

15-400 Milestone 6

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1 Major Changes

There are no major changes.

2 What You Have Accomplished Since Your Last Meeting

I have created IID and non-IID partitions of the shakespeare dataset and have set things up for GeePs and Gaia. I have run into some difficulties since GeePs uses an outdated version of Caffe with a different LSTM layer. I think I have figured out how to get things to work and work through this difference but have not yet got it working completely. Another that I have been working on is trying to see if there is a better metric than perplexity for our purposes. Because we are comparing character-based language models to each other, it makes sense to use a metric for evaluate character-based language models instead of using something like perplexity, which is used primarily with word-based language models. We are most likely going to use bits-per-character (BPC), which is a metric that I have already been calculating. In fact, I have been using it to calculate perplexity.

3 Meeting Your Milestone

It has been taking a little bit longer than I would like to get these things working, but things are still moving along.

4 Surprises

There were not really any major surprises besides the one described above.

5 Looking Ahead

Looking ahead, it is important to figure out how to appropriately resolve the issue with the different Caffe versions. With this resolved, it will be much easier to see if we observe similar trends with LSTMs as we do with CNNs.

6 Revisions to Your Future Milestones

There are no revision to future milestones.

7 Resources Needed

I have all the resources that I need to complete my project.