

## Daily Log

I ended up entirely changing my project idea after the first few days in the lab, so my work is only really relevant to my project starting from Thursday, September 5th. In the preceding two days, I was initially working on my original project idea, then I began to search for a new idea and write a new proposal.

### Thursday August 29

The research I did on this day was for my original project, which is no longer being used. However, I did take some notes on what I found that day. I spent most of the time exploring various motion capture libraries.

**Carnegie Mellon Graphics Lab Motion Capture Database:** In this database, the same person may appear under more than one subject number. Each subject, however, has its own calibrated skeleton.

When browsing for motions, start with the higher numbered subjects first. The lower numbers contain some of our earliest motion capture sessions, and may not be as high quality.

Data categories

- human interaction
- interaction with environment
- locomotion: running, walking, jumping, varied
- physical activities and sports
- situations and scenarios
- test motions

There are 2605 trials in 6 categories and 23 subcategories.

### Tuesday September 10

This was the day I decided to change my project, but at this point I didn't really have a clear idea of what I wanted to do. This day was spent trying to define a new project idea, and then outside of class I spent some time writing a new project proposal and Journal 0.

I considered doing an audio-based project, and found resources on Kaggle and a GitHub fastai audio repository that would help with this.

After this day, I found my final project and wrote a new Journal 0. Now, I'm doing an NLP project to answer questions based on informational text passages.

## Thursday September 12

Now that I'd finalized my project plan, I worked on finding resources for my new project. I first looked for a dataset, and then I searched for an online ML and NLP course that I could work on to teach me some of the basics as I begin the project.

On Thursday and over the weekend, I found some articles and courses to get started, as well as the database that I'll use in my project. I will be using the SQuAD (Stanford Question Answering Dataset) in my project, which was further explained in my Journal 0.

<https://towardsdatascience.com/natural-language-processing-from-basics-to-using-rnn-and-lstm-ef6779e4ae66>. This links to a Medium page that gives a brief overview of NLP with RNNs.

I also finished watching the first lecture video of a recent (Winter 2019) Stanford course entitled "Natural Language Processing with Deep Learning". I plan to follow the lecture videos and associated activities of this course moving forward, so I can get a good grasp on the material as I begin my project.

## Timeline

Date	Goal	Met
Sunday Sep 8	Finalize new project proposal and find a database and online introductory tutorials to follow.	Yes. Finalized new project and found a fully recorded online class.
Sunday Sep 15	Be able to create vector representations of words using Word2Vec and finish lectures/exercises for week 1 of Stanford course.	
Sunday Sep 22	Implement methods with GloVe (global vectors for word representation). Lectures/exercises for week 2 of online course.	

## Reflection

This week, I met my main goal of finalizing my new project. I also found a course that includes both exercises and lecture videos. For the first several weeks of this project, I will be learning how to use the word vectors, word embeddings, and trying out neural networks for simpler examples. Once I get those things to work, I'll be able to build up to the larger tasks. Now that I've found some structured material to follow along with, I have a more predictable timeline; I'm able to follow along with the teachings of the course. I've also found the dataset that I'll be using for my project, so I will be able to test small samples from that dataset.