# Journal Report 5
9/30/19 – 10/6/19
Valerie Nayak
Computer Systems Research Lab
Period 2, White

## Daily Log

### Monday September 30

Today, I'm working on my program for dependency parsing using PyTorch. After walking through a sample parse by hand, I implemented the PartialParse class initialization and methods. Now, I'm working on the minibatch parsing method, which parses a list of sentences and forms transitions based on a given model.

### Tuesday October 1

I'm continuing to work on my dependency parsing model. I got the individual parsing steps to work correctly. I'm still working through the full parsing of a sentence. Right now, when I run my minibatch parsing method, it creates the dependency parses but breaks with list index errors on the last step. I plan on working to fix this on Thursday. I'm also planning on starting to train my neural network to predict transitions for my parsing.

### Thursday October 3

I worked more on my dependency parsing model. I can now correctly parse a minibatch. I tried to train my neural network to predict the parse steps, but I was having difficulties installing and using PyTorch. It claims to be missing one of the packages, which I'll have to further research in the coming days. I also started watching the sixth lecture video, which covers sentence probabilities and using recurrent neural networks in language models.

## Timeline

| Date | Goal | Met |
| --- | --- | --- |
| Sunday Sep 29 | Finish the stochastic gradient descent from week 2. Work on week 3 of online course. Be able to perform basic sentence classification using neural networks and word windows. | I finished the stochastic gradient descent model. I've gotten started on my sentence classification, but it's still a work in progress. |
| Sunday Oct 6 | Complete sentence classification methods with neural networks and word windows. Get started on week 4 materials with RNNs. | I'm still finishing up the dependency parsing because of the aforementioned issues I had with PyTorch. I've also in the middle of the sixth lecture video. |
| Sunday Oct 13 | Finish my dependency parsing neural network model. Work on week 4 materials with RNNs for sentence classification. | |
| Sunday Oct 20 | Train my first RNN model working for translation tasks. Finish the 4th week of lecture videos if I don't finish that in the previous week. | |

## Reflection

I didn't completely finish the dependency parsing model, though I did make significant progress on it. I'm still working on figuring out my issues with PyTorch because after I downloaded it, it said some of the packages were missing. I did some research on these issues over the weekend, but I'll have to continue looking into it in the coming days.

I'm trying to give myself a little more time for the upcoming tasks involving RNNs, because there seems to be a bit more work associated with it and I will also have to make sure I can get it running with a GPU. This should also allow me to have time to finish up my dependency parsing model and the sixth lecture before I start the new RNN model.