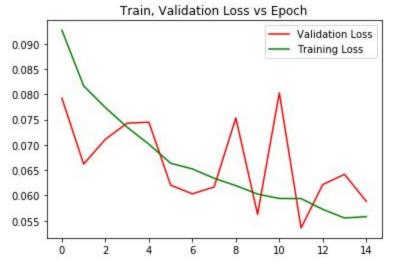
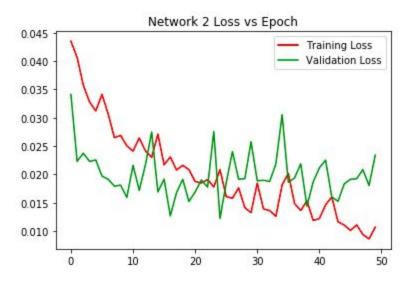
Network 1 Random initialization,Adam Optimization



Network 2 Random initialization, Adam Optimization

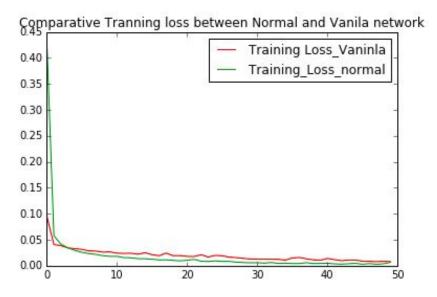


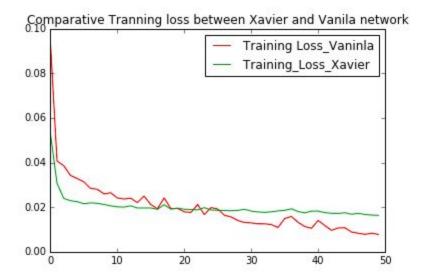
Training accuracy =0.764095238095 Total Accuracy: 0.696324936224

Task B

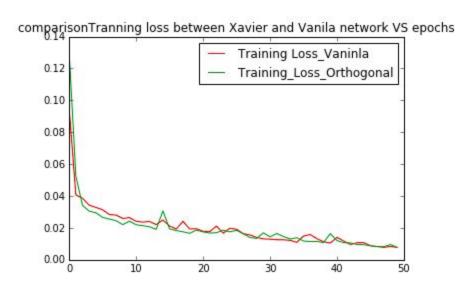
Experiment 1

Training Loss Comparison Between Normal initialization and Vanilla



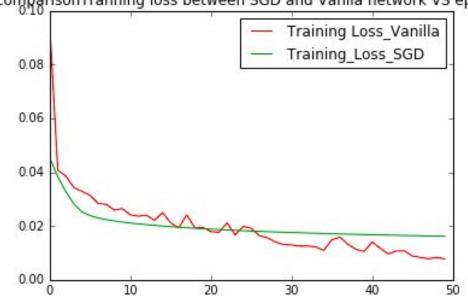


EXP 4
Training Loss Comparison Between Orthogonal initialization and Vanilla



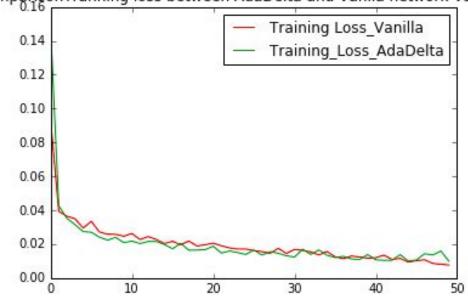
Experiment 4 SGD optimizer



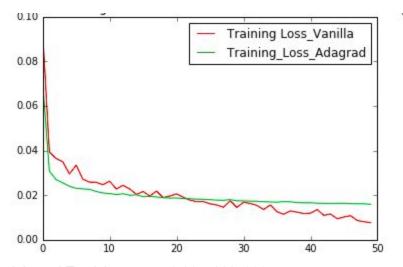


## AdaDelta optimizer

comparisonTranning loss between AdaDelta and Vanila network VS epochs

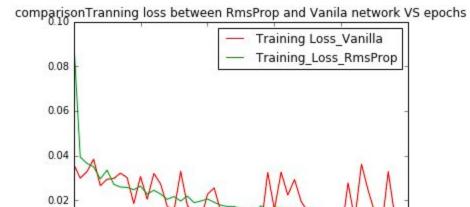


Adagrad optimizer



Adagrad Total Accuracy: 0.864409279337

### RmsProp optimizer



20

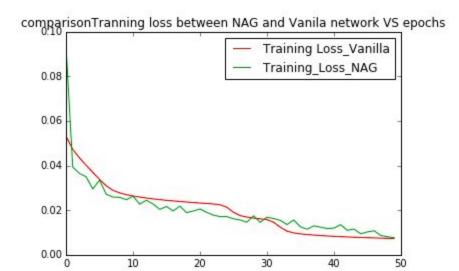
30

40

RmsProp Total Accuracy: 0.89430205676

10

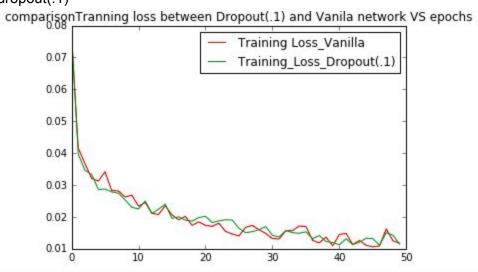
0.00



NAG Total Accuracy: 0.760265864158

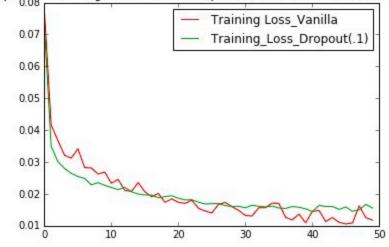
### Experiment 2

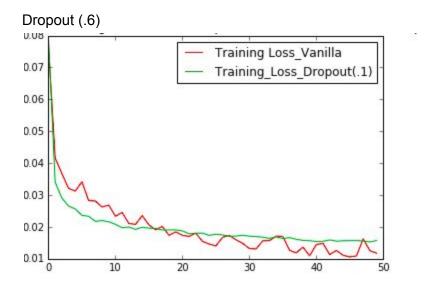
# dropout(.1)



Dropout (.4)

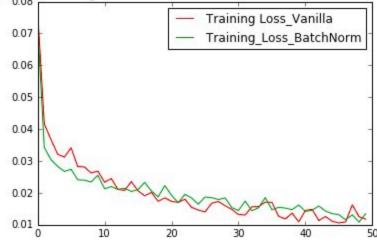
comparisonTranning loss between Dropout(.4) and Vanila network VS epochs





#### BatchNorm

comparisonTranning loss between BatchNorm and Vanila network VS epochs



BatchNorm Total Accuracy: 0.868241788903