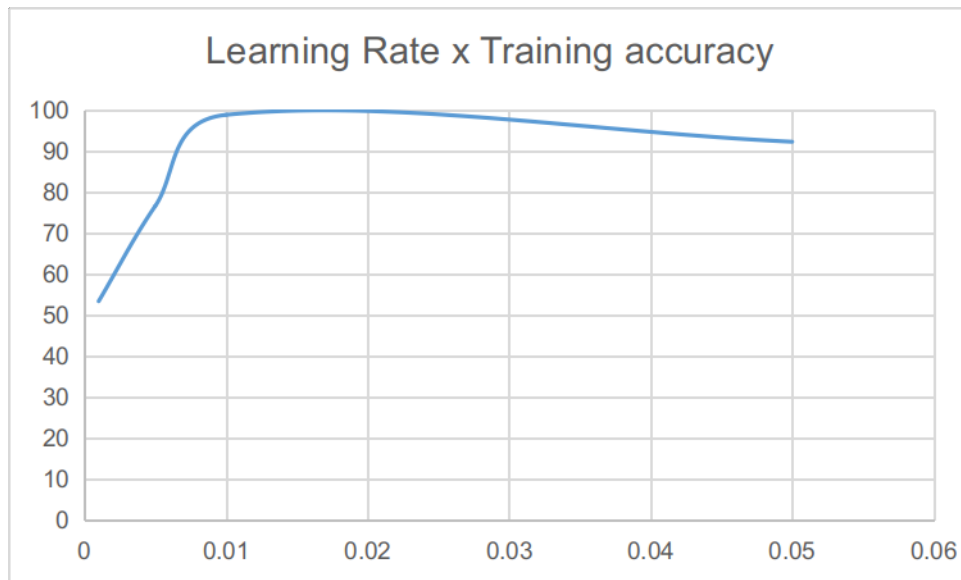Following are the plots of training and testing accuracy obtained by tuning the learning rate.
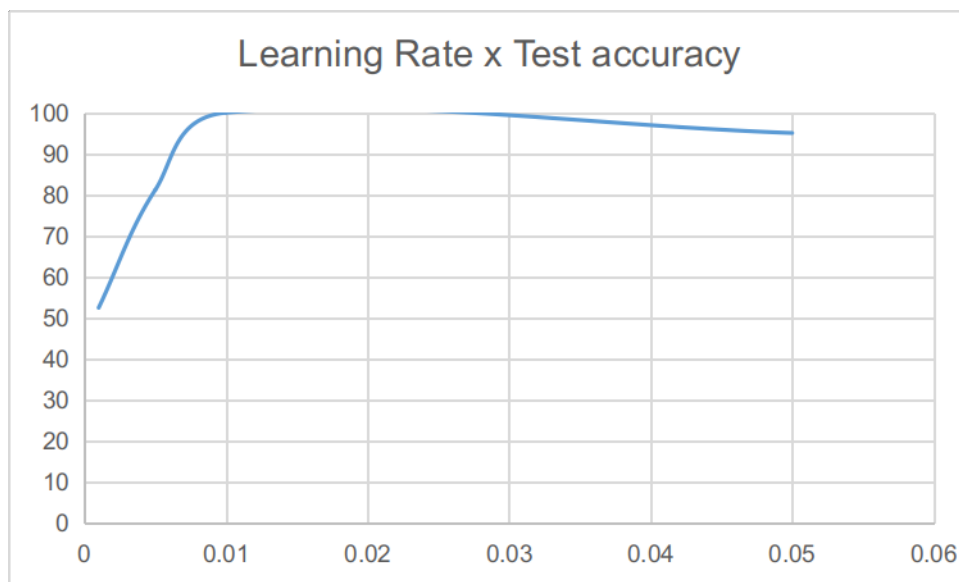

Figure 1: Learning Rate vs Training Accuracy

Figure 2: Learning Rate vs Test Accuracy