Relatos Protésicos

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1. Proyecto: EleutherAl

Este proyecto cuenta con 4 modelos de inteligencia artificial diferentes, cada uno de ellos ha sido entrenado con una cantidad diferente de parámetros como se explica a continuación:

- EleutherAl/gpt-j-6B, entrenado con 6 billones de parámetros.
- EleutherAl/gpt-neo-125M, entrenado con 125 millones de parámetros.
- EleutherAl/gpt-neo-1.3B, entrenado con 1.3 billones de parámetros.
- EleutherAl/gpt-neo-2.7B, entrenado con 2.7 billones de parámetros.

Sin embargo, para este trabajo en particular se realizaron las pruebas de generación de texto con el modelo **EleutherAl/gpt-j-6B**, ya que es el modelo mas reciente y el que mayor número de parámetros tiene por parte de este proyecto.

GPT-J 6B es un modelo de transformación entrenado con el Mesh Transformer JAX de Ben Wang. "GPT-J" se refiere a la clase de modelo, mientras que "6B" representa el número de parámetros entrenables.

El modelo consta de 28 capas con una dimensión de modelo de 4096, y una dimensión de propagación hacia adelante de 16384. La dimensión del modelo se divide en 16 cabezas, cada una con una dimensión de 256. La incrustación por posición rotativa (RoPE) se aplica a 64 dimensiones de cada cabeza. El modelo se entrena con un vocabulario de tokenización de 50257, utilizando el mismo conjunto de BPEs que GPT-2/GPT-3.

1.1. Datos de entrenamiento

El GPT-J 6B se entrenó con Pile, un conjunto de datos curados a gran escala creado por EleutherAl.

1.2. Procedimiento de entrenamiento

Este modelo se entrenó para 402.000 millones de tokens a lo largo de 383.500 pasos en la vaina TPU v3-256. Se entrenó como un modelo lingüístico autorregresivo, utilizando la pérdida de entropía cruzada para maximizar la probabilidad de predecir correctamente el siguiente token.

1.3. Uso previsto y limitaciones

GPT-J aprende una representación interna del idioma inglés que puede utilizarse para extraer características útiles para tareas posteriores. Sin embargo, el modelo es mejor para lo que fue pre entrenado, que es la generación de texto a partir de un prompt.

1.4. Limitaciones y sesgos

La funcionalidad principal de GPT-J es tomar una cadena de texto y predecir el siguiente token. Aunque los modelos lingüísticos se utilizan ampliamente para otras tareas, hay muchas incógnitas en este trabajo. Cuando se le pide a GPT-J es importante recordar que el siguiente

token estadísticamente más probable no es a menudo el token que produce el texto más "exacto". Nunca confíe en que GPT-J produzca un resultado exacto desde el punto de vista de los hechos.

GPT-J fue entrenado en Pile, un conjunto de datos conocido por contener lenguaje profano, lascivo y de otro tipo. Dependiendo del caso de uso, GPT-J puede producir texto socialmente inaceptable. Para un análisis más detallado de los sesgos de Pile, véanse las secciones 5 y 6 del artículo sobre Pile.

Como ocurre con todos los modelos lingüísticos, es difícil predecir de antemano cómo responderá GPT-J a determinadas indicaciones y el contenido ofensivo puede aparecer sin previo aviso. Recomendamos que una persona se encargue de filtrar los resultados antes de publicarlos, tanto para censurar el contenido no deseado como para mejorar la calidad de los resultados.

1.5. Donde encontrarlo

Este proyecto con sus respectivos modelos que se han creado hasta hoy se puede encontrar en el siguiente <u>enlace</u>.

2. Historia

El objetivo de trabajar con un generador de texto automático para este trabajo es realizar una historia solo con el contexto que nosotros le vayamos dando al modelo a partir de frases cortas. A pesar de que este modelo también trabaja en el idioma español, opte por realizarlo en el idioma ingles ya que al estar haciendo muchas peticiones en español el demo que se encuentra en la página del proyecto suele trabarse un poco.

El texto que se ve a continuación es el resultado obtenido, donde las oraciones en negritas son el texto introducido al modelo y el resto es lo que el modelo genero como respuesta.

Two weeks ago I went to visit my girlfriend in Mexico City because it was her birthday and her professional exam to get her dental degree. She was about to finish and wanted to celebrate with me. When I arrived at the airport, I thought that I was probably the only American going to visit. It was nice and sunny, and the heat felt so good. My girlfriend was wearing a white t-shirt, shorts, flip-flops, and a fake mustache that read "You're only as old as the jokes you tell." I was there for two weeks, and I couldn't go home without visiting this place where I became a fan. The capital is like all the other places I have visited in the world, which are the best places on earth.

The first thing we did when we met was to have lunch with her parents and one of our friends. We spent a lot of time discussing what was best for her as an adult and what would make her happiest. So, we suggested she get the help she needs to deal with her anger, and that is where we came in.

What does therapy involve? As a trained therapist, I will be helping you get to the root of your anger and guide you through the many challenges you face. Therapy will include exploration of the following:

- The source of your anger
- How you want to live your life

- Finding happiness Anxiety/depression
- A course of life changes and skills to overcome

Then we went for a coffee and spent the whole time talking. She told me all about her life and about her divorce, and the crazy mix up with the passport and her inability to go home. She was determined to do it, and I was determined to help her.

"I could see why she wanted to go home. There was no way that I would have left her there. The thought of being married to someone else, someone who loved me and wanted to spend the rest of my life with me was something I could not fathom.

After a wonderful day with my girlfriend and after not seeing her for a long time I had to say goodbye to her and go back to my city. We spent the day with a hotel on a beach in the city and at night we walked back to the city center, enjoying the beautiful night. I kissed her as she was waiting for me in the door of my hotel, she took me in her arms and I could see in her eyes that she missed me and I started to feel like I am the only person in the world for her. It was a perfect moment. When I came back to the hotel and got into my room, I took out my phone and I realized I didn't have any messages, I thought it was a little strange.

On the way back I saw many accidents on the road and it took me a long time to return home. At the house I found Mom was sitting in front of the TV with the radio turned on, the dishes were clean, and there were 2 large bags of groceries on the counter.

- "You look tired," she said.
- "I'm fine," I replied.
- "What happened? You look all haggard."
- "It's been a long day."
- "You don't have to worry about what happened to you in the field, you know that right?"
- "I know," I said.

During the course of the following week I had a lot of homework to do, so that's all I did.

Then a few days ago I got a call from a TV station in Texas. The producer wants me to come on and talk about vampires.

- "Is that an offer?" I asked.
- "It sounded like it." "It's an offer," she said.
- "So will you come on and talk to us?"
- I agreed that I would.
- "Why Texas?"
- "Because the local affiliate, KCLE, is the station that puts on the local city council meeting. So I figured, what better place to announce the show than in the middle of town?"

After a long week of doing homework, Halloween was approaching and many of our friends were inviting us to parties. I'm not a huge fan of parties, mostly because it doesn't allow me to practice my dancing skills in an open environment. However, I'm more than happy to take part in the festivities and the night was coming to a close. I couldn't find my socks, which I thought was

a fairly unlikely occurrence, and after a frantic search I finally gave up. I decided to go to the library to relax, and what happened next is what I'll be telling you about today.

I saw one of my best friends being made up, however, I still don't know what he was dressed up as. Then I went back to the meeting place and found out he was dressed up as the Virgin Mary. That really creeped me out and I didn't want to go in. But the more I thought about it, the more I decided to go in because he was obviously proud of what he was doing. It was a very good day out. I think we may have to go again some time.

Although I didn't attend any parties because the pandemic situation is not very good where I still live, I saw that most of my friends and family did go out.

You could say that I'm a fan of seeing new places. I was waiting for a good time to visit Macau. It's known for its casinos, and that's all it is. So I took a taxi from the airport to the casino area and then I spent the rest of the day there. The Casino was designed like a gigantic mini city with every place having a purpose and a theme. I walked around and saw different sections where I could watch a movie, play a game, and gamble, etc.

A few days later, I went back to Mexico City with a friend to accompany his sister because she had an event to attend. I bought a jacket in Mexico City because I needed something new to wear. We stopped by a small mall on the way there and I bought some pants because it was a new pair. The salesperson asked me if I had planned to wear them. I said no because I was planning to wear a light colored shirt, shorts and sandals. She told me that I should bring my new pants to the mall for a fitting and she would be able to make sure they fit well.

During that day I invited my friend to eat because his birthday was coming up, so we went to a shopping mall and we were there waiting for his sister's event to end. I was waiting for my friend and when she finished her event I suggested to him that he should go out with me to have dinner. I asked him to get his motorcycle ready, then we went out to have dinner at a fast food restaurant. After we ate I invited him to my house to hang out for a little bit because my house was a block away from the restaurant and it would have been nice to sit in a room together, but he had to be somewhere around 5:30-6:00 so he could go to the place he had to be in.

In the evening of that day, he and his sister returned home while I went to visit my girlfriend and stayed with her for a day. At about midnight, I left her and started home. I was approaching the main road, when suddenly, a voice called out to me. "Stop! This road is closed. Go home." As I turned to see who it was, I saw a police officer coming towards me and I walked backwards to let him pass. He called out again, "Stop! The road is closed." I then saw that the officer was carrying a lathi, so I stopped. The officer and I sat down on the sidewalk to chat. He was a man in his forties.

The next day she came back with me to my city and visited my family since my grandmother was in the hospital that day. A few weeks later she visited again, but after that it was just one time per month. The next year I visited her once a month and then every 2-3 months. Finally, when she was a little over 20, we got married. Later in the year, I returned to her city to visit her family.

One day she told me that she had had a dream about me. That I would return again and visit her. Now it's 11 years later. I keep asking her about it, and she never remembers that dream.

After verifying that my grandmother was well and after spending some time with them, we said goodbye and went to dinner. We had booked the tables at a restaurant called Hala Hala in Los Angeles's MacArthur Park neighborhood. It was a pretty simple place but the food was delicious and the service was excellent. While we were having our meal, we had a man sitting next to us who asked us if we had just gotten back from the East Coast. He told us that his brother had sent him a postcard from San Francisco and that he was going to be moving there from Los Angeles. We started talking about the location and how that city had grown so much in the past year.

It was the end of the weekend and my girlfriend had to return to Mexico City because she had to work on Monday, so before she came back we had lunch and then I accompanied her to the bus station. Before she got on the bus, I saw that she was very nervous, and I asked her what was the problem. She said that it was something she was very afraid of, that was to be the first time she would travel alone on a bus, because her family didn't know where she was going, and she would be very afraid to get off the bus in a new city. She didn't even know where the bus was going. And even if she knew where the bus was going, she said that she didn't know how to tell the driver where to go. The driver had to find the bus station on his own.