A Review on Open AI based ChatGPT

[1]Ms Ayalin Roy, [2]Ms.Aliyona Tomy, [3]Ms Dalbina Dalan

[1]Student, [2]Student, [3]Assistant professor
[1] Department of Computer Science
[1]Santhigiri College of computer Sciences Vazhithala, Thodupuzha, India

Abstract: ChatGPT is a large language model developed by OpenAI, trained in a divorce range of internet text to generate human-like responses to text inputs. ChatGPT can perform a variety of language task such as answering questions, generating text, summarizing long pieces of text, machine translation and text classification. ChatGPT is a highly advanced AI model that offers state-of-the-art performance in generating human-like text and It has been proven to be a valuable tool for a variety of industries including customer service, content creation, conversational AI, medical field and film industry. Its coherent Output have made it a popular choice among developers and businesses. ChatGPT, which stands for Chat Generative Pretrained Transformer is used to quickly and efficiently respond to customer inquiries, provide accurate and helpful information in a manner that is indistinguishable.

Index Terms: Introduction, Application, Comparison.

I. INTRODUCTION TO OPEN AI AND GPT SERIES

OpenAI is a research organization that develops and promotes friendly AI in a responsible way, it was founded in 2015 by Elon Musk and Sam Altman. The organization was established with a mission that artificial intelligence benefits all humanity. Open AI has developed many cutting-edge AI models, including the GPT series of language models. One of the Open AI most notable contribution to the field of AI is its development of GPT series language models, including ChatGPT. These models are based on the transformer architecture and have set new standards in the field of language generation and processing, providing highly coherent and human-like outputs, GPT(Generative Pretrained Transformer) is a transformer-based on deep learning architecture for NLP task such as text generation, translation and summarization. GPT-3 is the largest and greatest GPT series. In customer service ChatGPT is used to quickly and efficiently respond to customer inquiries, providing accurate and and helpful information in a manner that is indistinguishable from human representative. ChatGPT is a powerful and versatile language model that has wide range of aplications across many industries such as text generation, question answering, and summarization, medical and even Film industry. Due to its large size of NLP tasks, ChatGPT become a popular choice for developing conversational AI applications, such as chatbots. ChatGPT is designed to be user-friendly and easy to use. With its conversational interface and natural language processing capabilities, it can understand and respond to human-like queries and commands. This allows for a more intuitive and efficient user experience compared to traditional search methods or databases. Additionally, ChatGPT can be integrated into various platforms, such as websites, mobile applications, or chatbots, making it accessible to a wide range of users. The technology can be customized to meet the specific needs of different industries and user groups, making it more versatile and flexible. Overall, the ease of use of ChatGPT makes it a valuable tool for various applications in different industries, including the medical field.

II.APPLICATIONS OF ChatGPT

ChatGPT is a powerful tool that can be used in a variety of applications, from customer service to medical field. One of the most common applications of ChatGPT is in customer service. By using the technology, businesses can create chatbots that can respond to customer inquiries in a natural and helpful manner,This can be used to reduce the workload of customer service agents, as the chatbot can handle many of the routine inquiries. Additionally, ChatGPT can be used to provide customers with personalized responses that are tailored to their individual needs. ChatGPT can be used in online education, by using this technology, teachers can create virtual tutors that can provide students with personalized feedback and guidance. The chatbot can be used to answer student questions, provide helpful hints, and even provide personalized feedback on assignments. This can help students learn more effectively and can help teachers save time by reducing the amount of time they need to spend answering student questions. ChatGPT can also be used in film industry and Medical field, in film industry chatGPT can be used for dialogue generation and even it is used in script writting recent updates says that ChatGPT will be writing the script for the movie Drishyam 3, in medical field ChatGPT has a wide range of application such as clinical decision supporter, medical content generator, medical research supporter etc.... Overall, ChatGPT is a powerful tool that can be used in a wide range of applications, from customer service to medical field this technology can help businesses ,teachers and doctors to save time and provide customers, students and patients with personalized responses and improve efficiency, accuracy, and accessibility in medical field. As the technology continues to evolve, it is likely that more applications of ChatGPT will be discovered.

III.COMPARISON BETWEEN GOOGLE AND ChatGPT

Google and ChatGPT both are AI-powered technologies that are designed to provide information and knowledge, but they have some key differences:

1. Information Sources: Google searches the entire web for information, while ChatGPT is trained on a large corpus of text data and can generate its own answers based on that information.
2. User Interaction: Google is a search engine that requires users to input keywords to retrieve information, while ChatGPT is a conversational AI model that can understand and respond to natural language queries and commands.

3. Accuracy and Relevance: Google provides a large amount of information, but its results can be biased and its accuracy can vary. On the other hand, ChatGPT is trained to generate accurate and relevant responses based on the information it has been trained on, but its results are limited to the data it has been exposed to.
4. Customization: Google can be customized to a certain extent through search settings and filters, but it does not offer the level of customization that ChatGPT does. ChatGPT can be fine-tuned for specific use cases, such as medical information retrieval, making it a more specialized tool.
5. Purpose: Google is a search engine that provides information by searching the web, while ChatGPT is a conversational AI model that generates human-like responses to natural language queries and commands.
    Overall, Google and ChatGPT both have their strengths and weaknesses and can be used together or separately depending on the specific information needs of the user.

IV. ADVANTAGES
1. Natural language understanding: ChatGPT is trained on a diverse range of text and has a strong understanding of human language, allowing it to respond to questions and prompts in a conversational manner.
2. Speed and efficiency: ChatGPT can generate responses quickly and with a high level of accuracy, making it useful for tasks such as customer service and information retrieval.
3. Customizability: ChatGPT can be fine-tuned for specific tasks and industries, allowing for more targeted and accurate responses.
4. Cost-effective: ChatGPT can provide 24/7 support at a lower cost compared to human employees, making it a costeffective solution for businesses.
5. Consistency: Unlike human employees, ChatGPT provides consistent and error-free responses, reducing the need for frequent correction and improving the overall user experience.

V. LIMITATIONS
•   Access to the Internet and location based information: - Open AI is unable to access internet, it is not capable of providing real time information, and we cannot use location based information and we cannot provide urls or references to anything on internet.
•   Outdated Data:- ChatGPT's most recent training data is from 2021 of September. Since then an entire year has passed, programming language may have been updated, libraries may have new features, and the world has even changed, this means that ChatGPT is operating off an outdated set of data.
•   Faulty Memory:- ChatGPT is unable to access previous memory, If we asked ChatGPT to rephrase some suggestions, or elaborate on something, it can sometimes mistakenly assume that ,it is unable to remember orginal piece it will just provide a review or just provide pretty much the same text it provided in the past with minimal changes
•   Inability to make Qualitative judgements:- ChatGPT is unable to extent things such as whether a text is offensive, what is good, what is evil etc.
•   Lack of Multimodal Outputs and Inputs:-The model is purely textual, it is not capable of providing images, urls, audio, or any other model of input. Similarly it cannot output code that can generate these things.
•   Questionable language support:- While trying mixed languages in ChatGPT it is found that support could differ vastly based on the language being used.
•   Quality of life Issues:- Sometimes we may need to wait for a long time before getting responses from ChatGPT. ChatGPT seems to be just hang sometimes, in some other cases it will return an error message.
•   Kills logical thinking capacity:- Recently many schools colleges and universities blocked ChatGPT because by using ChatGPT students can get their homework done it would affect their logical thinking and mental growth. ChatGPT also helps students for there research by providing relevant information this will also adversely affect students mental growth.

VI. FUTURE POTENTIALS
1. Improved Understanding of Natural Language: As AI technology continues to advance, it is likely that ChatGPT and similar models will become even more advanced in their understanding of human language, leading to more accurate and relevant responses.
2. Integration with Other Technologies: ChatGPT and other language models have the potential to be integrated with a wide range of other technologies, including virtual assistants, customer service chatbots, and more, providing new and innovative ways to interact with AI.
3. Increased Efficiency and Automation: ChatGPT and other language models have the potential to automate a wide range of tasks and processes, freeing up time and resources for other activities.
4. New Business and Commercial Applications: As language models become more advanced, they are likely to open up new business and commercial opportunities, particularly in areas such as customer service, content creation, and research.
5. Advancements in Natural Language Processing: ChatGPT and other language models are likely to drive further advancements in the field of natural language processing, leading to new and exciting developments in the future.

VIII. CONCLUSION
In conclusion, OpenAI's ChatGPT is a cutting-edge language model that has the potential to revolutionize the way we interact with AI. With its ability to generate highly accurate responses to a wide range of questions and prompts, its speed and efficiency, and its versatility, ChatGPT is well-suited for a wide range of applications. However, like all AI systems, it also has its limitations, including its dependence on training data, its limited contextual understanding, and ethical concerns. Nevertheless, as AI technology continues to advance, it is likely that ChatGPT and other language models will become even more advanced and capable, opening up new and exciting opportunities in the future. In short, ChatGPT is a powerful tool that has the potential to change the way we live and work for the better, and it will be fascinating to see how it evolves in the coming years.

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