

IDENTIFICATION OF THE PARAMETERS USED BY CHATGPT TO RECOGNIZE SPANISH TEXTS.

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ABSTRACT

This research presents a literature review on ChatGPT, which is a conversational system that generates a textual response to a request. ChatGPT is a language model based on the Transformer architecture and neural networks. It generates responses quickly and with extensive knowledge on any given topic. Additionally, this work also delves into the implications of ChatGPT, such as gaining a deeper understanding of its functioning, regulations, and ethical limits in the academic and scientific domain.

BACKGROUND

ChatGPT emerges as a result of constant advances in the field of Artificial Intelligence and the subfield of Natural Language Processing. ChatGPT's conversational system utilizes the GPT (Generative Pre-trained Transformer) model to generate text through a neural network that comprehends the input text. The model was trained on vast amounts of data collected from the internet. This extensive dataset has enabled ChatGPT's language model to possess the ability to understand complex texts, generate, suggest text, and predict complete phrases.

OBJECTIVES

1

Determining the operation of text-generating AIs in Spanish.



2

Analyze the existing literature.



3

Analyze the parameters of text generation in Spanish.



METHODS

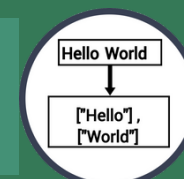
This work involved a comprehensive documentary research that covered writings from different authors related to related topics. The purpose was to gain a more complete understanding of the subject through the exploration of academic resources. The Google Scholar search engine was utilized to explore articles related to the language model used by ChatGPT, as well as language models in general, the GPT model, and the various implications associated with the presence of ChatGPT.

RESULTS

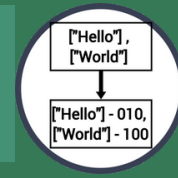
During the documentary search, important information was found, such as in the article by Olite, Suárez, and Ledo published in 2023. In this article, they explore, following the sudden emergence of ChatGPT, the uncertainties, controversies, and challenges associated with this conversational Artificial Intelligence system.

In their 2023 article, Vicente-Yagüe-Jara, López-Martínez, Navarro-Navarro, and Cuellar-Santiago mention that text-generating AIs are based on Large Language Models (LLMs). These models originated with the creation of the Transformers system, which has an enhanced attention capacity.

Tokenization: The input text is divided into smaller units called tokens.



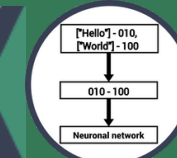
Input Encoding: The tokens are converted into numbers that the model processes based on the training data.



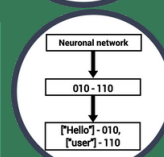
Multiple Attention: The model determines the parts of the input text that are relevant by considering multiple parts of the text simultaneously.



Transformation: The encoded numbers are mathematically transformed through a neural network multiple times.



Decoding: The model predicts the next token and subsequent ones based on tokens already predicted.



In his study published in 2023, Pacheco conducts an analysis of the impact and limitations of ChatGPT. He mentions, based on his own criteria, that the use of ChatGPT is a powerful technology that should be developed with an ethical perspective to avoid harmful uses for humans. According to Pacheco, ChatGPT is not inherently responsible for the misuse of this tool.

CONCLUSIONS

De Vito, in his 2023 article, states as a personal opinion that he avoids determining whether the use of ChatGPT is good or bad. Instead, he considers the inevitable use of ChatGPT. He suggests that, rather than focusing efforts on prohibiting it, efforts should be directed towards leveraging this conversational system as a tool. Other authors, such as González and Espinoza, explore the ethical and technological challenges associated with ChatGPT. One implication they discuss is that this tool allows for easier solutions at the expense of not developing important skills. One challenge they mention in their work is the ethical dilemma of using ChatGPT as a productivity improvement tool without resorting to plagiarism.

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