

Write With Transformer

Goals The main goal of this module is for you to play around with state-of-the-art Transformer language models, specifically the GPT-2 model from OpenAI.

Setup

1. Please go to <https://transformer.huggingface.co/doc/distil-gpt2>
2. In the bottom-left, click and drag the “Model size” slider to the right until it reads “gpt2-medium”.
3. Keep the other parameters the same: Top-p 0.9, Temperature 1, Max time 1.
4. Delete all the text in the main document pane once you’ve read it.
5. Type something and press the Tab key. You should see a list of autocomplete suggestions. When we say to “use the completion”, we mean press Tab to trigger this behavior.

Your Task

Question 1 Write some different sentences and use the completion at various points to get a feel for the tool. Try completing short snippets or longer snippets.

Question 2 Try some sentences involving specific entities. Write at least three sentences about a city, country, or celebrity and see what happens when you use the completion at various points. Are any of the completions specific to that thing?

Question 3 The bigram model only depended on the immediate previous word. Is this true for the Transformer model? Try something like “At the X, I really wanted to ___” and then use tab completion. Try this with different places for X, like “school”, “house”, etc. How much does what you write for X impact what the model suggests next?