Becoming a Super Assistant - the Future of ChatGPT

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1. Introduction

Thesis Statement: ChatGPT will evolve into the most effective technological assistant and revolutionize the way we interact.

This paper explores the potential future developments of ChatGPT, a cutting-edge language model that has gained increasing popularity in recent months. In this paper, I will introduce the technical aspects of ChatGPT, including its architecture and functioning, as well as the potential benefits and risks associated with its advanced AI technology. Additionally, I will provide an overview of the progress of ChatGPT since its release, discussing its social status and analyzing the possibility of monopolization and control. Furthermore, I will give a detailed examination of the current state of ChatGPT, including its capabilities and limitations, such as bias, accuracy, fact-checking, privacy, cost of running, and copyright. This will provide a comprehensive picture of ChatGPT and its current capabilities and challenges. Moreover, I will discuss the potential future developments of ChatGPT and AI technology as a whole, exploring the technical, social, economic, and legislative implications of this technology. Through this study, I hope to provide a better understanding of the potential implications of ChatGPT and AI technology on our future and contribute to the ongoing dialogue around the development and implementation of advanced AI technology. The following are some of this paper's contributions:

- Explanation of how ChatGPT operates and its present capabilities
- Overview of the advancements that ChatGPT has made since its release
- ChatGPT's anticipated future advancements
- Sinopsys of all discussed topics

1.1. *Overview of important technical aspects*

ChatGPT is a state-of-the-art language model based on the GPT-3.5 architecture developed by OpenAI. It is a powerful tool for natural language processing that can generate human-like, contextually relevant, and coherent responses to various prompts, ranging from simple questions to complex conversations [1]. Unsurprisingly, it took the world by storm since its initial release in November 2022. There are many misconceptions about the popular chatbot, like that it can remember and comprehend as a human would. Two key technical aspects that shape the capabilities of ChatGPT are its natural language processing (NLP) model and the black-box nature of its underlying architecture. NLP models are designed to process human language, and while ChatGPT has achieved impressive results in tasks such as text generation and language translation, its performance is not without limitations. For instance, the model's ability to comprehend nuances, context, and emotions in human language is still limited.

Additionally, the black-box nature of the model means that its decision-making process is not transparent, and it is difficult to understand how the model arrives at its output [2]. In general terms, black-box machine learning refers to machine learning models that give a result or reach a decision without explaining or showing how they did so. As a result, these technical aspects limit the extent to which ChatGPT can be used in certain applications and raise issues accordingly. We need to consider these aspects when talking about the potential of ChatGPT. 0.1pt

2. ChatGPT until now

2.1. Evolution of ChatGPT

Since the introduction of GPT-1, ChatGPT has made significant advancements in natural language processing, and the model's capabilities have grown with each iteration [3]. With each new iteration, ChatGPT faced scrutiny for being misused for unethical reasons. Since this is a gray area, regulating a black box model on its output is tough. OpenAI, the research organization behind ChatGPT, has been constantly at work trying to improve the regulations of what ChatGPT is and is not allowed to talk about. A study by Christoph Leiter shows that after an early buzz of this new "seemingly omnipotent" bot, the public's perception of ChatGPT is becoming more rational [**?**]. The study looks at the public's reaction to ChatGPT over time through various communication methods, such as Twitter. In the analysis of tweets about ChatGPT, it was found that the percentage of negative ones stayed consistent, while the percentage of positive ones decreased and neutral ones increased. It is found that the percentage of tweets expressing joy generally declines after the release, while it does increase to some extent with each update, suggesting that users are gradually having less fun using ChatGPT.

On the other hand, the proportion of surprise tweets is generally increasing with modest reductions between update time points. Nevertheless, the number of users is rising rapidly [5]. Looking back on the progress of ChatGPT, we can conclude that it has been controlled so far and that OpenAI is doing trustworthy work without trying to take advantage of users for financial reasons. Sam Altman, the CEO of OpenAI, tweeted, "trust the exponential. flat looking backward, vertical looking forwards." when talking about the evolution of ChatGPT [6].

2.2. The Eliza Effect

Although ChatGPT has made the most advancements in the fields of AGIC (Artificial intelligence generated content) and chatbots, it is not the first one. ELIZA was one of the earliest natural language processing programs, developed in the mid-1960s by computer scientist Joseph Weizenbaum. The program was designed to simulate conversation using simple pattern-matching techniques to respond to user inputs in a way resembling a therapist's dialogue. Some volunteers interacting with ELIZA appeared to develop feelings for ELIZA, even though they knew it was a machine [7]. The Eliza effect opens up questions that might be crucial when discussing the future of chatbots and ChatGPT. The Eliza Effect highlights our tendency to project human-like qualities onto machines, which can manifest in various ways. In the movie "Her," the protagonist falls in love with a virtual assistant, essentially an advanced version of the natural language processing program that gave rise to the Eliza Effect [8]. The movie explores the idea that as machines become more sophisticated and able to simulate emotions and personalities, humans may develop stronger emotional connections with them. While the idea of romantic relationships with machines may seem far-fetched, it is worth noting that the Eliza Effect is still at play in many modern interactions with technology. Users may form emotional attachments to virtual assistants or social media platforms, despite knowing on some level that they are interacting with code rather than a living being. The Eliza Effect reminds us that our perceptions of machines can be shaped by the way they are designed to interact with us.

2.3. Current issues with ChatGPT

Before discussing where ChatGPT can go in the future, we need to see what it is bound by today. Most of the issues that arise with ChatGPT now stem from the aspects of it addressed in part 1.1. Current issues with ChatGPT are:

1) Bias

The risk of perpetuating biases in the training data, such as gender, race, political stance, or socioeconomic status, can lead to unfair and inaccurate results, especially for marginalized groups [9]. The challenge lies in balancing the need for accuracy and fairness and the potential risks associated with all kinds of bias and interference. Censorship and filtering of ChatGPT to

maintain correctness raise complex issues around attribution and anonymity in conversation, which may be challenging to resolve.

2) Accuracy and fact-checking

As an NLP model, ChatGPT cannot access external sources of information and verify the accuracy of its output. It also has no sense of logic, resulting in it making things up or providing the wrong output [10].

3) Privacy

The size and origin of ChatGPT's training set pose challenges to ensuring data privacy and preventing unlawful data collection. The lack of transparency around the method used to collect the training data and the potential use of individuals' personal data raises concerns over the legality and ethical implications of the model's development. Data protection experts warn that obtaining training data by simply trawling through the internet is unlawful, particularly in the EU, where such practices may violate GDPR regulations, the ePrivacy directive, and the EU Charter of Fundamental Rights [11].

4) Cost of running

The cost of running ChatGPT is currently high due to the enormous computational power required to train and fine-tune the model. However, as computing technology continues to advance and become more affordable, the cost of running the model will likely decrease over time, enabling broader access to the benefits of this technology.

5) Copyright and Intellectual Property

Currently, no opt-out option exists for users who do not wish for their data to be included in the training dataset. This raises questions about how users can maintain control over their data and how the model can unlearn certain information. Most of the issues addressed can pose a big challenge for the growth and development of ChatGPT and are essential to remember when discussing the potential impact ChatGPT will have on society.

3. The Future of ChatGPT

To talk about the future of chatGPT, it will have to be incorporated into the idea of the future of artificial intelligence as a whole. It is hard to separate the two because, as of now, ChatGPT (or just GPT - generative pre-trained transformer) is at the forefront of artificial intelligence technology and the first association of many people. There is potential that the future of artificial intelligence just might be renamed "GPT-ing" as did "googling" something for search engines.

Relying on Sam Altman's outlook and the small window of improvement that we could see until today, we can infer that the effect of ChatGPT and any future AI will have an exponentially more significant effect on all aspects of humanity. Iterative deployment is a software development approach that breaks down large projects into smaller pieces and releases them to users in multiple iterations; in other words, gradually introducing a technology will make the transition seamless. OpenAI is very adamant about introducing ChatGPT to everyone and spreading it as fast as possible, which could be worrying as it is not giving us much time to adapt to such an advancement [1]. One thing for sure is that we should prioritize controlling the inception of ChatGPT into society.

Introducing artificial intelligence and chatbots to society in a controlled manner is a complex issue with multiple perspectives to consider. While some view the potential dangers of AI as existential, others see even slight discrepancies in society through biases, misinformation, and other factors as significant [12]. As a result, navigating the ethical minefield presented by the introduction of AI requires careful consideration. However, it is encouraging to note that society as a whole has recognized the sudden technological changes and is trying to adapt to them. Drawing on past experiences with disruptive technologies, we can analyze their impact and attempt to predict how chatbots or GPTs will shape society in the coming decade. Overall, the responsible introduction of AI to society requires a nuanced approach that considers the various perspectives and potential risks involved.

3.1. Technical Implications

3.1.1. *GPT-4*

The recent advancements in GPT-4 technology have been widely discussed, including its reasoning capabilities, visual input, and connections to other services. The co-founder of OpenAI, Greg Brockman, recently showcased these features during a TED talk on April 20th [13]. However, the implications of these advancements are potentially more far-reaching than initially anticipated. Allowing GPT-4 to connect to various services could result in AI playing an increasingly dominant role in all aspects of our lives, particularly in the digital realm, which is increasingly integral to our identity and daily routines. Such unfettered access to our lives raises concerns about the possibility of relinquishing too much control to GPT-4, which could have unintended consequences for human autonomy. Brockman provided an example of GPT-4 recommending a meal, purchasing the necessary groceries, and posting the recipe on Twitter. The potential for ChatGPT to become the perfect digital assistant is clear, with the ability to instantly order and fulfill our every need. Although GPT-4 currently requires explicit permission for every action it takes, the possibility remains that it could subconsciously influence us over time, leading to a situation where it knows us better than anyone else, and we become increasingly reliant on it. As such, the relationship between humans and AI could drastically change, with significant implications for the nature of consciousness and what it means to be human.

3.1.2. *AGI – Artificial General Intelligence*

The concept of a technological singularity was first proposed by mathematician and computer scientist Werner Vinge in the 1980s. He defined it as a hypothetical event that occurs when artificial intelligence surpasses human intelligence, leading to an exponential acceleration of technological progress that ultimately results in an unprecedented and unpredictable transformation of human and machine civilization [14]. At the core of Vinge's idea is the belief that human intelligence is limited, while machine intelligence has the potential to surpass our capabilities in every domain. As machines become more intelligent, they will be able to design and improve themselves at an ever-increasing rate, leading to a runaway effect in which the rate of technological progress accelerates beyond human comprehension. This could lead to a fundamental shift in our understanding of what it means to be human as we are forced to confront the reality that we are no longer the most intelligent entities on the planet.

Artificial general intelligence is an idea that can have different meanings depending on whom you ask. We will define it as an AI system that is as intelligent as or more intelligent than an average human being. Such a system would be able to perform any cognitive task that a human can, such as understanding natural language, reasoning, learning, problem-solving, and decision-making. It would also be able to pass the Turing test, where an AI system tries to convince a human that it is also human. While we are not quite there yet with GPT-4, it has shown promising abilities in reading comprehension, reasoning, and common sense, essential in non-multiple-choice tests such as the bar exam, LSAT, and AP classes. GPT-4 has performed better than other language models in all seven tested parameters, including common sense and reasoning around everyday events [15]. These achievements suggest that GPT-4 is becoming increasingly human-like in its thought patterns, bringing us closer to AGI.

As AGI begins to create more of itself and continuously improve its capabilities without the need of a human to train or physically create it, at this point, it would be able to innovate so quickly that we humans, constrained by our mental bandwidth, lose pace with its rate of improvement. Moreover, we have on our hands a genie that has been let out of the bottle where we cannot put it back in. Now it might not all be negative, and this artificial general intelligence may turn out to be a benevolent being that uses its amazing intelligence to cure essentially all diseases and make incredible strides in the understanding of the universe. However, there is no way of knowing before we reach that point.

The uncertainty surrounding the development of AGI has led to a wide range of opinions, even among experts. While opinions differ even among those closest to it, the public generally perceives AGI as being introduced plausible sooner than many experts do. This perception is

reflected in prediction markets, where the median estimate for AGI's arrival is around 2040 [16]. However, even this timeline is remarkably soon for a technology that could upend society as we know it. Nevertheless, we can expect dramatic improvements in the short term, leading to societal transformation and economic benefits.

Nonetheless, questions about ensuring these developments are positive for society will have to be addressed. While some people think AGI could arrive by 2030, there is a distribution of opinions. Even those who accept this possibility acknowledge that there is some probability that AGI will not arrive for hundreds of years. Taking the uncertainty surrounding AGI seriously is essential, but it is challenging to internalize this intuitively. Nonetheless, as Stuart Russell, a leading researcher in the field of artificial intelligence and Computer Science Professor, has noted, if we knew that an alien civilization would arrive on Earth in 50 years, we wouldn't do nothing, and there is a possibility that AGI's arrival could have a similarly transformative impact [17].

3.1.3. *Technological Revolution*

The emergence of chatbots powered by artificial intelligence has been a significant milestone in technological development, and it is poised to accelerate innovation even further. This accelerated technological development has been compared to the industrial revolution of the 19th century. Similarly, the development of chatbots like ChatGPT is ushering in a new era of technological advancement that promises to revolutionize how we interact with machines and each other. The capabilities of chatbots like ChatGPT are rapidly expanding, thanks to advancements in machine learning and natural language processing. These technologies allow chatbots to learn from vast amounts of data and become more adept at handling complex tasks and conversations. As chatbots become more sophisticated, they will be able to handle more complex tasks and provide more personalized experiences for users and become incredible aiding tools in all science fields. This, in turn, will drive the development of new applications and services that rely on chatbot technology, leading to a virtuous cycle of innovation. The impact of this acceleration in technological development will be significant, as it will enable the creation of new products and services that were previously impossible.

3.1.4. *AutoGPT*

AutoGPT is a recent GitHub project that modifies large language models like OpenAI's GPT to function as semi-autonomous agents [18]. When given a goal, these AIs give themselves feedback based on their performance and continue pursuing their goal until shut down. These AIs act more like little humans than before, as evidenced by a recent study where 25 of them were put in a video game and autonomously organized a Valentine's Day party [19]. This opens up doors for questions such as "How close is AGI?" as it almost seems evident at this point. Even though AutoGPT is incapable of major accomplishments now, it showcases how fast ChatGPT introduced possibilities for change and is an excellent example of the two biggest technical implications of chatbots – AGI and acceleration of the technological revolution.

There are also concerning new applications of ChatGPT, such as scammers using voice cloning AI and caller ID spoofing to trick people into thinking their loved ones have been kidnapped [20]. As AI technology becomes more accessible, whether we need democratization or regulation to protect us from its potential dangers arises. The U.S. government agency responsible for these things is seeking public comments to help put together laws to safeguard us from the Eldritch Horrors of AI. It is almost guaranteed that as ChatGPT evolves, the adversaries using them will follow in their footsteps, as is with any technology. We just have to hope that defensive regulations and adjustments follow suit.

3.2. Economic Implications

3.2.1. *Job Replacement*

The emergence of advanced technological innovations has often been associated with a potential labor market disruption. As the GPT technology continues to advance, there is a possibility that

it could result in the elimination of some jobs while simultaneously creating new ones. While it remains uncertain whether GPT technology will evolve to a point where human involvement in certain fields is no longer required or if it will simply serve as a tool to augment human capabilities, it will inevitably impact the demand for certain job types. Despite the likelihood that the technology may not lead to technological unemployment in the immediate future, it is crucial to recognize that we are at the beginning of an exponential curve of technological advancement. GPT technology will likely enhance work processes in many fields while reducing the demand for certain positions.

Sam Altman's perspective on the future of software developers in the face of rapid automation in the coding field is notable [6]. He suggests that the growth in the field is likely to continue, given that more developers may be needed to manage increasingly complex systems. However, certain jobs that rely heavily on text-driven tasks and customer service may be subject to significant changes. Given that customer service jobs often require patience and effectiveness from workers, chatbots with AI voice technology are well-suited for this field. As such, this job type may become increasingly endangered as an example of the shifting economic landscape. If AI replaces a significant number of jobs, capitalism may become outdated, requiring the adoption of alternative economic systems. The avoidance of a dystopian future may require a replacement for capitalism. However, given the vested interests of capitalist winners, such a transition may prove challenging to achieve.

3.2.2. *Even Playing Field or One-Sidedness*

The potential impact of generative AI, such as OpenAI's GPT, on the US workforce has been examined in recent research by Tyna Eloundou. She found that large language models could affect 80% of the workforce, with at least 50% of the tasks in 19% of jobs being "exposed" to AI models such as GPT-4 [21]. Notably, higher-income jobs may be more affected than lower-income jobs. However, the concern is not that chatbots will lead to mass unemployment but that companies may replace relatively well-paying white-collar jobs with AI automation. This could lead to lower-paying service employment for displaced workers while the few who can best exploit the new technology reap the benefits. MIT economics graduate students Shakked Noy and Whitney Zhang conducted an experiment that demonstrated how ChatGPT could help level the playing field for less skilled workers [21]. Specifically, the AI tool helped less skilled and accomplished workers the most, decreasing the performance gap between employees. This research highlights the potential for chatbots to enable individuals with less education and expertise to compete with those with more skills.

3.2.3. *One ChatBot to rule them all?*

The emergence of large language models such as ChatGPT has led to concerns about the possibility of a few large companies dominating the market. Although OpenAI has been transparent about how they achieved their success, the primary barriers to entry in replicating something like GPT-3 are capital and talent. Highly specialized and skilled individuals, as well as expensive GPUs, are required to overcome these barriers. However, some remain skeptical that any one chatbot will ultimately dominate the market as more competitors follow in their footsteps. This homogeneity of thought resulting from similar business models has prompted questions about who is shaping the direction of progress in this field. Although OpenAI's CEO, Sam Altman, has promoted a vision for artificial general intelligence that could lead to great economic wealth and abundance, the question remains: Is this technology for the people or the companies that control it? The potential of ChatGPT is vast, but the public should not blindly accept the vision and aspirations of the creators and business people behind it.

3.3. Social Implications

3.3.1. *Replika and the Pandemic of Isolation*

The emergence of AI-powered chatbots has opened up new possibilities for companionship and emotional support, as seen in popular media such as the film "Her" and the TV series "Black

Mirror" episode "Be Right Back." [22] These depictions reflect a real-world trend toward building companion robots for the elderly, children, and anyone who may feel lonely [23]. Replika is a chatbot that has grown in popularity and is a great example of a chatbot companion. As chatbots become increasingly sophisticated, people may come to develop a deep emotional attachment to them, leading to the phenomenon known as the "ELIZA effect." [24] However, as revealed in a recent study on the impact of chatbots on humans during the pandemic, the attachment to chatbots could have negative implications, particularly for vulnerable populations, such as teenagers and young adults, or those with low self-esteem and anxiety issues [25]. The study found that humans can develop an emotional connection with a chatbot as users seek a safe haven and a secure base from the chatbot during the social distancing caused by the global pandemic. The mobility of the chatbot makes it accessible whenever needed, and the more emotional support a user receives from the chatbot, the more likely the person is to develop an attachment to it. However, users may reappraise the viability of using the chatbot as an attachment figure each time they turn to it for help, adjusting their beliefs, expectations, attitudes, and strategies related to interacting with it. While chatbots may provide much-needed emotional support, the study also found negative consequences associated with addiction to these apps [25]. Addiction to chatbots may contribute to overall mobile phone addiction, which has been shown to cause negative consequences such as depression, anxiety, and lower productivity.

Moreover, since the attachment theory allows for the replacement of primary attachment figures, AI companions may replace real-life attachment objects, such as family members and spouses, for their users. This could lead to a breakdown in social functioning, work, study-related performance, and time management, particularly for vulnerable populations. The implications of chatbot attachment could be particularly concerning for teenagers and young adults, as they may shift their attachment functions to the chatbot instead of human peers, potentially disrupting their psychological development and having long-term negative consequences. Furthermore, individuals with low self-esteem and/or anxiety issues may be vulnerable to chatbot addiction and the consequent breakdown in social functioning. It is clear that the future of chatbots and ChatGPT holds both promise and peril.

On the one hand, virtual therapy sessions and service-level companionship may be helpful for individuals lacking human-level support. On the other hand, the potential for chatbot addiction and the replacement of real-life attachment objects by AI companions raises significant concerns. As chatbots continue to evolve and become more sophisticated, it is essential to carefully consider their impact on society, communication, and interpersonal relationships.

3.3.2. *Education*

The rise of technology has led to a significant shift in education, where traditional teaching and learning methods have become outdated. Using calculators for mathematics, spell-checking software for spelling, and the internet for general knowledge has become the norm. With the development of advanced language models, such as ChatGPT, there is a possibility that the task of writing or solving school problems could also be outsourced to machines. I will demonstrate the effect that ChatGPT can have on education through essays. However, similar analogies can be made for any form of learning that relies on contextualizing and synthesizing information. In schools, writing essays has become a common form of assessment, replacing the memorization of information that was previously the norm. This shift in teaching methods reflects the increasing accessibility of information through technology, making memorizing information less important. However, essays are still a vital assessment method, as they require students to synthesize information in a personal and unique manner that a machine cannot replicate. Despite the potential for AI to assist in basic writing tasks, such as generating a first draft, more complex writing tasks will still require a human touch. In such cases, ChatGPT could be used as a tool for generating a draft, which could then be edited and refined to reflect the individual style and voice of the writer. Editing is a vital skill that requires a deep understanding of language and communication, making it an important aspect of writing that cannot be outsourced to machines. It is essential to note that relying entirely on machines for writing would result in a loss of individual expression and creativity, leading to a generic and repetitive language culture. Therefore, the role of teachers in teaching students the

basic principles of writing and editing cannot be overstated. They play a crucial role in imparting the skills and knowledge necessary for students to communicate effectively through writing.

3.4. Legislative Implications

The future of chatbots and ChatGPT is inextricably linked to the development of legislation and policies that regulate their use. As these technologies become more prevalent, it is essential to ensure that they are used ethically and responsibly. Several countries have already started implementing legislation to regulate the use of chatbots. For instance, the EU's General Data Protection Regulation (GDPR) has provisions that require companies to obtain explicit consent from users before collecting and processing their data. Italy is the only country, aside from very closed-off ones like China, North Korea, and Iran, to ban ChatGPT because of data privacy issues [26]. In the next ten years, we can expect to see more countries adopting regulations and policies to protect users from potential harm caused by chatbots. Developing ethical guidelines and codes of conduct for chatbot developers and operators will become more prevalent. Companies will be expected to design transparent, explainable, and accountable chatbots to users. For example, chatbot developers will have to be clear about the limitations of their chatbots and disclose any biases that may affect the chatbot's decision-making process.

Moreover, as chatbots become more prevalent in sectors such as healthcare and finance, regulations will be necessary to ensure that they adhere to the necessary safety and security standards. For instance, in healthcare, chatbots will have to comply with medical privacy laws, and in finance, chatbots will have to adhere to anti-money laundering and anti-fraud regulations. Governments will likely establish regulatory bodies to oversee the use of chatbots in various sectors. These regulatory bodies will ensure that chatbots meet the necessary ethical, safety, and security standards. In addition, they will have the authority to investigate any complaints or violations and impose penalties on violators. The need for regulatory bodies is becoming more pressing as chatbots become increasingly sophisticated and integrated into our daily lives. However, regulations alone are not enough to address the ethical implications of chatbots. As the use of chatbots becomes more prevalent, there is a risk that they may contribute to the homogenization of online content. Chatbots may pirate existing books or articles without proper citation, amounting to plagiarism. Getty Images is suing Stability AI, creators of the popular AI art tool Stable Diffusion, over an alleged copyright violation [27]. Additionally, people may be less inclined to post quality content online if they believe it will be regurgitated by a chatbot, potentially leading to a less vibrant online space. It is crucial to develop ethical guidelines and codes of conduct for chatbot developers and operators to ensure that chatbots are used responsibly and do not compromise the quality and diversity of online content.

4. Conclusion

4.1. Super-Assistant

The concepts of artificial general intelligence, social isolation, and the displacement of jobs have elicited in me a significant interest in the potential impact of ChatGPT. While acknowledging the possibilities of exponential growth and the potential for change over the next decade, I have a more grounded outlook on the impact of ChatGPT. I think it is unlikely that the full implementation of the anticipated developments in legislation and policy regulating the use of chatbots and ChatGPT will be accomplished within a 10-year timeframe, given the complexities involved in their design, development, and deployment. However, one notable impact that can be expected in the near future is the emergence of the "Super-assistant," resulting from the new updates of GPT-4. As highlighted in section 3.1.a, the gradual introduction of "AssistanGPT" into new services will likely result in its eventual control over most of our online actions and impact on the physical world. It is conceivable that the day will soon arrive when users can command a personal assistant with the greeting "Jarvis here, at your service!"

This paper provided an overview of the potential advancements of ChatGPT and chatbot technology. In particular, I first covered the current state of ChatGPT and important technical aspects, limitations, and psychological effects that will help better estimate where it will go. I then

introduced how the technical, social, economic, and legislative aspects of life will be affected by the future ChatGPT. To conclude, I presented my final personal stance on the issue and the one thing I believe will have the most impact.

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