ICS 661 Assignment 3

Submit the report with the GitHub link to your source code repository.

Part I: BERT Implementation

Repeat the task from Assignment 2, but this time using BERT. You can refer to the BERT documentation here. Remember BERT already has a tokenizer to use. You may also consider using variants such as TinyBERT or DistilBERT for this task (TinyBERT/DistilBERT_documentation).

Part II: Fine-Tuning GPT-2 for Joke Generation

Dataset

You will be working with a dataset containing 1,622 short jokes.

Task

Fine-tune a GPT-2 model (see the documentation <u>here</u>) to generate a complete joke based on the first three input words.

Example:

Given the input:

"what", "did", "the",

your model should generate a full joke, such as:

"What did the bartender say to the jumper cables? You better not try to start anything."

In your report, make sure to include:

- 1. Examples of generated jokes based on three starting words that **exist** in the dataset.
- 2. Examples of jokes generated from three randomly chosen words (not necessarily from the dataset). Analyze and discuss how well the model performs in both cases.