Supervised Learning Chatbot

As part of continuously learning Python as a hobby, I have been slowly working on creating this chatbot that I have named Jeff. I utilized resources from some of my favorite Pythonista’s on Youtube to help get started. In particular, I used a base model specifically from Python Engineer where he shows how to make a simple base for a supervised learning bot. This provided me with the base trainer, sample corpus, and chat function.

From here, I was able to create the ability for the bot to perform some additional skills. These skills would include a basic 4-function calculator, the ability to report the weather, and the ability to convert a string to a WAV file to return a voiced response to the user.

I plan to continue adding skills such as the ability to check the stock market, retrieve hardware data, and an expanded social palette to use when conversating. I also plan to export this project from my laptop to a Raspberry Pi 4 with the ultimate goal of giving the bot a functional body.

Once I am satisfied with the results of the supervised model, I want to venture into learning more about converting Jeff into a reinforcement learning chatbot so that it may teach itself how to entertain more complex conversations over time.

To try it out, utilize the “chat.py” file in the project package.

Roadmap:

More chat responses

/ “Request” object, to add more modularity to the code when requests are made

Deploy to a Raspberry Pi4 and implement microphone input

Additional supervised learning data sets