AI Camp – Final Project Write Up

Dhruva Krishnamurthy

In this project, I leveraged the OpenAI GPT-2 124M NLP network in an attempt to create prompts that summarise the state of the financial world from an economic and monetary perspective.

To go over the methodology, when the flask app is loaded, we immediately download the 124M model from aitextgen. We then use an API to pull a series of news articles from a week ago until present based on common keywords related to the forex market, typically sumarised by the names of currencies and important countries. We combine all headlines into a single string, save this as a .txt file and use this as our input to train the model. Since the goal is to provide live prompts, we retrain a model with current articles every time we want a new prompt.

There are some lmitations to this model, one of them being the restriction on the number of API calls allowed per month (max is 100, so currently if we exceed this the flask app will return an error). The model also takes a while to train, so whenever the refresh button is pressed to generate a new training dataset and prompt, we need to wait for roughly 30 minutes.

A potential ramification to the model would be to add an option to edit the list or submit a new one for the keywords we collect headlines for. For example, suppose a viewer was only interested in the Dollar, we might change our list of keywords to being solely US-focused (e.g. [‘USA’,’Dollar’,’US Inflation’,’US Debt’,…]). It would add some more personalisability to the project.