The Rise of AI Chatbots

Chatbots are software programs that use Artificial Intelligence (AI) to simulate human conversation, used for a variety of purposes such as customer service, entertainment and sharing information. They ahve become a valuable tool that businesses use to improve customer service and streamline processes. They have the potential to save time and allow companies to focus on more important tasks.

The concept of bots has existed for many years but only recently become wildly used due to advances in AI and natural language processing (NLP). Chat Generative Pre-Trained Transformer, ChatGPT, is OpenAI's latest conversational chatbot model. The bot uses natural language processing to create seamless responses, ask follow up questions, correct its mistakes, refuse inappropriate requests and even write code. Released in November 2022, ChatGPT is free while under research preview and has had millions of user interactions.

HOW DOES IT WORK?

ChatGPT was taught to perform tasks and make predictions using large amounts of conversational data and machine learning algorithms. The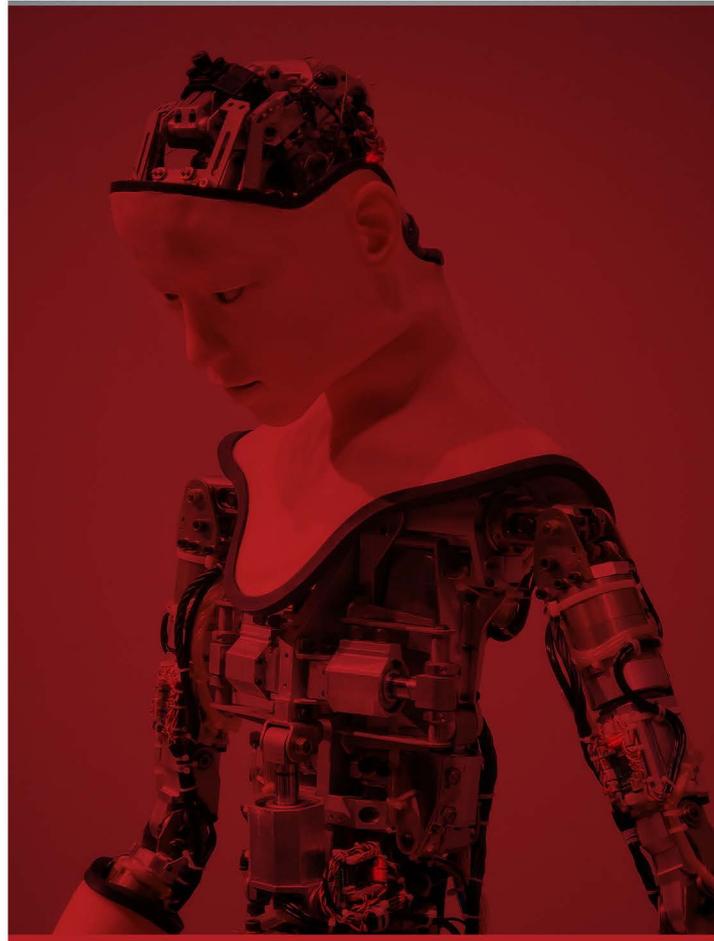 bot learns key patterns and is tested on data to see how it will perform its task. If the model's performance is inadequate, the training process can be repeated with different algorithms or data until the desired level of performance is achieved. This is extremely important, especially for ChatGPT to allow it to communicate with a range of users and tasks. In order to provide a response that is suitable and natural sounding, the model considers the context of the discussion as well as any pertinent information or data it has access to.

WHAT ARE CHATGPT'S USES?

Bots are already used within customer service queries online, to answer questions, track orders and offer recommendations. ChatGPT takes this a step further with its ability to answer follow up questions and provide personal responses based on past interactions. Real time responses would mean a reduced requirement of a human customer service representative, where time and resources can be better spent.

Since its release ChatGPT has been used in education to generate customised study material suitable for every student's learning needs. Real time feedback during online tutoring sessions could be a valuable asset to improve the current education system, allowing students to work at their own pace. Since its release, ChatGPT has been a useful resource in explaining complex academic theories, and for some replacing a standard search engine.

It is important to note that GPT is a machine learning model and its output is only as good as the data it has been trained on. It is not a substitute for human expertise and should be used as a supplement to, rather than a replacement for, human judgment.

CONCLUSION

The implications of ChatGPT are an exciting venture in the world of technology. As long as ChatGPT remains under research purposes it is free to use and a great tool to take advantage of. The possibility of streamlining processes would allow further development into newer, more complex technology.

ABOUT THE AUTHOR

Alina Butt

My name is Alina Butt. I studied Computer Science at the University of Kent. During my time at university my interest in Artificial Intelligence and Chatbots grew, which led me to write my dissertation on the impact chatbots might have in our future. I think the advancements of AI and bots will change the way we interact with technology quicker than ever before.