Journal Report 11

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Daily Log

Tuesday November 18

Today, I worked on my GitHub documentation so I would have that ready by break. Mainly, I edited my readme to contain useful information about my project, and organized my files into the folders that we were supposed to have.

Monday December 2

Today, I researched the baseline standard BERT model in TensorFlow and found some Towards Data Science pages that describe it. I continued reading the documentation for it and I found some Jupyter Notebook tutorials that will walk me through how to download it to try out.

Tuesday December 3

I worked on implementing the standard BERT question answering model. I did this in a Jupyter Notebook on Colab, which I ran using TPU. I adapted the notebook from one I'd found on a Towards Data Science page. At first, I'd been having difficulties implementing it because it couldn't find some of the required packages, but after some research I found that I just had to add a line that downloaded all the requirements before running the model. (This can all be found in the Jupyter Notebook, and it all downloads properly when you run it on Colab.)

The model I was able to download and run seems to be working when I try some examples myself, but I still need to run validation and figure out the accuracy on the dataset. The BERT GitHub repo provides instructions for how to do that, but I'm still trying to figure out how to download the required files onto Colab in the right places to get it to run. I plan on working on that more next class.

I added all my most recent files to GitHub today and also updated my documentation and readme to reflect my most recent changes.

Thursday December 5

I continued to try to figure out how to run the validation and find the accuracy on the standard BERT model, but after trying lots of different examples I still haven't managed to get it working yet. I'm planning on coming back to it next week.

Also, over the weekend I realized that some of my concepts are unclear on how to actually train my own RNN and build off of existing ones, though I'd thought I understood it when I originally watched the lecture videos. Next week, I'm planning on going back to my lecture videos to relearn what I missed the first time and trying to implement my own simple language model from scratch before returning to work on my project.

Timeline

Date	Goal	Met
Sunday Nov 24	Begin to implement a model for question answering.	Yes
Sunday, Dec 8	Finish my GitHub documentation for my code up to this point. Have a basic BERT model on GitHub with clear instructions on how to use it.	Yes
Sunday, Dec 15	Rewatch the lecture videos from my online class from the week that covered RNN language models and implement the translation model using the PyTorch libraries.	
Winter Break Goal	Implement a basic question answering model based on BERT. Planning on basing it off of previously implemented models and guides.	

Reflection

This week and the week of Thanksgiving break, I worked on my GitHub documentation and also downloaded a baseline question answering model and ran it, although I haven't been able to figure out how to get the validation working yet. This brings me pretty close to meeting my winter goal, having a BERT model that I can build off of.

I also found that though I've been able to download and work with existing models, I'm missing some of the information that I'll need to make and modify my own. Next week, I'm going to revisit my online class as well as online tutorials to relearn how to do that. I'm going to try to write my own basic language model from scratch just so I can understand the concepts, instead of building off of an existing one. Once I get that working and am comfortable with that, I'll return to my work on my actual project.