



ChatGPT: Virtual Creative Model

Abduallah Gamal¹

¹Faculty of Computers and Informatics, Zagazig University, Zagazig, Sharqiyah 44519, Egypt

Email: abduallahgamal@zu.edu.eg

Abstract

We offer ChatGPT, an autoregressive language model that employs deep learning to generate sentences that resemble those written by humans, and assess them using the preceding distinction. We discuss the nature of ChatGPT based on a review of its output. Also, we reviewed some details about the different versions of ChatGPT. We show, based on the resulting ChatGPT outputs, which the recently released AI-enabled ChatGPT can be of great help to daily life. We showed the full benefit behind ChatGPT.

Keywords: ChatGPT; Artificial Intelligence; OpenAI.

1. Introduction

ChatGPT is a new bot technology released by the artificial intelligence company OpenAI in late 2022. It is developed through a linguistic model that carries millions of words, which makes it able to speak in a smooth manner and establish dialogues with people, answering their questions and providing them with various assistance in various fields. ChatGPT also depends on the analysis of words and the production of texts and images in a simplified way with a long or short description of any of the things in the world (Dowling and Lucey, 2023). The training process for the bot utilizes a combination of reinforcement learning algorithms and human input on over 150 billion different factors. The platform gained one million users in only the first week that it was available to the general public and has been swiftly dubbed as a result of the perceived quality of the answer produced by the model.

Last week, OpenAI, a startup that specializes in artificial intelligence, presented GPT-4, the most recent iteration of the comprehensive language model that is the driving force behind its popular ChatGPT. According to the business, GPT-4 has undergone significant development, and it has already astounded people with its capacity to produce human-like prose, as well as graphics and computer code, from almost any given input. Researchers believe that these capabilities have the potential to alter research; yet, some of them are disappointed since they are unable to access the technology, its underlying code, or details on how it was taught at this time. According to experts, this gives rise to concerns about the safety of the technology and reduces its use for research purposes.

One of the improvements that was made to GPT-4 on March 14 was the addition of the capability to handle photos in addition to text. Open AI, which has its headquarters in San Francisco, California, claims that its latest version of ChatGPT achieved results in the ninetieth centile on the United States Bar Legal Examination, which is a significant improvement from the previous version of ChatGPT, which only achieved results in the tenth centile. Nevertheless, the technology is not yet available to the general public; at this time, only paying customers to ChatGPT have access to it.

OpenAI is an artificial intelligence research center with the declared mission of fostering the development of friendly AI that may be used for the betterment of mankind. It began operations in 2015 and is now regarded as a rival to DeepMind. Microsoft is a major investor in OpenAI, and the company has previously disclosed that it has reached a deal with OpenAI to license its GPT-3 (Floridi and Chiriatti, 2020). Let us tell you about the nature of GPT-3. GPT-3 is an autoregressive language model of the third generation that makes use of deep learning to generate text that resembles that produced by humans. To put it another way, it is a computational system that is intended to create sequences of words, code, or other data, with the generation process beginning with a source input that is referred to as the prompt. For instance, it is used in the process of machine translation in order to statistically predict word

sequences. The language model is educated using an unlabeled dataset that contains texts from a variety of sources, predominantly in English but also in other languages. These sources include Wikipedia and a great many additional websites. In order to provide findings that are meaningful, these statistical models need to be trained using a substantial quantity of data. In 2018, the first version of GPT made use of 110 million different learning parameters (Scott 2020). After a year, the GPT-2 exercise used 1.5 billion of them (Scott 2020). Moreover, GPT-3 used 175 billion different parameters. It was taught on the artificial intelligence supercomputer that Microsoft Azure provides (Scott 2020). It is an extremely expensive program, with estimates placing the whole cost at 12 million dollars. This computational technique is useful for a broad variety of use cases, such as summarization, translation, grammatical correction, question answering, Chabot, email composition, and many more applications.

Finding information using a search engine is a good analogy for the level of difficulty required to use GPT-3, which is quite simple. In the same manner that Google "reads" our searches without necessarily comprehending them and provides appropriate replies, GPT-3 creates a text without any comprehension that continues the sequence of our words in the same way. And it continues to do so throughout the whole of the text that has been provided, irrespective of whether the job in and of itself is simple or complex, reasonable or unreasonable, meaningful or devoid of significance. GPT-3 generates the text that is a statistically good fit, given the initial text, without any supervision, input, or training about the "proper" or "correct" or "true" text that should follow the prompt. Instead, it generates text that is a statistically excellent match. To receive the issuing text, one merely has to write a prompt in simple English (either a statement or a question would suffice), and that is all that is required.

2. Benefits of ChatGPT

In this section, we show ways to benefit from the ChatGPT application in daily work and life.

2.1 *Creating a hard-to-hack password*

Many individuals lack the capacity to generate a strong, difficult-to-crack password, which makes this task challenging for some. At the same time, this is critical for individuals who dread losing or having their highly valuable data and information stolen. With ChatGPT, you have many options for passwords. You just need to indicate the length of the desired password and whether or not it comprises digits or special characters in order to test it.

2.2 *Investigating literary theft*

The people who do study and publish articles are concerned about this issue. The use of ChatGPT enables you to check that the content you have written does not include any kind of plagiarism. It might also be helpful for those who edit articles, as well as teachers and professors at schools and colleges who are revising student papers and assignments.

2.3 *Graphic design*

The most difficult work for a graphic designer is to locate a precise picture that reflects the design that is in his head and to draw inspiration for his designs from the concept that he wants to take inspiration from for his designs. As a result, the ChatGPT program was designed so that it could generate an endless number of distinct designs based on the keywords that were provided to it. Even if it does not exist in reality; For instance, if you want to search for a photo of a pet driving his own automobile, you will discover that this application satisfies your demand quickly. Another example would be if you wanted to look for a picture of a person driving a horse-drawn carriage.

2.4 *Writing emails*

ChatGPT may compose official and casual emails by selecting a format that corresponds to the data you provide. For instance, if you wanted to send an e-mail to a customer thanking him for a recent phone call and summarizing the key points and actions agreed upon during the call, as well as informing him of the time and location of your next meeting, all you would need to do is provide these details to the system. The program will then generate the message's whole text in a professional and error-free way.

2.5 *Software quality*

The efficacy of software that has been created may be evaluated using ChatGPT, and the results can indicate whether or not the program satisfies the necessary requirements. In addition to this, it generates a comprehensive report on any security flaws that are discovered inside the system and gives you step-by-step guidance on how to correct these flaws before the system is released in its final, complete iteration.

2.6 *Websites design*

The capacity of ChatGPT to make use of design concepts, programming languages, and tools for online development makes it a formidable rival for those who work in programming and web development. You may count on him to provide guidance about the design and development of websites. It provides you with advice to build your website in a simple style that is suitable for the consumer, does not seem difficult while they are using the website, and is also comparable with the aims of your website.

2.7 Writing a CV

ChatGPT creates a comprehensive resume for you that will assist you in locating the ideal job for your skills and experience. You will just need to provide him your personal information, including your address and other contact details, and the educational qualifications that you have obtained, as well as whether or not you have any previous practical experiences or life skills in a variety of fields, and he, in turn, will organize all of this information for you in appropriate formulas and in an organized manner so that you can apply for the job that you want to get.

2.8 Medical field

Undoubtedly, it is impossible to discuss the applications of artificial intelligence without at least briefly mentioning the fields of medicine and public health. You may use this program if you work in this industry and need to view the newest results of artificial intelligence in terms of methods for identifying illness symptoms and ways for treatment, or if you need assistance diagnosing a particular ailment. You may, for instance, try writing the following sentence: (a diagnosis of back pain), and then make a note of the logical answers that come to your mind.

2.9 Providing logistics services

If you are preparing for a conference or event with a large number of attendees and need an accurate logistical plan to ensure that the event runs flawlessly, in terms of securing transportation for the attendees and the paragraphs that you will present, then the ChatGPT application can provide you with everything you need. Just give the number of guests, the location of the event, and any other pertinent information, and the program will generate the necessary plan to ensure everything runs successfully.

2.10 Providing advice related to daily life

It is referred to as the same work as a life coach. If you provide this application with information about your present position and your aspirational life objectives, it will construct a strategic plan that will guide your life decisions until you realize your aspirational goals. He may also offer guidance on a variety of themes, such as assisting you in drafting your future goals or coping with and regulating your emotions, and he may suggest some good habits that you can adopt to enhance the efficacy of your life.

In the end, we have mentioned ten tasks in detail that ChatGPT performs. In addition, the application performs other tasks, for example: conducting debates on a specific topic, writing advertisement content, choosing brands, writing motivational speeches, writing stories, promoting accounts on social media platforms, and managing your financial affairs. In addition to all the tasks, there are many other tasks that the ChatGPT application may perform.

3. Conclusion

In spite of the concerns, ChatGPT and its subsequent versions will cause a stir in the scientific community. We believe that it will truly be a significant infrastructural shift in the field of research, virtually in the same way that the internet was a significant change. Also, it did not and will not replace scientists, but it can help with some tasks. We believe that we are going to start discovering that we can link the work that we do with computational or even robotic experiments to articles, data programmes, and libraries that we utilize along with more tasks. What we presented in this paper is significant. We provided explanatory information about the ChatGPT application and its various versions. In addition to the amount of parameters that each version has been trained on. Also, we've outlined most of the areas that ChatGPT can invade and help in quite well. For example, a number of tasks and areas that ChatGPT can integrate into are mentioned namely: creating a hard-to-hack password, investigating literary theft, graphic design, writing emails, software quality, websites design, writing a CV, medical field, providing logistics services, providing advice related to daily life, conducting debates on a specific topic, writing advertisement content, choosing brands, writing motivational speeches, writing stories, promoting accounts on social media platforms, and managing your financial affairs.

References

- [1] Dowling, M., Lucey, B., 2023. ChatGPT for (Finance) research: The Bananarama Conjecture. *Financ. Res. Lett.* 53, 103662. <https://doi.org/https://doi.org/10.1016/j.frl.2023.103662>
- [2] Floridi, L., Chiriatti, M., 2020. GPT-3: Its Nature, Scope, Limits, and Consequences. *Minds Mach.* 30, 681–694. <https://doi.org/10.1007/s11023-020-09548-1>.
- [3] Scott, K., 2020. Microsoft teams up with OpenAI to exclusively license GPT-3 language model. *Official Microsoft Blog*.