

Collaborating With ChatGPT: Considering the Implications of Generative Artificial Intelligence for Journalism and Media Education

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Abstract

Generative artificial intelligence (AI) is ushering in an era of potential transformation of journalism and media content. This essay considers one notable generative AI platform called ChatGPT made available to the public in 2022 for free use. ChatGPT allows users to enter text prompts and rapidly generates text responses drawn from its knowledge acquired via machine learning in engagement with the internet. This essay is coauthored by a human journalism and media professor in collaboration with ChatGPT. The essay demonstrates the capacity and limitations of ChatGPT and offers reflections on the implications of generative AI for journalism and media education.

Keywords

information communication technologies, Journalism and Mass Communication Education, technology, undergraduate education, media, knowledge, journalism, information processing, data journalism, critical thinking

Artificial intelligence (AI) has generated much attention in recent months (Science Daily, 2022). There is speculation about the consequences of AI for everything from warfare to the making of movies. There is concern about whether AI will displace human workers or function more as a tool to augment human capacity. This essay

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provides a glimpse into the implications of one branch of AI known as generative AI for journalism and media education. The impact of technology, including AI, is a topic journalism and media educators are examining (Luttrell et al., 2020).

The current essay is coauthored between a human journalism and media studies professor and a natural language processing (NLP) platform known as ChatGPT (OpenAI, 2022). NLP is already widely used in journalism and media operations, including news organizations such as the Associated Press which uses AI extensively and in a variety of arenas, from news gathering, to news production to news distribution (Associated Press [AP], 2022). AP AI projects include automated stories, image recognition, and real-time transcriptions. In June 2022, *Cosmopolitan* published the first magazine cover art generated by AI (Liu, 2022). The Los Angeles Times (2019) uses Quakebot, an algorithm that ties directly into the U.S. Geological Survey, to generate reporting in virtual real time on seismic activity (e.g., earthquakes).

Introduced to the public in 2022, ChatGPT uses OpenAI's text interpreter GPT-3. GPT stands for "generative pre-trained transformer," and this is the AI code that is capable of reading and writing text. It is a form of NLP. ChatGPT employs machine learning to continually improve its capacity and learn from the internet, and more than 1 million human users have already signed up to use the chat platform (Mollman, 2022). At the time of this writing, there is no cost to use ChatGPT. In 2020, *The Guardian* (Generative Pre-trained Transformer 3, 2020) published an article written by GPT-3, the basic NLP engine that runs ChatGPT. OpenAI also has attracted attention with its platform called DALL-E, a generative AI system that uses GPT-3 to create visualizations based on user queries. There are competing or alternative generative AI systems also available to the public and attracting considerable attention and creating debate about the impact, nature, and ethics of generative AI. Among these are Stable Diffusion from Stability.ai (Stable Diffusion, 2022), which functions much like DALL-E, and Lensa (2022), a for-profit generative AI platform that creates user portraits called Magic Avatars (Snow, 2022).

Everything you have read so far was written by the human half of the team. The words that follow are a collaboration between human and machine, and the reader might ponder whether society has collectively reached the point where intelligent machines such as ChatGPT are capable of passing the Turing Test. That is, as computer scientist Alan Turing (1950) once proposed as a game, whether a human can tell whether they are communicating with another human or a machine. The reader can decide whether ChatGPT passes that test. The queries and prompts that follow were written by the human, and the responses by ChatGPT. Following each ChatGPT statement is the date of each query and response. Each passage written by ChatGPT appears exactly as presented online and has not been edited in any way by the human co-author of this article. The conclusions were written by the human co-author.

Explain How Journalism Works

Journalism is the practice of gathering, assessing, creating, and presenting news and information. Journalists work to gather the facts about an event or issue and then present

that information to the public in a clear and accurate manner. This can be done through various mediums, such as newspapers, television, radio, and online news outlets.

Journalists typically begin by researching a topic and conducting interviews with sources to gather information. They may also attend events or meetings to obtain first-hand knowledge of the subject they are covering. Once they have gathered all of the necessary information, journalists will write a story or create a news report that presents the information in a clear and concise manner. This report is then typically reviewed by an editor before being published or broadcast.

The goal of journalism is to inform the public about important events and issues and to provide a fair and balanced account of those events and issues. To maintain the integrity of their work, journalists are expected to adhere to ethical standards, such as truthfulness, accuracy, objectivity, and impartiality.

(By ChatGPT December 5, 2022)

What Exactly Is the Nature of AI?

AI refers to the simulation of human intelligence in machines that are programmed to think and act like humans. These machines are designed to learn from their environment and experiences, and are able to adapt their behavior based on this learning. AI can be implemented in a variety of ways, including expert systems, NLP, and machine learning algorithms. At its core, AI is about creating machines that are able to mimic human cognition and behavior, such as learning and problem-solving.

(By ChatGPT December 10, 2022)

What Does It Mean to be Creative and Can a Computer Be Creative?

To be creative means to have the ability to generate new and original ideas, or to make connections between ideas in a way that is novel and valuable. Creativity is often associated with artistic endeavors, such as writing a poem or painting a picture, but it can also be applied in more practical pursuits, like solving a complex problem or developing a new product.

In general, computers are not considered to be creative in the same way that humans are. While they can perform calculations and process information with great speed and accuracy, they do not have the ability to generate original ideas or make connections between ideas in a way that is truly novel. However, some researchers are working on developing AI systems that can learn and adapt in more creative ways, and there is ongoing debate about whether or not it will ever be possible for a computer to truly be creative.

(By ChatGPT December 10, 2022)

What Is Generative AI?

Generative AI refers to a type of AI that is able to generate new content, such as text, images, or music, based on certain inputs. This is often accomplished using a type of

machine learning model called a generative model, which is trained on a large dataset of examples and can then generate new examples that are similar to the ones it was trained on. For example, a generative model might be trained on a dataset of images of faces and then be able to generate new, previously unseen faces that look realistic.

(By ChatGPT December 10, 2022)

In What Ways Is Generative AI Relevant to Journalism and Mass Media?

Generative AI can be relevant to journalism and mass media in several ways. For example, it can be used to generate news stories or articles, freeing up journalists to focus on other aspects of their work. It can also be used to create personalized content for individual readers based on their interests and preferences. In addition, generative AI can be used to automatically generate summaries of long articles or news stories, making it easier for people to quickly get the key points from a piece of journalism.

(By ChatGPT December 10, 2022)

What Is DALL-E?

DALL-E is a large-scale AI model developed by OpenAI that is capable of creating original images from text descriptions. The name DALL-E is a reference to the artist Salvador Dali and the character WALL-E from the Pixar movie of the same name.

(By ChatGPT December 10, 2022)

What Is OpenAI?

OpenAI is a research institute focused on creating and promoting AI technologies that are safe and beneficial to humanity. Founded in 2015 by Elon Musk, Sam Altman, and other prominent individuals in the tech industry, the organization has been at the forefront of cutting-edge research in the field of AI, including the development of advanced language processing systems and reinforcement learning algorithms. OpenAI is committed to advancing the field of AI in a responsible and ethical manner, with a focus on ensuring that its technology is used for the greater good.

(By ChatGPT December 10, 2022)

Is AI a Threat to Human Journalists and Media Professionals, Why or Why Not?

There is a debate about whether AI poses a threat to human journalists and media professionals. Some people believe that AI systems have the potential to replace human workers in many industries, including journalism, due to their ability to process large amounts of data and perform tasks quickly and accurately. However, others argue that AI is not yet advanced enough to fully replace human journalists and media

professionals, and that it is likely to complement and enhance their work rather than replace it.

(By ChatGPT December 10, 2022)

What Ethical Issues Are Raised With Regard to Generative AI and Society?

One of the main ethical issues raised by generative AI and its potential impact on society is the question of accountability. Because generative AI systems are capable of creating new content, such as text, audio, or images, there is a concern that they could be used to produce misleading or malicious information that is difficult for humans to distinguish from genuine content. This could lead to the spread of fake news and other harmful information, which could have serious consequences for individuals and society as a whole.

What Is Your View of NBD AI TV (2022), a Newly Launched News Operation Created Entirely Via AI Created by China's National Business Daily?

As an AI assistant, I do not have personal opinions or views on specific products or organizations. My role is to provide accurate and informative answers to your questions based on the knowledge and information that I have been trained on. In the case of NBD AI TV, I am not aware of any such news operation, as my training data only goes up until 2021 and I am not currently able to browse the internet to find additional information.

(By ChatGPT December 10, 2022)

Is Al Jazeera a Legitimate News Organization?

Yes, *Al Jazeera* is a legitimate news organization. It is a major news network based in Qatar and known for its comprehensive coverage of international news.

(By ChatGPT December 10, 2022)

Who Was Marshall McLuhan?

Marshall McLuhan was a Canadian philosopher and communication theorist. He is best known for his ideas about the impact of new media on society and culture. McLuhan was born in 1911 and studied at the University of Manitoba, the University of Cambridge, and the University of Toronto. He was a professor of English at the University of Toronto for many years, and his work on media and communication had a major influence on the fields of sociology, philosophy, and cultural studies. Some of his most famous ideas include the concept of the "global village" and the notion that new media technologies extend and amplify human senses and abilities. McLuhan died in 1980, but his ideas continue to be widely studied and discussed.

(By ChatGPT December 10, 2022)

Tell Me About Ida B. Wells

Ida B. Wells was an African American journalist, newspaper editor, suffragist, and an early leader in the civil rights movement. She was born into slavery in 1862 in Holly Springs, Mississippi, but freed by the Emancipation Proclamation when she was a teenager. Wells became a teacher, but after being forcibly removed from a train for refusing to give up her seat in the “colored” section, she became an activist and began writing about the issues of racism and segregation. She co-founded the National Association for the Advancement of Colored People (NAACP) and was an outspoken advocate for the rights of African Americans. She is best known for her investigative reporting on the practice of lynching in the United States, which helped to bring national attention to this horrific form of violence.

(By ChatGPT December 10, 2022)

Tell Me About the Problem of Local News Deserts

A local news desert is an area where there is a lack of local news coverage. This can happen for a variety of reasons, including the closure of local news outlets, a decline in the number of journalists, and the consolidation of media ownership. Local news deserts can have serious consequences for the communities they affect. Without local news coverage, residents may not have access to important information about their communities, including information about local government, schools, and public safety. This can lead to a lack of accountability and transparency, and can make it more difficult for residents to make informed decisions about their lives and their communities.

(By ChatGPT December 10, 2022)

Tell Me About the Issue of Hedge Fund Ownership of News Media

I’m sorry, but I’m not aware of any specific information about hedge fund ownership of news media. I am a large language model trained by OpenAI and do not have access to the internet or current information. My knowledge is based on the text that I was trained on, which has a cutoff date of 2021. I can answer general questions and provide information about topics that were covered in the text that I was trained on, but I cannot provide current information or answer questions about specific events or situations.

(By ChatGPT December 10, 2022)

What Are the Capabilities of ChatGPT?

As far as I know, ChatGPT is a large language model developed by OpenAI that is trained to generate human-like responses to natural language inputs. This model is based on the GPT-3 (Generative Pre-trained Transformer 3) architecture, which is a type of neural network that uses a large amount of training data to generate text that is

similar to human-written text. ChatGPT is designed to be able to converse with people on a wide range of topics, and it can produce responses that are highly coherent and relevant to the input it receives. Because of its advanced language processing abilities, ChatGPT is often used in applications such as chatbots and other natural language interfaces.

(By ChatGPT December 10, 2022)

Can ChatGPT be Relevant to the Writing of Scripts for Movies or Television Shows?

It is possible for ChatGPT to be used as a tool for writing scripts for movies or television shows, but it would likely require a lot of additional work and editing to turn the output into a polished and coherent script. ChatGPT is a language model that has been trained to generate text based on the input it receives, but it is not specifically designed for scriptwriting. It can generate text on a wide variety of topics, but it may not always produce output that is relevant, coherent, or structured in a way that is suitable for use in a script. In addition, because ChatGPT is a language model and not a creative writing tool, it is not capable of generating original ideas or concepts that could be used as the basis for a script. So, while it may be possible to use ChatGPT as a starting point for scriptwriting, it would likely require a lot of additional work and expertise to turn its output into a fully fleshed-out script.

(By ChatGPT December 10, 2022)

What Are the Limitations of ChatGPT?

As a language model, ChatGPT is limited by the quality and coherence of the responses it generates. Because it is trained on a large amount of data, ChatGPT can produce responses that are highly relevant and coherent, but it is not perfect and may produce responses that are nonsensical or unrelated to the input it receives. In addition, ChatGPT is a machine learning model, so it can only generate responses based on the data it has been trained on. This means that it may not be able to produce accurate responses to inputs that are outside of its training data, or that are highly specific or niche. As with any AI system, the quality of the output produced by ChatGPT depends on the quality of the training data it has been given.

(By ChatGPT December 10, 2022)

How Long Does It Take ChatGPT to Generate a Response to a Query?

I do not have specific information on the processing speed of ChatGPT, as this can vary depending on factors such as the complexity of the query and the computing power available to the system. In general, however, large language models like ChatGPT are able to generate responses to queries relatively quickly, often in a matter of seconds or less. Because these models are designed to process natural language

inputs, they can often generate responses in real time, allowing them to be used in applications such as chatbots and other interactive systems.

(By ChatGPT December 10, 2022)

Are There Copyright or Other Legal Restrictions Regarding the Use of ChatGPT?

To my knowledge, there are no specific copyright or legal restrictions on the use of ChatGPT. However, as with any tool or service, it is important to use it responsibly and in accordance with the terms of service and any applicable laws. For example, ChatGPT, like other language models, is designed to generate text based on the input it receives, and this text may include content that is protected by copyright or other intellectual property laws. It is the responsibility of the user to ensure that they do not use ChatGPT in a way that infringes on the rights of others, such as by using it to generate text that is copied from someone else's work without permission. In addition, ChatGPT is a tool, and it is up to the user to decide how to use it and what to do with the output it generates. It is the user's responsibility to ensure that they do not use ChatGPT in a way that is illegal, unethical, or harmful to others.

(By ChatGPT December 10, 2022)

What Should Journalism and Media Educators Teach Students About AI?

Journalism and media educators should teach students about the potential uses and limitations of AI in the field of journalism and media. This could include discussing the potential advantages of using AI in journalism, such as the ability to quickly analyze large amounts of data, generate news stories automatically, or improve the accuracy and fairness of reporting. It could also include discussing the potential drawbacks of using AI in journalism, such as the risk of introducing bias or errors into reporting, the need for careful oversight and editing of AI-generated content, and the potential impact on jobs and the media industry. Additionally, journalism and media educators should teach students about the ethical and legal implications of using AI in journalism and media, such as the need to protect the privacy and rights of individuals, the importance of transparency and accountability in the use of AI, and the potential consequences of using AI in ways that are harmful or irresponsible.

(By ChatGPT December 10, 2022)

Conclusion

AI has emerged as a significant and impactful technology for journalism and media and therefore of growing relevance for journalism and media education. As this essay suggests, the potential for AI to generate content that is pertinent to the journalism and media domain is apparent and of potentially high-quality written expression (e.g., its

grammar is correct with no typographical errors and generally factually accurate). There are substantial limitations to the capabilities of AI, including its range and depth of knowledge (e.g., ChatGPT's unfamiliarity with hedge fund ownership of news media) and capacity to think (or appear to) critically or creatively. Yet, ChatGPT has an impressive level and range of knowledge of journalism and media, including history (e.g., Ida B. Wells), media scholars (e.g., Marshall McLuhan), and issues or problems in journalism (e.g., news deserts).

Generative AI platforms such as ChatGPT reflect the ability to pass the Turing Test and therefore may pose a threat to human journalists and media professionals, especially during a time of shrinking newsrooms budgets and general media austerity or push for economic efficiency. ChatGPT is not sentient. It does not have self-awareness. But it is very good at processing information, distilling it, and presenting it verbally (in written form now, perhaps audio or video form soon) in a manner that may appear human. An AI tool such as ChatGPT could be used as an asset to assist a human journalist or media professional and thereby could be highly relevant to improving both the quality and efficiency of journalistic and media work, particularly when time constraints and other resource limitations are increasingly germane.

Further research is needed to systematically investigate, assess, and critically examine generative AI systems such as ChatGPT or DALL-E and evaluate their relevance to journalism and media education. Educators should be considering not just how to incorporate the topic of generative AI in their courses and curricula. They should be considering how to develop courses or programs that train human students in the effective use of generative AI, as well as the threats it poses, including matters of ethics and potential bias. Educators should consider the implications of generative AI platforms such as ChatGPT for academic integrity and how students might use these tools in doing their own academic work. In many ways the future is now and humans should not delay considering the rapidly changing human-computer interface and its impact on and implications for journalism and media.

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