

Daily Log

Monday September 16

I took a better look at the data today and found that most of it didn't suit my needs. It appears most of it is for wind, and not a lot of it is for other aspects of weather. I also played around with the demo some more, but I'll admit it might be a bit too much.

Tuesday September 17

I looked at ageron's GitHub repository for ML tutorials. I started from the beginning and was able to get most of the setup done. This included playing around with matplotlib to be able to graph my results.

Thursday September 19

I furthered my learning of machine learning and PyTorch. I also took a look at ageron's section about RNN's. Hopefully this will help me understand the LSTM demo code.

Timeline

Date	Goal	Met
9/8	Find data to use	Yes, but I still need to figure out how to parse it into Python
9/15	Edit the LSTM demo to solve different problems	No, toyed around with LSTM, but wasn't able to change it to perform different tasks yet
9/22	Edit the LSTM demo to solve different problems	No, but with the GitHub repository, I think I have a plan to accomplish this
9/27	Edit the LSTM demo to solve different problems	
10/4	Have an LSTM ready to be trained on data	

Reflection

I began this week with the realization that I needed a lot more background knowledge if I wanted to understand the LSTM demo code. Mr. White suggested that I check out Aurélien Geron's tutorial on machine learning with PyTorch. This week, I looked at that a lot.

I decided to start from the beginning, with graphing outputs. For this, I learned how to use matplotlib. I was able to graph some data I had on my computer:

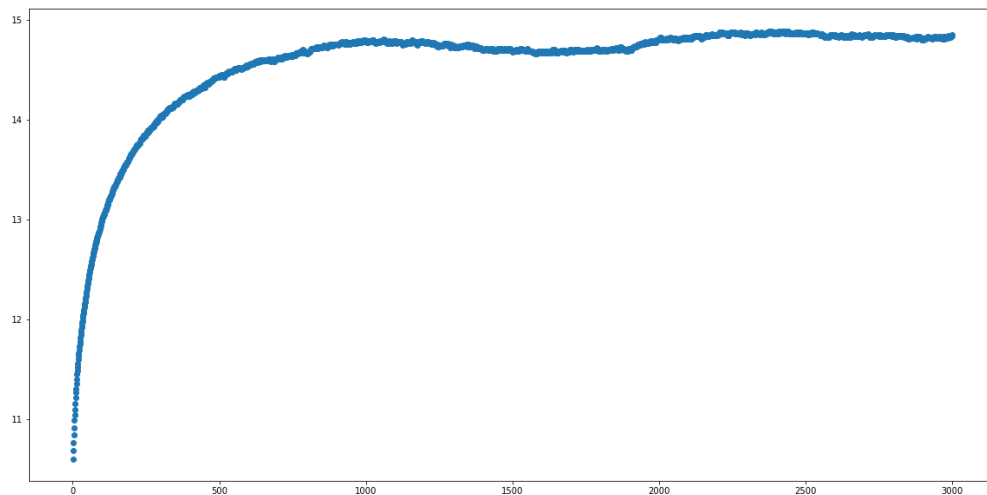


Figure 1: Simulated upper ocean temperature over time.

I also began to read more into the structure of PyTorch and how it uses tensors. It turns out I never really understood tensors from AI 2, I just used them.