

Project -3, Milestone-1

HPC

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<https://github.com/mpcs51087/project-3-winter-2024-codesniper99>

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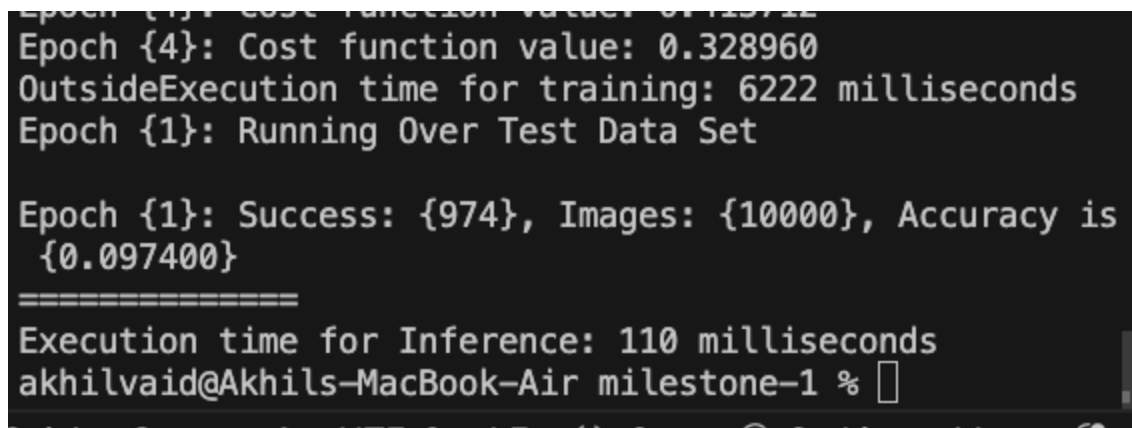
Overview

Writing a basic feed forward neural network (FNN) code for both training and inference

Performance Results

My success rate for 2 hidden layers of 10 neurons each is

Parameters: Epochs 5

A terminal window screenshot with a black background and white text. The text shows the output of a neural network training and inference process. It includes the cost function value for epoch 4, the training time, the test data set results for epoch 1, the success rate, the number of images, the accuracy, the inference time, and the user's name and machine name.

```
Epoch {4}: Cost function value: 0.328960
OutsideExecution time for training: 6222 milliseconds
Epoch {1}: Running Over Test Data Set

Epoch {1}: Success: {974}, Images: {10000}, Accuracy is
{0.097400}
=====
Execution time for Inference: 110 milliseconds
akhilvoid@Akhils-MacBook-Air milestone-1 %
```

For some reason, my predictions are getting stuck on same value and I am trying to figure out why

Training Time: 6222 milliseconds (5 epochs)

Inference Time: 110 milliseconds

Grind rate: 48216 images/second

Number of images per batch: 128

Learning Rate: 0.6