Lab 6

Conie O'Malley

Part 4: Take a Brief Look at Using Large Pre-trained Language Models

Deliverable 16: Prepare Your Environment

```
In [1]: import tensorflow as tf
   import torch
   import keras
   import nltk
   from nltk.corpus import movie_reviews
   from gensim.models import Word2Vec
   from transformers import pipeline
   nltk.download("movie_reviews")

   [nltk_data] Downloading package movie_reviews to
   [nltk_data] /Users/coniecakes/nltk_data...
   [nltk_data] Package movie_reviews is already up-to-date!

Out[1]: True

In [2]: generator = pipeline('text-generation', model='gpt2')

Device set to use mps:0
```

Deliverable 17: Use the LLM to Generate Text

```
In [3]: generator.tokenizer.pad_token_id = generator.model.config.eos_token_id

text = generator(
    "Once upon a time",
    max_new_tokens=100,
    num_return_sequences=5
)

print(text)
```

Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.

[{'generated_text': 'Once upon a time, my mother took comfort on the fact I had a brother. And I felt that I could make it happen. Now she has decided t o take her revenge on herself... The last thing the boys want to do is show me their real identity and they want to keep me in detention forever..." (Mother \'s Confessions of a Man), in The Unbreakable Bond 3.12\n\nIn our lives we b ecome more and more familiar with our physical and emotional needs. We have a body that grows'}, {'generated_text': "Once upon a time, if they ever thou ght of the problem themselves, they would realize how wrong they were and co me to such a compromise, and not have to try and explain to others that they simply thought something wrong when they thought something right. They won't realize that the two other variables are true when they consider an action t hat would be a mistake.\n\nTo put it another way, if you think about what a person is going to do in a situation, you will never think of that person as being selfish"}, {'generated_text': 'Once upon a time, as a result of the me rger, the merger has been the dominant force." For "over 2,000 years", the w ord "interplay" would refer to those who were associated with it. It is not a coincidence that there is no overlap between those who participated in the merger and the present "socially conscious leaders of the day". Furthermore, the very word "socially conscious" has now become synonymous with "centralis ed control. This includes state and corporate policy, economic policy'}, {'g enerated_text': "Once upon a time, I was at all of those things and wanted s omething to come out of my mouth, but this isn't where I'm at now. This is w here I've grown so far. I'm not a bad fighter.\n\nRonda Rousey's career reco rd includes one win over Andre Agassi before and one win over Jessica Andrad e before she joined The Ultimate Fighter, as well as being the first woman t o ever fight for an overall title under the UFC's banner.\n\nAquita"}, {'gen erated_text': "Once upon a time, one might claim that science was merely a g ame, in which one had to beat a computer or be in a real-world situation. Bu t it turns out that many people do know that mathematics wasn't just a physi cal science—it wasn't just a game. It's a powerful tool for exploring comple x and important issues. And in fact, the whole game seems to have many advan tages over traditional math. First of all, there is a common ground among ac ademic, scientific, and cultural disciplines. Second"}]