

Generative AI Appendix

1. I used ChatGPT to help me brush up on joining data frames. I kept getting an error when merging two data frames with a shared column name.
 - a. ChatGPT advised me that, “The ValueError: columns overlap but no suffix specified error occurs when you try to join or merge DataFrames, and both DataFrames contain columns with the same names, but you haven't specified how to handle the overlapping columns.

Joining DataFrames with suffixes to handle overlapping columns

```
joined_df = df1.join(df2, lsuffix='_left', rsuffix='_right')
```

- b. I implemented lsuffix and rsuffix into my code
2. I was having a hard time fully understanding the purpose of generate_sequences and generate_labels. I asked ChatGPT to walk me through an implementation of these functions with dummy data so that I could understand the overall algorithm I should be targeting.
 - a. ChatGPT provided me with the overall algorithm to implement when constructing generate_sequences and generate_labels. I checked my work iteratively with ChatGPT using the dummy data to ensure my function correctly manipulated the data.
3. I've had very little experience building an LSTM model using tensorflow. I asked ChatGPT how to add layers and how to set hyperparameters using the preset packages.
 - a. ChatGPT listed these items for me and once I read up on it I was able to implement it for my model. I did the same with my GRU model.
4. I used ChatGPT to brush up on building a confusion matrix. I could not remember the right package/library I needed to use to create one.
 - a. I figured out that I needed to import seaborn to plot a confusion matrix. I implemented this in my LSTM and GRU models