Chris Sheng jiaxians@andrew.cmu.edu 15400 Biweekly Report 1 March 1, 2018

Major Changes

There has not been major changes, as I have been continuing working on the same data set and algorithm.

What I have accomplished so far

I have found a model that works well with the specific dataset, which has a lot less overfit and a lot more stability.

Even though we have not got satisfying experiment results so far, I have became familiar with the basics of data processing, visualization and how to debug using different matrices and visualizations.

Meeting my milestone

As the result has not been satisfying, I might not be able to submit my paper abstract for AMIA on time. Still trying to diagnose the algorithm.

Surprises

Apart from the fact that the application result of the algorithm I'm working with is not great in the real world, another surprise is the ratio of the amount of time that I spend on data processing and plotting versus actual experiments. I discussed with my professor about this, and he says that it's also a fact that bothers him and the machine learning community, and that Auton lab is working on tools to help solve this problem.

Looking Ahead

For this algorithm specifically, I hope to identify the specific datapoint that contributes to the bad performance of the algorithm; we may switch to a different dataset if it's due to some problem with the dataset.

On a broader scale, I will be continuing working on medical datasets and doctors from UPMC.

Revisions to my milestones

Just trying to diagnose the algorithm; if it does not go well then I will not be able to submit the paper on time.

Resources needed

I have all the resources that I need.