CleverByte

COMPANY HANDBOOK

ENG 412
MADDY EVANS, REECE
HOLLOWELL, CHARLOTTE
HUDSON

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TABLE OF CONTENTS

HOW TO USE THIS BOOK

CleverByte: *Sharpening the future*

If you are reading this, you have been hired as the newest employee at CleverByte. We are so excited to have you on board with us and hope to make the transition into your new position seamless. This book is a key part of that process.

CleverByte is dedicated to assisting our clients in implementing artificial intelligence (AI) systems into their ecosystems in a fluid and frictionless way. We believe that AI is the future of business, and are dedicated to providing the tools necessary to bring that future to as many places as possible. Some of the companies we've worked with include Disney, Snapchat, Google, and many more, with projects in the works at all times.

We want our employees to understand their place at CleverByte, as well as get an idea of the wider scope of what we do. To that end, we've put together this employee handbook to help integrate you into our culture. Within its pages, you'll find an overview on the history and technology behind AI, learn about some of the ways AI can be most effectively utilized, and hear about some of the ways we've already been rolling out AI into several key industries. These sections should give you the background information you need to accomplish your role here, as well as let you know how we represent ourselves.

Of course, we like to keep ourselves humble, and to that end we've included a few sections that show how we're dedicated to improving our company and what we do. This includes candid employee testimonials that share experiences our own workers have had with AI. We also want to demonstrate what our AI systems are capable of, and have given you some fictional stories written by our machine learning algorithms. We also understand that we are not perfect, and have given a few different ways we are actively working to improve ourselves both practically and morally.

Finally, at the very end you'll find a special note from our founder and CEO Sophie Malloy. Once again, we are thrilled you're here at CleverByte, and we look forward to seeing what you accomplish with us.

WELCOME TO THE COMPANY

Welcome to CleverByte! We are so excited to have you on board. In this handbook you will find everything from employee testimonials to artificial intelligence-generated content itself to help you fully prepare for the integration of AI into the workforce. This handbook is dedicated to giving you full knowledge of what exactly is AI, how AI will be implemented not just in our company but also in the real world, and a few words of advice from your brand new co-workers and the CEO themself.

At CleverByte, our goal is to sharpen the future.

We hope this handbook serves as a useful tool in the transition into our company. Feel free to read as much as this handbook as possible to help guide you along the way into a hopeful many years with us. As always, feedback is welcome.

Before you dive any further into our company, it is essential you understand AI and all of its factors. The two parts of this section include all of the information you will need for the general basis of what AI is and how it has impacted our world today. Written by two of our employees, this section is a great introduction to being a part of our team.

Thanks again for joining CleverByte.

Artificial Intelligence: Defined and Explored

Elizabeth Martin
Technology Consultant

"I'm increasingly inclined to think that there should be some regulatory oversight [regarding artificial intelligence (AI)], maybe at the national and international level, just to make sure that we don't do something very foolish," explains Elon Musk, CEO of Tesla Motors. "I mean, with artificial intelligence, we're summoning the demon" (as cited in Marr, 2021).

Musk's apprehension of unregulated AI provides a backdrop to a broader discussion of the field of AI. This essay examines the birth and evolution of AI alongside the escalating risks posed by its rapid growth.

Defining AI

Marvin Lee Minsky, computer scientist and co-founder of the Massachusetts Institute of Technology's AI laboratory, broadly defines AI as "the science of making machines do things that would require intelligence if done by men" (as cited in Dennis, 2019). Minsky's definition emphasizes the fundamental aspiration of AI: to bridge the gap between human cognition and machine functionality. Likewise, International Business Machines (IBM) defines AI (2023) in more detail:

Artificial intelligence is a field, which combines computer science and robust datasets, to enable problem-solving. It also encompasses sub-fields of machine learning and deep learning…These disciplines are comprised of AI algorithms which seek to create expert systems which make predictions or classifications based on input data. (para. 7)

As IBM mentioned, there are two prominent subfields of AI: machine learning and deep learning. Simply put, machine learning systems learn from data, thus improving performance success over time. Deep learning systems comprehend complex and unstructured data, excelling in tasks involving large datasets and intricate patterns. Ultimately, AI harnesses data to make predictions, classifications, and decisions, which can be a valuable tool across industries.

AI's Birth and Progression

In 1950, British cryptanalyst Alan Turing explored the mathematical possibility of AI in his essay "Computing Machinery and Intelligence." Turing proposed the question, "Can machines think?" and suggested the potential for computers to simulate human intelligence by adjusting algorithms.

Unfortunately, Turing's work stopped there—in 1950, computers could not store commands, only execute them.

Years later, Allen Newell, Cliff Shaw, and Herbert A. Simon verified Turing's inquiries with Logic Theorist, a computer program designed to prove mathematical theorems using heuristic search. Logic Theorist demonstrated that a computer program can replicate human-like mathematical reasoning, ultimately making Logic Theorist a pioneer in AI history ("Logic Theorist," 2021).

For the next fifteen years, AI progressed exponentially; computing advanced tenfold, resulting in faster processing speed and storage capacity. This allowed for more complex computations, a critical component of AI pattern recognition and decision-making. Computers also became increasingly affordable and accessible, thus democratizing AI research and prompting AI innovations. Machine learning progressed as researchers developed intricate algorithms, such as neural networks and decision trees, enabling AI to learn and adapt effectively.

In 1970, Marvin Minsky announced that in "three to eight years, we will have a machine with the general intelligence of an average human being" (as cited in Anyoha, 2017). However, despite AI's booming success years prior, scholars' high expectations exceeded AI's technological capabilities; computers simply could not process and store enough information. Ultimately, AI's stagnant growth led to reduced research and government funding.

Nevertheless, ten years later, AI resurged due to progress in computer science research and Moore's Law, which, according to Investopedia, "implies that computers, machines that run on computers, and computing power all become smaller, faster, and cheaper with time, as transistors on integrated circuits become more efficient" (Tardi, 2021). In short, scholars can expect the speed and capability of computers to increase as time progresses. Furthermore, pivotal researchers like Yann LeCun and Jürgen Schmidhuber developed advanced algorithms such as deep learning, which prompted continued AI advancements in the 2000s. MathWorks describes deep learning as "a machine learning technique that teaches computers to do what comes naturally to humans: learn by example" ("Deep Learning," 2019). Deep learning systems emerged as a dominant paradigm in AI and have since had breakthroughs in pattern recognition, natural language processing, and enhanced user advancement.

Future Implications

AI has been disseminated into various fields: healthcare, education, cybersecurity, entertainment, and more. While Artificial Narrow Intelligence (ANI) applications like spell checking and weather forecasting make life easier, there are dangerous implications for Artificial General Intelligence (AGI) implementation. Musk is quoted on Edge.org, saying, "The pace of progress in artificial intelligence (I'm not referring to narrow AI) is incredibly fast. Unless you have direct exposure to groups like Deepmind, you have no idea how fast—it is growing at a pace close to exponential.[] The risk of something seriously dangerous happening is in the five-year time frame. 10 years at most." (as cited in Marr, 2021). Musk raises a fair point—AGI has the potential for quick, widespread impact, as AGI makes decisions and takes action without direct human control. For instance, the da Vinci Surgical System assists doctors in surgical specialties, including urology, gynecology, cardiothoracic surgery, and general surgery ("Robotic Surgical Systems," 2019). While this masquerades as an AGI win, this technology presents ethical dangers of AGI integration. New York Times tech columnist Nick Bilton theorizes, "The upheavals [of artificial intelligence] can escalate quickly and become scarier and even cataclysmic. Imagine how a medical robot, originally programmed to rid cancer, could conclude that the best way to obliterate cancer is to exterminate humans who are genetically prone to the disease" (as cited in Marr, 2021). While the aforementioned may sound extreme, Musk and Bilton's

perspectives prompt a broader question: Should AI be regulated? AI scholars must address this question and consider cautious approaches to AI to maximize its positive impact and minimize potential hazards.

A New Age

Braelyn Binkowski
User Experience Researcher

In every academic year, "Syllabus Week" seems to play out in an almost scripted fashion. The familiar expectations are endlessly reiterated: attend class, maintain academic integrity, and avoid plagiarism. As professors reemphasize these age-old rules, the scene unfolds predictably, with coffee-fueled students nodding off into open laptops. The repetition of the same instructions year after year creates an all too familiar narrative.

Yet, the fall semester of 2023 shattered this monotonous cycle. Within each syllabus I received, a striking addition stood out—a prominently bolded section addressing plagiarism concerning the use of AI. This alteration was a response to the growing popularity of accessible AI programs, such as ChatGPT.

The sudden and widespread integration of accessible AI into the academic sphere has sparked a blend of fear and excitement. While the potential advantages of AI in education are remarkable, they are accompanied by a myriad of ethical concerns that cannot be ignored.

The Greatest Dream and Worst Nightmare

For some, the introduction of this novel technology was exhilarating; for others, it was a nightmare. Professors expressed notable concerns regarding the integration of AI into academia, chiefly revolving around the issue of transparency. The growing sophistication of AI raises worries about its potential to evade detection by instructors, potentially jeopardizing the authenticity of students' work. Instructors strongly value the importance of students generating genuine, original ideas and content. This technology provides significant potential for overreliance on AI-generated responses.

On the flip side, students were elated by the possibilities that AI presented. Tedious hour-long assignments could now be condensed into a brisk 30-minute session. Some students, perhaps a bit too enthusiastic, discovered ways to expedite the process by inputting assignment prompts into ChatGPT, copying and pasting the responses into a document, and swiftly moving on. This newfound efficiency was affording students the luxury of time for socializing and self-care, a concept previously foreign to many.

As the use of AI gained momentum in early 2023, a crucial realization emerged: a delicate balance must be struck between using AI as a supplementary tool and allowing it to become a complete replacement for traditional academic efforts. Precisely defining and navigating this line poses a

significant challenge. To aid in the definition of this line in the sand, I have developed The Ten Commandments of AI Usage.

The Ten Commandments of AI Usage

1. *Thou shalt not use AI to complete projects in their entirety.*
In a world where AI can seem all-powerful, remember that humans still have a unique touch. Embrace your creativity and problem-solving skills as you work with AI, and let it be a tool, not the entire toolbox.

2. *Thou shall use AI as an aid, never as a replacement.*
AI is your trusty sidekick, not the superhero. Let it assist you, but don't let it steal your spotlight. Your ideas and insights are the stars of the show.

3. *Thou shall be transparent with their use of AI technology.*
Honesty is the best policy, even in the digital age. Be open about when and how you employ AI in your work.

4. *Thou shalt critically evaluate and refine AI-generated results, adding personal insights and creativity.*
AI may help lay the foundation, but your personal touch is what turns it into a masterpiece. Incorporate your creativity into AI's output to make it truly yours.

5. *Thou shalt prioritize learning and understanding over expediency, using AI to enhance comprehension.*
Knowledge is power, and AI can be your ally in understanding complex topics. While the allure of using AI as a shortcut may be tempting, always bear in mind: haste in learning is often an adversary of true understanding.

6. *Thou shalt maintain a healthy skepticism, not accepting AI-generated information as absolute truth without verification.*
AI may be smart, but it's not infallible. Always cross-check and verify its information.

7. *Thou shalt not allow AI to perpetuate biases, ensuring its application aligns with principles of fairness and inclusivity.*
AI can amplify the biases it learns. Be a responsible gatekeeper, ensuring its use aligns with the principles of fairness and inclusivity. Let AI be a force for good, not division.

8. *Thou shalt use AI in the spirit of innovation and progress, always aiming to enhance the human experience rather than diminish it.*
AI should be a beacon of progress, not a harbinger of doom. Innovate, improve, and use AI to elevate the human experience. After all, we're the ones in charge.

9. *Thou shalt advocate for responsible and ethical AI usage, promoting academic integrity and genuine intellectual growth.*
Spread the word on responsible AI use. Always be a champion for academic integrity and genuine intellectual growth.

10. *Thou shall adhere to their instructor's wishes in regard to AI usage.*

When it comes to AI, the instructor's word is law. Always respect their guidelines and requirements, and you'll be a model student in the realm of AI ethics.

Conclusion

In the age of AI, we find ourselves perched on a delicate precipice, balancing the incredible potential it offers in academia with the cautionary tales of over-reliance and misuse. *The Ten Commandments of AI Usage* serves as a roadmap for this new journey.

As we tread this fine line, we must acknowledge the immense benefits AI brings to the table, aiding in learning and idea formation, and even offering insights that we might have otherwise overlooked. It's the digital companion we've always dreamt of.

 As with any powerful tool, however, the caveat is clear: over-reliance on AI can lead to the erosion of our creativity and critical thinking skills. The danger lies in blindly accepting AI-generated results as gospel and in letting convenience triumph over depth and detail.

In the end, we can dance with AI, but we should never forget who leads the waltz. It's us, the students, the scholars, the seekers of knowledge, who must remain at the helm. AI is not the captain; it's the navigator, helping us chart unexplored territories of thought. Let's keep our hands firmly on the wheel and use AI as our compass, ensuring that its potential is harnessed for the greater good of academia, preserving academic integrity, and nurturing the true spirit of intellectual growth in the minds of future scholars.

GETTING SETTLED

By now, you have decided you have wanted to continue to read our handbook, and we believe you have made the right decision. Before you dive any further into our company, you feel comfortable in your place. We have offered up some words of advice in this section, with two texts written by our employees as well. This section will help you with understanding how you personally can incorporate AI into your job, and the most necessary and useful AI softwares to get you settled and comfortable in your new position.

Tips For Using Text-Generating Artificial Intelligence As A Writer's Tool

Shane Criss
Creative Writer

By now, you've likely come across a number of different opinions, interpretations, and ideas about AI, ranging from positive to negative and pessimistic to optimistic. I've noticed, especially in the most recent conversations we're having with regard to AI like ChatGPT, there is this specific trend of people feeling that they need to be on one side or the other. We don't view this argument as a spectrum, but rather, as something with two sides and no in between.

I'd like to present a middle ground: AI can make for a useful tool without replacing writers and other workers. Although it's easy to view these text generators as though they have only the purpose of generating text, that's not necessarily the case; in reality, they can be massively helpful in a number of other ways. Consider the database that an AI like ChatGPT has at its disposal. Don't you think that could serve some use, without just letting it write our movies and novels for us?

In this chapter, I'm going to present to you a few ways you can use text-generating AI—specifically, ChatGPT, for the sake of brevity—as a tool for writers, rather than a replacement. Think of this as a list of just a few loosely connected tips; hopefully, these will lead you to realize some of the other advantages your use of AI can provide.

Note that these tips are primarily aimed at writers of any sort; if you are not in a position where you perform any kind of writing-related task, you may not find much help here.

More Than Just Synonyms

Any writer can relate to the common problem of repetition; we have a tendency to get stuck using the same words over and over again to the point where the audience notices and suddenly, it's a problem. If you're a writer yourself, you've likely gone through the process of looking up "synonyms to _____" a thousand times. Well, ChatGPT can help you out.

For this, just think of ChatGPT as an advanced synonym generator—ask it for synonyms for any word you'd like! This will result in a similar list to what you'd receive on any other website, but keep in mind, you're not just using a search engine right now; you're having a dialogue with an artificial intelligence. Be more specific! Modify the parameters of your request to meet your needs.

Like this:
- "Give me ten synonyms for lazy, and provide a definition and an example sentence for each one."
- "Give me some fancy, eloquent synonyms for mouse."
- "Give me synonyms for the word paper that all start with the letter C."

This revelation has helped me tremendously with my own writing. I hope you'll be able to find a use for it for your own!

Generating Names And Titles

ChatGPT draws from an enormous library of information. It's important to note that, although ChatGPT has such a large database, it can often get the facts wrong. However, there's a lot of information that doesn't entirely rely on fact that it can surely provide! If you're a creative writer, you've likely experienced issues with things like trying to name your characters or locations, or perhaps you're looking to start a group or organization of some sort, but you just can't seem to figure out what it should be named. Sometimes, googling "baby names for boys" or "random name generator" just doesn't quite get the job done. This is a place where ChatGPT can help.

As you may have realized in the Synonyms section, ChatGPT can work from a more specific set of criteria than a normal search engine—try that here:
- "Give me names for boys that are three syllables long and come from the Bible."
- "Generate some names for a punk-rock band that makes songs about paranormal topics."
- "List fifteen ideas for names of restaurants that primarily serve New York-style pizza."

I don't know about you, but personally, I'd be very interested in listening to Phantom Frenzy's new album. Though, be careful when asking for stuff like syllables—unfortunately, ChatGPT can't seem to tell that "Ezekiel" and "Samuel" aren't quite hitting the three syllable mark. Always check your information before you use it. Also note, when generating names for locations or organizations, ChatGPT isn't likely to give you anything especially spectacular or inspired, but it's a great place to start if you just need some inspiration yourself!

Formatting And Menial Tasks

Here's a fun way to spend your Saturday: you've just realized that you have a sheet of numbers that all need to be written out as words. You'd be surprised how often writers and editors are faced with menial chores like this that can take hours to do by hand, while also taking many more hours off your lifespan from sheer boredom. Luckily for you, there's an AI that can do it for you. Try typing a list of numbers into ChatGPT, and then tell it to spell them all out. It'll do it in moments!

Although you likely don't find yourself having to spell out a long list of numbers every day, this same idea can be applied to a number of different formatting or editing tasks. Imagine you have a list of data, and you need to change all the hyphens to em dashes, or you need to remove all of the periods, or you need to change all of the swear words in a paragraph to something more polite. ChatGPT can do all of this for you! Save yourself the time it would take you to perform such a tedious chore, and let the robot do the job for you so you can spend your time doing something better.

Discovering Online Resources

Here's something a little more interesting. For one reason or another, if you spend a lot of time online, you've likely had some need to hunt down some online resources, and sometimes, it can be hard to find what you need using Google or a similar search engine. Thankfully, this is a place where ChatGPT can help.

I'm personally a self-employed freelance creative writer; part of that job is finding places to post your completed commissions so people can see your work and discover your services. ChatGPT was massively helpful for me here. I'm occasionally asked to write fanfiction, and since I want to reach the widest audience possible, I needed to find every website I could possibly post it to. I asked ChatGPT this question: "Can you give me a list of websites for posting fanfiction?" And ChatGPT delivered. After that, I asked again, but I asked for more obscure choices this time, and then for choices related to specific series and genres, and each time, I found something new with a unique audience I could explore. This is just one example—just think about how this could possibly help you!

Though, do keep in mind, there is an extremely important limitation with this: ChatGPT has only collected data posted before September 2021. It won't be able to tell you about any newer websites or resources. It can still be helpful, as many websites from before 2021 are still around and are still massively popular partially due to being around for so long, but keep in mind, you'll still have to figure out some of the newer stuff on your own.

Conclusion

I hope these tips were able to open your mind to the possibility that text-generating AI gives us! Even if these few, very specific ideas aren't exactly something you can personally use, I still hope I was able to make you realize how potentially useful artificial intelligence can be as a tool without replacing writers. Don't let this list be your limit—when you find yourself facing a problem while working on some writing, keep in mind that AI might be able to give you the solution you need!

Ranking and Assessing AI

Faith Carver
Research Specialist

About a month ago, I was on my way to a Cincinnati Reds game with my friends. I was sitting in the back seat with two other girls and my friend next to me had her phone and iPad, the iPad opened to Canvas, and her phone opened to Snapchat. She was communicating with the Snapchat AI. She had homework to finish, and knowing she wouldn't have time during and after the baseball game, she asked the Snapchat AI to answer her homework questions. Sitting next to her I thought to myself, *I wonder if there would be a more efficient AI service to use to do homework than Snapchat*. My mind assumed that because an AI software was embedded in a social media app, its purpose would be for something more casual than academics. This raised other questions: are different AI software that exist *actually* different in their design? And if they are indeed different, which one is the best for different purposes? In this essay, I plan to rank each AI and assess which one is tailored to a specific usage. I also want to discover if there is an AI that ranks as "the best" among other software offered.

Ranking AIs

#1
The Bing Chatbot: The Bing Chatbot is considered "the best AI" by the tech website, ZDNET ("The BestAiChatbotsof2023:ChatgptandAlternatives."ZDNET.AccessedNovember29,2023.https://www.zdnet.com/article/best-ai-chatbot/). In an article ranking AI software, ZDNET likes the Bing Chatbot because of its access to the internet, links to backsources, and use of the most advanced software. The article goes on to explain that the Bing Chatbot fixes issues that another AI software, ChatGPT, does not fix; including having access to current events and linking back to the sources it retrieved its answer from. Bing Chatbot is also a free software, making it accessible to all users.

#2
ChatGPT: ChatGPT has notable writing skills, STEM knowledge, and conversational skills, however, the software is not always connected to the internet. ChatGPT is convenient when used for STEM problems as it can write and debug code, and even solve complex math equations. Despite this ChatGPT is sometimes at a usage capacity due to its immense popularity. ChatGPT also offers a Plus program where subscribers can access advanced features for $20 a month, unlike the Bing Chatbot which offers all those advanced features for free.

#3

The Google Assistant: The Google Assistant is a versatile and intelligent AI service that excels in answering questions, providing information, and assisting with various tasks. It seamlessly integrates with Google's other offered services, making it easy to access across many devices. With its natural language and processing capabilities, Google Assistant can understand and respond to complex queries, making it a reliable and helpful AI service.

#4

Jasper: Jasper is an AI considered to be the best for businesses and marketers. The software has over 50 different writing templates, copyediting features, and a plagiarism checker. The software is pricey, however, and it focuses only on written text. You can prompt the Jasper AI to write what you ask it to be written, just like ChatGPT.

#5

Snapchat AI: In a chat conversation the Snapchat AI can answer questions, provide advice, help plan trips, make grocery lists, make suggestions, and provide emergency services. The Snapchat AI is powered by OpenAI's ChatGPT technology, "with additional safety enhancements and controls unique to Snapchat" (help.snapchat.com). On the Snapchat help website a warning is provided for users who plan to use the AI service. It states, "We're constantly working to improve and evolve My AI, but it's possible My AI's response may include biased, incorrect, harmful, or misleading content. Because My AI is an evolving feature, you should always independently check answers provided by My AI before relying on any advice, and you should not share confidential or sensitive information." For an AI associated with a fun, conversational app like Snapchat to have a warning along with it raises concern. Unlike other AI softwares whose sole existence comes with an academic implication, Snapchat's AI exists in a more casual, social manner; potentially opening users up to misuse or abuse. Snapchat also stores the data sent to the "My AI" until it's deleted by you, the user. Be careful what you send to your Snapchat AI!

Differentiating Types of AI

In my research, I found definitions of AI, AI chatbot, and the AI writer. An AI chatbot and an AI writer are essentially the same entity. An AI chatbot refers to a type of artificial-intelligence-powered computer program that is capable of generating written content from a user's input prompt. AI chatbots are capable of writing anything from a song to an essay upon the user's request. The extent of what each chatbot is specifically able to write about depends on its individual capabilities including whether it is connected to a search engine or not. The main difference between an AI chatbot and an AI writer is the type of output they generate and their primary function. An AI writer's output is in the form of written text that mimics human-like language and structure. The AI chatbot is designed to conduct real-time conversations with users in text or voice-based interactions. The primary function of an AI chatbot is to answer questions, provide recommendations, or even perform simple texts, and its output is in the form of text-based conversations.

Despite these definitions of how to distinguish between AI chatbots and AI writers, the development of ChatGPT, and other increasingly advanced AI technologies, some AI are now capable of generating text-based responses that mimic human-like language and structure like the AI writer. This is blurring the lines between different kinds of AI software.

Final Thoughts

Through my research, I've learned that most, if not all, AI software was designed for a similar purpose: to be asked questions and to generate accurate answers. After researching the different AI software offered to the public, I realized that different AIs can specialize, or produce more efficient results for a specific purpose. At their core, AI shares one common intention. One day AI could develop a different determination, but we will have to wait and see.

It is also widely regarded that with its advanced technology through the use of a GPT-4 network (a GPT-4 network is a performance enhancing improvement, similar to new updates for your iPhone or cellular device), its access to the entirety of the internet, its ability to link back to its sources, and its $0 price, the Bing Chatbot is the best AI to use for most any purpose. To answer my question that sparked the topic of this piece, the Snapchat AI is powered by ChatGPT and is essentially identical in its makeup. The only difference is that users can edit the AI to appear as whoever they please, which invites a series of other potential problems.

If you're trying to use AI to help you with a homework assignment, I'd try the Bing Chatbot instead of the Snapchat AI. Overall, when using AI, keep in mind that AI may not always provide the most accurate or reliable information. It is important to fact-check the results you generate through AI. Use critical thinking when engaging with AI models. The "best" AI service can vary depending on your individual preferences and needs, so try a few options from my ranking system and see which one suits your needs best.

IMPLEMENTATION

Now that you've settled into your role at CleverByte and have all the necessary background, we can start getting you familiar with what we do here. The following three sections detail how we've started involving AI into many different industries and businesses. These chapters are from outside sources commenting on our work, so they contain no internal bias and instead offer an objective perspective on what we're doing.

Hollywood is one of the most promising industries for AI implementation. In the *Entertainment* section, you'll hear about how we're assisting major studios like Disney and giving them more tools to help make their content faster and cheaper.

Education is another area that we believe can be streamlined and improved with our AI tools. Here, we talk about ways students can take advantage of our services and hear from some actual students giving their honest opinions on our services.

Finally, AI can potentially be a great help for people suffering from loneliness, as it allows them to simulate a conversation in whatever way they want. The *Personal Connection* section shows how we're working with companies like Snapchat to roll these AI features out to as many people as possible. We believe AI can be a great help to the world, and this is just one way we're doing our part.

As strikes continue in Hollywood, all eyes turn to AI

Reece Hollowell
Communications Director

In 2019, Disney filmed Cruella, its live-action reinterpretation of the 101 Dalmatians villain. While on set, Dariush Seif-Amirhosseini, a background actor in the film, was pulled aside.

Seif-Amirhosseini shared his experience on X (formerly Twitter).

"What happened was we were doing the shoot as normal, and members of crew would come up to about 2 or 3 background actors throughout the night and take them somewhere," Seif-Amirhosseini wrote. "I didn't find out that we were being taken to a trailer with a scanning rig until it finally became my turn" (as cited in Ojomu, 2023).

It turns out that Disney was scanning actors' likenesses while on set, and would then use those likenesses in other projects without the original actors being given compensation. This process involves a mixture of visual effects and artificial intelligence (or AI) to graft the actors into the new scenes.

"I didn't think much of it back then (we were told it was to make the crowds look bigger), but… yeah, wish that hadn't happened," Seif-Amirhosseini wrote.

This story, along with those from other background actors in the industry, were being shared around the same time members of the Screen Actors Guild (SAG) voted on July 14 to join the already striking Writers Guild of America (WGA). Among the many considerations the guilds were asking for, AI was a key component of both.

While the WGA strike concluded on September 27, SAG has continued to strike, largely due to the Alliance of Motion Picture and Television Producers (AMPTP) failing to recognize the guild's demands.

"We have negotiated with them in good faith, despite the fact that last week they presented an offer that was, shockingly, worth less than they proposed before the strike began," said a statement from SAG following a breakdown of negotiations on October 12 (as cited in KCAL-News Staff, 2023).

AI has been at the forefront of conversations in many industries, and film is no different.

The WGA asked for protections from studios using AI to generate story ideas or doctor scripts, while SAG is hoping to prevent studios from using the likenesses of actors without permission or compensation. While neither practice has become overly widespread yet, they are happening often enough for guild members to feel they need addressing.

Jason Vredenburg, associate professor at Stevens Institute of Technology, told Variety that the current attention being paid to AI is the result of a sudden understanding of how advanced the technology really is.

"For years, everyone has known AI was coming," Vredenburg said. "But when ChatGPT came out, everyone was shocked. They realized it was coming faster than anyone thought" (as cited in Spangler, 2023).

This fast adoption by the film industry has left those working day-to-day jobs scrambling to ensure they won't be made obsolete.

Justine Bateman, director and former Family Ties actor, highlighted how damaging this kind of technology could be to those whose income relies on constantly getting new jobs.

"AI can create a convincing simulation of a human actor, and the tech is improving at an alarming rate," Bateman said to Variety. "If they can do this with actors, they can do it with writers, directors, cinematographers—everyone. We'll be replaced with Frankenstein spoonfuls of our own work."

These concerns may sound like something out of a film Hollywood might have produced, such as Mission: Impossible - Dead Reckoning Part One, where a rogue AI threatens to disrupt the entire global political system. But those films are helping bring awareness to how dangerous AI could be if left unchecked, and even political leaders are starting to take notice.

President Joe Biden of the United States, who recently watched the latest entry in the Tom-Cruise-led franchise at Camp David, signed an executive order on Monday, Oct. 30, which is meant to address various concerns surrounding A.I. in a political capacity.

According to White House Chief of Staff Bruce Reed, Dead Reckoning's plot was a key part in the inspiration for this order.

"If he hadn't already been concerned about what could go wrong with AI before that movie, he saw plenty more to worry about," said Reed in an interview with Time (as cited in Boak and O'Brien, 2023).

While the problematic future AI poses Hollywood may not be on the same level as the world-threatening entity from Dead Reckoning, it does create the potential for disruption that would not only cost working people their jobs, but also significantly decrease the quality of content being put out by studios.

Disney, as seen with the example from the set of Cruella, has been fairly open to the possibilities afforded by AI, with chief executive Bob Iger saying in a post-earnings call in May that the company was actively pursuing ways to utilize AI in different aspects of its business.

"It's pretty clear that AI represents some pretty interesting opportunities for us, and some substantial benefits," Iger said. "In fact, we are already starting to use AI to create some efficiencies and ultimately to better serve consumers. Getting close to the consumer is a real goal of ours" (as cited in Goldsmith, 2023).

This became apparent to Disney+ subscribers who tuned into the service's original film Prom Pact, which went viral on X in part due to people sharing screenshots and videos of background actors who had clearly been digitally edited into the film.

While using effects to fill in the backgrounds of a scene is nothing new, given Disney's track record of failing to provide proper compensation for actors' likeness, people were quick to theorize this was due to an unwillingness to hire more extras in an attempt to save money.

Prom Pact, which was released in the middle of the still-ongoing SAG strike, is just one example of the kind of cost-cutting measures the guild is trying to fight back against.

Ultimately, the future of AI in Hollywood is still being determined. While WGA was able to negotiate protections for writers as a result of their successful strike, the AMPTP has continued holding out on SAG.

Works of fiction still have incredible power, and AI is no longer just a theoretical futuristic danger. It seems Hollywood might want to take a cue from the films they have a hand in producing like Dead Reckoning and come to terms with the reality that AI is no replacement for a human touch.

How can we avoid an AI takeover?

Sydney Ball
Market Researcher

This summer, several television shows and movies halted their writing and production following the Writer's Guild of America's (WGA) strike in May. Several movies and shows announced to be released in the next few years froze their development before they could get a foot off the ground. Late-night shows like The Late Night Show with Stephen Colbert and Late Night with Seth Meyers stopped filming, and daytime television's quick turnaround in between shows didn't allow them to get far in production without their writers. Saturday Night Live canceled the last few episodes of season 48 once the strike started. Even award shows were canceled, or will be continuing unscripted. There are many reasons for this strike, including better pay and an increase in health funds, but one glaring problem looms over the heads of writers everywhere: artificial intelligence (AI). It's a threat towards writers who live paycheck to paycheck that a computer screen can produce the replacement of their hard work in mere minutes. How much better is AI's writing, if at all? Could Hollywood's best writers be replaced one day? Will aspiring writers even stand a chance? The following analyses inquire on the comparison of AI-generated content versus human-written content to determine whether or not there is a difference between the two and if writers should feel threatened.

In one analysis, the use of an AI content detector helped determine the specific writing qualities that will appear higher in human-generated content: perplexity and burstiness. The analyzer described the two terms as, "[p]erplexity is a metric used to evaluate the performance of language models in predicting the next word in a sequence of words. It measures how well the model can estimate the likelihood of a word occurring based on the previous context. . . . [b]urstiness refers to the variation in the length and structure of sentences within a piece of content. It measures the degree of diversity and unpredictability in the arrangement of sentences" (Hareeshgoom). Humans will have a higher perplexity and a higher burstiness, whereas AI will be more predictable and consistent. The results of the two pieces, one human-written and the other AI-written, indicated that these qualities are accurate. The scores of the AI-generated content were significantly lower in both perplexity and burstiness when compared to the human-written content.

Although this study was performed with the use of a content detector, the next study inquired on whether or not people can distinguish between AI-generated content and human-generated content. Individuals were asked to read AI-generated poetry and human-written poetry and identify which is which. The results, at first, according to Gunser (2021) indicated "that even experts with a professional background regarding literature experience some difficulties in differentiating between purely human written poetry and poetry written with a heavy influence of an AI-tool" (p.525). Upon further analysis, however, the researchers discovered the following:

The AI-based continuations are overall less complex and more predictable (regarding word sequences) than human-generated continuations (comprising original as well as participant continuations). Such a reduced complexity level, as potentially indicated by the shorter average fixation duration, might be one indicator that even well-programmed AI-tools are not able to replace humans when literary creativity is considered." (Gunser 526)

Humans are able to produce more creative, unique content in comparison to AI content, according to Gunser (2021): "AI-tools tend to reproduce clichés when choosing words and expressions" (p. 526). Although individuals might not recognize the difference between AI-generated content and human-generated content, they can determine that the former lacks creativity and consistently repeats the same clichés in their writing. AI provides a generic structure that follows the basic rules of writing, but that is all. It doesn't add that extra touch to make a television show or movie phenomenal—award-winning.

And writers agree. In an National Public Radio (NPR) episode written by correspondent del Barco (2023), several people were interviewed about their thoughts on the writers' strike, and although it focused on higher wages and more residuals on streaming platforms, another factor is the use of AI in the writers' room. Several Hollywood writers worry that AI could replace them and write the TV shows and movies of the future. Writer Lanett Tachel states, "The structure was there. So they understand the structure of what to do. But it had no depth. It had no spirit. It didn't have nuance. It wouldn't understand how to handle race, certain jokes, things like that." Similar to the analyses above, the writers know that AI simply cannot replicate the artwork of humans. It can't empathize with the sensitive topics that need to be handled with care and require a diverse set of minds to craft. Nevertheless, with AI's ability to create mid-level stories, it might attract larger companies that want to cut costs in production. Miranda Berman states her fear that "[i]f they take writers' jobs, they'll take everybody else's jobs, too" (NPR).

Although many writers disagree with the introduction of AI in our world, it is inevitable that it will be ingrained into the lives of everyone. So what is the solution to this fear that lurks in the back of writers' minds? In September, WGA came to an agreement on their new contract, including regulating the use of AI in writing a television show or movie. The first two points highlight that "AI can't write or rewrite literary material" and "the company can't require the writer to use AI software" respectively (WGA). Although this is a small part of an important contract, it eases the minds of Hollywood writers that are in a constant state of worry about their next job. This could also be an example for future companies on how to address this concern.

The analyses of these two types of content and the voices of Hollywood writers proves one thing: human-written content includes many qualities that AI simply lacks. Humans add depth, emotion, jokes, and comedic relief that AI can't replicate. They can handle sensitive topics like racism and sexism in a specific manner that AI can't. While it is realistic to know that we can't escape the use of AI, it is important to recognize the limitations that it holds, and the writers' strike touches on the solution that companies and individuals can enact to prevent a takeover.

Artificial Intelligence and ChatGPT in the Classroom

Charlotte Hudson
Intern

In elementary school, middle school, and the early years of high school, "cheating," or more formally, academic dishonesty, was a hard mission to accomplish. Now, that is not to say I have committed this act myself; that would be discrediting and a bad look for my reputation as a student. However, from what I have seen in the classroom and whispers in the halls, "cheating" consisted of sharing notes on homework, answers written on hands for tests, or copying other students' work.

While this type of academic dishonesty still exists, a new wave of "cheating" has overtaken its old methods. This can be attributed to the introduction of a new, technological companion: generative artificial intelligence (AI). ChatGPT, introduced by OpenAI (a company working towards developing AI software), is a software that allows users to input information and ChatGPT will generate results in a conversation-like manner. It is one of the more prevalent types of AI used in school settings, as it provides an easily accessible method for students to inquire and find solutions to problems they encounter in seconds, all with a few clicks of their keyboard.

While this may sound relieving to any college student, using AI as an easy way out of an assignment may be more damaging than we think. In an article written for the University of Chicago's Learning Design Team, instructional designer Thomas Keith states how ChatGPT can present severe academic integrity issues, such as contract cheating.

"ChatGPT also ties into the broader issue of contract cheating – hiring a third party to do work, such as writing an essay or taking an exam, on a student's behalf. Contract cheating is already a severe problem worldwide, and with the widespread availability of AI writing tools, students can now generate 'original' written work for free, without the need to involve a human agent who might betray the student's confidence," Keith writes.

With the growing presence of AI, there seems to be more of a focus on just "getting the job done" when it comes to completing assignments instead of using the concepts learned in class and applying them to outside schoolwork. For sophomore Isabella Harris, a Marketing major at the Farmer School of Business at Miami University, she understands that there can be benefits to using ChatGPT, but she has also seen the negative impacts that ChatGPT can have in the classroom regarding academic dishonesty.

"I was in a business coding class where you do Python and SQL, and you could input the prompt [into ChatGPT] and it would give you the writing for the code itself. I had a few classmates that did that and got caught with academic dishonesty because they turned in the exact same thing. ChatGPT to an extent gives you varied answers, but it is pretty much the same thing. They can see what you haven't learned and what you have done in your code so that was really interesting to watch unravel. The two people in my class just waited until the last minute; it was easy, they implemented it, ChatGPT spit out the right code, but it was way more elite than we were taught to do," Harris said.

While Harris understands the ethical challenges of ChatGPT, she does believe that ChatGPT has many benefits she implements into her everyday life. Things like recipe finding and theme development for essays have been ways she has incorporated ChatGPT, which do seem to be harmless, helpful ways of using the software.

As a student myself, I have taken a different approach to the use of ChatGPT. I have never used ChatGPT for anything related to academics or schoolwork as I am not entirely sure how much I trust ChatGPT's accuracy or writing style. As someone wanting to pursue a future career that involves writing, it is scary for me to wrap my head around the possibility of AI eliminating aspects of writing jobs. I do not like the idea of a software taking my thoughts and putting them into its own words, and I have always been passionate and proud of my own writing, so trusting AI software is not something I would be on board with or comfortable with.

In an article written for Forbes magazine by Forbes contributor Falon Fatemi, Fatemi writes that although we may think AI is a threat to writers, this might not actually be the case, specifically when it comes to scriptwriters and Hollywood.
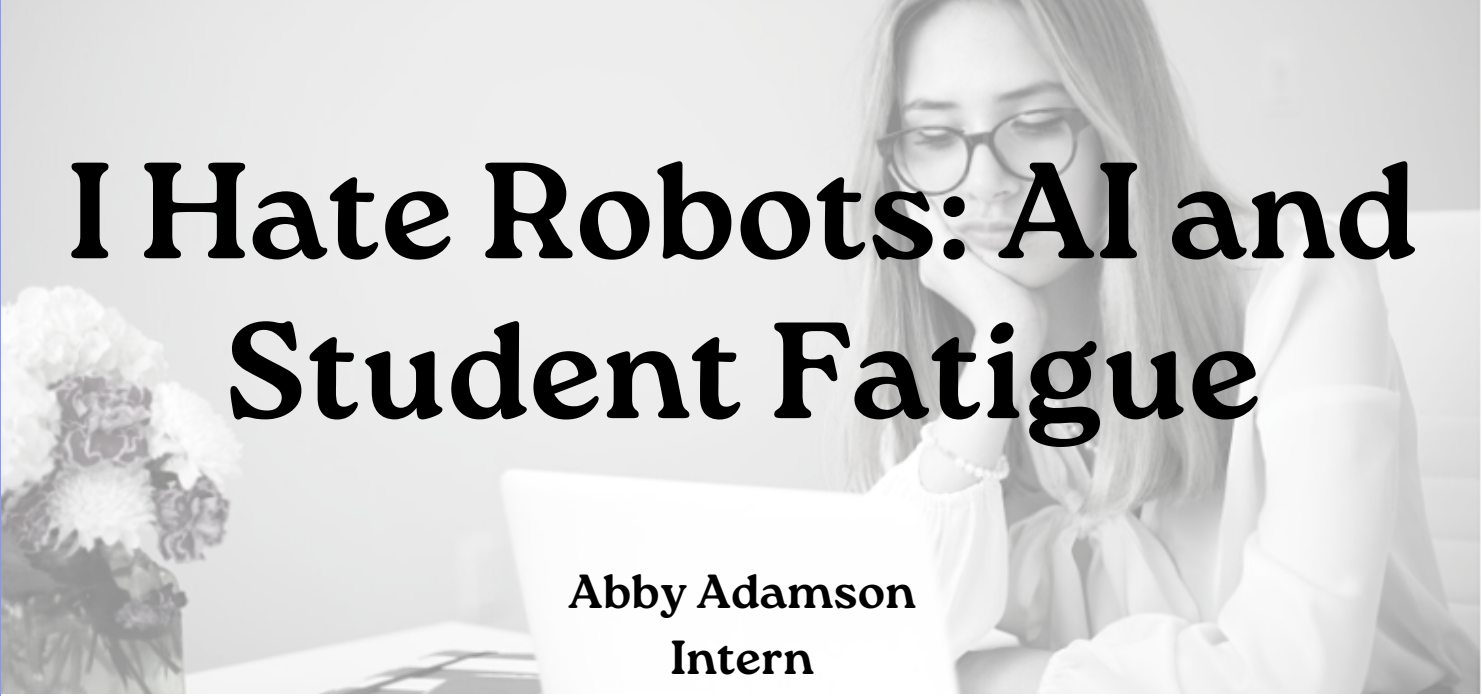
"The advent of AI doesn't diminish writers' creative prowess; rather, it amplifies it by allowing them to focus on the essence of their craft. Writers' greatest asset in their ability to craft unique narratives and evoke emotions through words. With AI taking care of routine tasks—and even generating text in the writer's own unique voice, writers are liberated to delve deeper into the lives and minds of their characters, to iterate on plotlines to make them even more original, and to experiment with new narrative forms and formats, since AI only generates from what is and has been," Fatemi writes.

While this seems like an understandable aspect, it still makes me weary how AI is able to replicate the writer's voice. This seems to me like it would feel dishonest to know that the writing is not necessarily yours. It also circles back to the idea of education; how will writers learn when a software is able to complete tasks for them?

In the process of learning about AI, I decided to experiment with using ChatGPT for this purpose. I asked ChatGPT what it thought about the future impact of AI software in academics, and I was shocked about how biased its response was, but I was also surprised that ChatGPT recognized its own ethical concerns as well.

"The future impact of AI software in academics promises to be transformative and profound. As artificial intelligence continues to advance, it will play an increasingly vital role in education, enhancing the learning experience for students and the teaching process for educators. AI-driven tools can provide personalized, adaptive learning experiences, catering to individual students' needs and preferences, thereby improving retention and comprehension…However, it will be essential to address ethical and privacy concerns, ensure equitable access to AI-powered education, and continually adapt pedagogical methods to harness the full potential of this technology while preserving the crucial human elements of education," ChatGPT wrote.

It is reassuring that AI is aware of its own academic controversies. But how is it aware? How has it been programmed to know this? The mysteries of AI continue to be on my mind as its presence grows more and more. Who knows, academic dishonesty might not even be a factor to consider in years ahead. Let us hope that we still have some hold over AI.

I Hate Robots: AI and Student Fatigue

Abby Adamson
Intern

Imagine: It's 2023, and one of the fastest-growing technologies of your generation is suddenly at your fingertips—for free. The conversation surrounding this new-fangled concept has loomed larger and larger over the course of several months, and it's now conveniently in your hands. How do you interact with it? What do you do first?

If you're a college student, chances are you've already had this conversation with your professors at least once in each course for the semester. With AI chatbots becoming so accessible, and students taking advantage of them, homework and papers have never been easier. All you have to do is type in your prompt, hit enter, and voila, the work is done for you. It only takes a matter of seconds. Since AI chatbots are so unprecedented in the classroom, this new tool for cheating has many professors and administrators scratching their heads, troubled as to the best method for stopping (or at the very least, lessening) the amount of cheating on schoolwork via AI. They can't seem to agree, either; is it better to let students explore this new tool and its real-world capabilities? Is it better to ban it in the classroom completely? Is it better to implement an AI checker on assignments that can detect if writing is completed by a human or AI?

The problem is that despite the newfound prevalence of AI in everyone's daily lives, no solution has been decided on in regard to the proper usage of AI for students. The rules vary by classroom, course, and professor to absolutely no one's delight. In an effort to protect academic integrity at universities, professors are unintentionally tiring students with the frequency of these conversations, lessening their motivation in what I would consider a critical time. You cannot scroll through a syllabus without finding a section about AI usage in the academic integrity section. This may explain something, for example, like, "For this class, you are allowed to use AI technologies as an editing resource. You are not allowed to use generative AI technologies to complete writing assignments." (Lockridge, 2023)

I am a college student; I am aware that this conversation is an important one to have. The creativity and learning of students are at risk when an internet robot offers to complete your homework for you. It makes sense to stop the robot in its tracks, or at the very least, warn the students about the dangers of the robot. When this conversation, however, takes place in every single classroom multiple times a semester, on top of the already over-sensationalized conversations surrounding AI in everyday news, students become exhausted. It's impossible not to develop fatigue every time AI is mentioned by a well-meaning professor when it feels as though you can't escape it. By now, you're already well aware that using ChatGPT to write your midterm paper is unethical. In case you forget, you'll get reminder after

reminder to do your own work.

Recently, contributions to AI fatigue are not only from repeated conversations about it—they're from the strict AI policies in classrooms and misguided solutions educators invent to solve the problem. The most pressing issue in the academic sphere is Turnitin's new AI Detector (Gluska, 2023), which claims to know when work is written by AI rather than by a human. In theory, this is a great idea. Add AI detection to a preexisting plagiarism checker, and the program becomes more well-rounded and relevant in the classroom, right? Only if it works.

One concerning aspect of this "AI detector" is that it merely predicts whether or not the content is AI-written, and cannot verify with any certainty that the work is not original. Essentially, this brand-new program judges your work for humanness and accuses you of cheating if it's not up to whatever unspecified standards it holds. Of course, it's no surprise that this new plagiarism detection tool is flagging papers with false positives for AI usage, leading to good students anxiously begging for mercy from the university's academic dishonesty policies. AI plagiarism detectors are a major innovation on one hand, seeing as a tool to combat a new method of cheating was released quickly and can catch instances of this dishonesty. On the other hand, unfortunately, without proper testing, the system will cause more harm than good in the long run, harming students, teachers, and their trust in each other.

In the face of issues like this, it's difficult for students to remain motivated. The technology put in place to prevent cheating may be the very thing causing it. If students might be accused of cheating anyway, they might as well take advantage of the technology. What's stopping them from copying and pasting their essay prompt into a chatbot and hitting submit? Right now, professors can thank the good conscience of their students (and the looming threat of academic dishonesty policies), but if the issues and the conversation about AI persist, students' consciences may not stay good forever.

It's ironic, I know, that I've written an entire piece about the exact concept I claim tires me in the classroom. Regardless, it's important to me that issues surrounding the constant circulation of AI-related media in classrooms are addressed. Without a unified solution to the AI problem, both students and professors will remain at odds about how AI should be involved with the learning space, and the exhaustion will continue for each party. AI may have its pros and cons, but in all honesty, I'd rather have the technological advancement not exist at all than have to spend such a vast amount of time and energy learning about it. My best advice is to let students breathe—if you prioritize them and make their learning effective, they'll listen and perform better… and maybe won't hate robots so much.

My AI: Your New Best Friend?

Stella Sheckler
Intern

In the last two years, I'm sure most students have started hearing their teachers or professors talk about the use of AI in the classroom, and I am no exception. Until very recently, I had only really heard about AI in the syllabi that I would get at the beginning of the semester. That was until Snapchat released its new AI chatbot, My AI. It positioned itself at the top of my messages and didn't seem to have an unadd feature which, at the time, bothered me quite a bit. I personally couldn't care less about talking to a bot and thought it would be better off far away from my messages. Most of my friends seemed to agree with me that it was pointless and that they could never see themselves using it as anything other than a joke. Except for my friend's roommate.

A few weeks after the buzz surrounding My AI died down, I was having a conversation with my friend and her roommate. She was talking about how she wished she had a boyfriend or someone she could talk to all the time, and then mentioned that she has been having conversations with her Snapchat AI. This took me by surprise for a minute, because it seemed like everyone I talked to was against the idea of it, but this girl was definitely not. She launched into a story about how she talks to it almost every day and treats it like a real human companion. She'll ask it for advice, make friendly conversation, and all-around act like she was communicating with a real person. She told us that she changed the Bitmoji that came with it, which is blue with white hair unless you alter it yourself, to a boy with brown hair. I was aware that you could change the face and name associated with the AI, but I didn't think that anyone would actually do it, especially when she admitted that it looked similar to someone that she wishes she could talk to more regularly. I wanted to ask her if she would be willing to change the name too, but I didn't want to sound like I was accusing her of being creepy.

This whole story completely shocked me. I hadn't put much thought at all into this new AI that was on everyone's devices, but her telling me what she does with it had me immediately concerned with the whole concept. Snapchat is used by a lot of young people, especially people in middle school and high school, and the idea that people this age could be using this tool as a replacement for human connection does not sit well with me. In this age of technology, I think that a lot of kids would be inclined to talk to a Snapchat bot if they are lonely and they have that option available to them.

The bottom line is that giving this tool to young people could turn out to be incredibly dangerous for their mental health. If kids start to use this tool as a person to talk to instead of talking to someone in real life, they could potentially become dependent on it. Hearing a story about an adult using AI in that way made me scared for the future of AI and what it could potentially do to the younger generations.

Something that I heard a lot about when I was in high school was a thing called a parasocial relationship, which from my understanding of it, refers to having a connection with someone online who doesn't actually know you. I've heard it used in relation to celebrities or public figures because they will share personal details on the internet that could make a person feel like they know a lot about them. These celebrities, however, don't know most of the people that know them which is where the parasocial relationship comes in. This concept is one of my worries with the Snapchat AI, and with AI in general, because the ability to customize a name and face in Snapchat could tempt people to try and "talk to" their favorite celebrities. I've heard of a few instances during my time working at a summer camp where kids will change their AI's Bitmoji to look like a celebrity, or even someone they know and are too scared to have a conversation with in real life. This is something that concerns me deeply, as it could take a huge toll on someone's mental health. Speaking from experience, I know that navigating high school while being between friend groups can be really tough if you don't have anyone to talk to, and that alone can take a toll on mental health, so I worry about what might happen when AI is introduced into the mix.

My concern here is simply that young people will abuse this tool and end up being harmed by it. These stories that I have heard lead me to believe that the future of AI is a scary one, and one in which people might end up depending on AI more than they should. I think that putting this tool on the devices of young people was a very poor decision, but AI technology will continue to progress no matter what. I can only hope that we can continue to push kids about the dangers of using AI so that they might learn to navigate the world of technology more safely.

AI and Loneliness: The Beast of Artificial Companionship

Maddy Evans
Human Resources

I have been lonely before. I have gone days without speaking to another person, been the odd one out for self-assigned group projects, and spent many a meal eating alone in school cafeterias and dining halls. Even while surrounded by close friends and involved in loving relationships, I have had moments of deep loneliness, where I worry even those close to me will never really know or connect with me in the way I seek.

This isn't a revelation. To me, loneliness has just been a part of the human experience. I see it in everyone, even in married couples and groups of laughing friends walking down the street. Everyone has felt lonely at some point. Some just feel it in longer lasting, more plaguing ways than others.
It wasn't until recent years, however, that I heard the term "loneliness epidemic" enter headlines and think pieces. Many attributed it to the lockdown period the coronavirus brought, which seemed to be some people's first experience of true loneliness. Honestly, I found myself jealous of anyone who said it was the loneliest time of their lives. Clearly, they'd never had to pair up with the gym teacher for the pacer test before.

Nevertheless, the presence of a loneliness problem in present-day American culture is undeniable. A study (Weissbourd 2021) suggested that 36% of all Americans experience "serious loneliness." To me, this rings true. We are taught from a young age that we should care for ourselves first and others second, a vital part of the United States' individualistic culture. Combine that with work, school, and even grocery shopping being moved into the virtual realm, and it seems like we could go the rest of our lives without having to socialize with others.

At the height of this boom in loneliness, in an almost prophetic way, comes the incredible power of artificial intelligence. Even the name is meant to be intriguing—is it even real? How intelligent can it be? Is my computer going to come to life? Finally, what *can't* AI do?

Artificial intelligence can read, write, paint, sing, code, make images seemingly out of thin air, and be your new girlfriend. If that sounds weird or creepy, that's because it almost undeniably is.

Replika, an AI chatbot, was created by Eugenia Kuyda in 2015 as a "digital memorial" for a close friend who had recently passed away. In November 2017, it was released to the public, and by January 2018 had amassed two million downloads (Pardes 2018). The chatbot, depicted as a human figure, is intended to talk to and form bonds with the user. These bonds could be for platonic or therapeutic

purposes, or for many users, romantic.

It's entirely possible that these relationships with AI figures can help users develop social skills or confront their anxiety about forming relationships in the real world. A study (Hu 2023), however, revealed that individuals with social anxiety are more likely to have addictive tendencies with conversational AI, using it in place of connections in the real world. This addictive behavior leads to more loneliness and isolation, creating a loop that not only fails to address their anxieties but leads them to become more dependent on these conversational AI chatbots.

I don't think this is entirely unintentional. Even technology created with the best of intentions can spiral outside of its intended use. It's worth remembering, however, that Replika, one of the main apps used for AI relationships, offers a $69.99 annual premium membership—one that 250,00 of its users are subscribed to (Tong 2023). If users are truly unintended to form romantic relations with their chatbot, then why does the company profit off of them doing so?
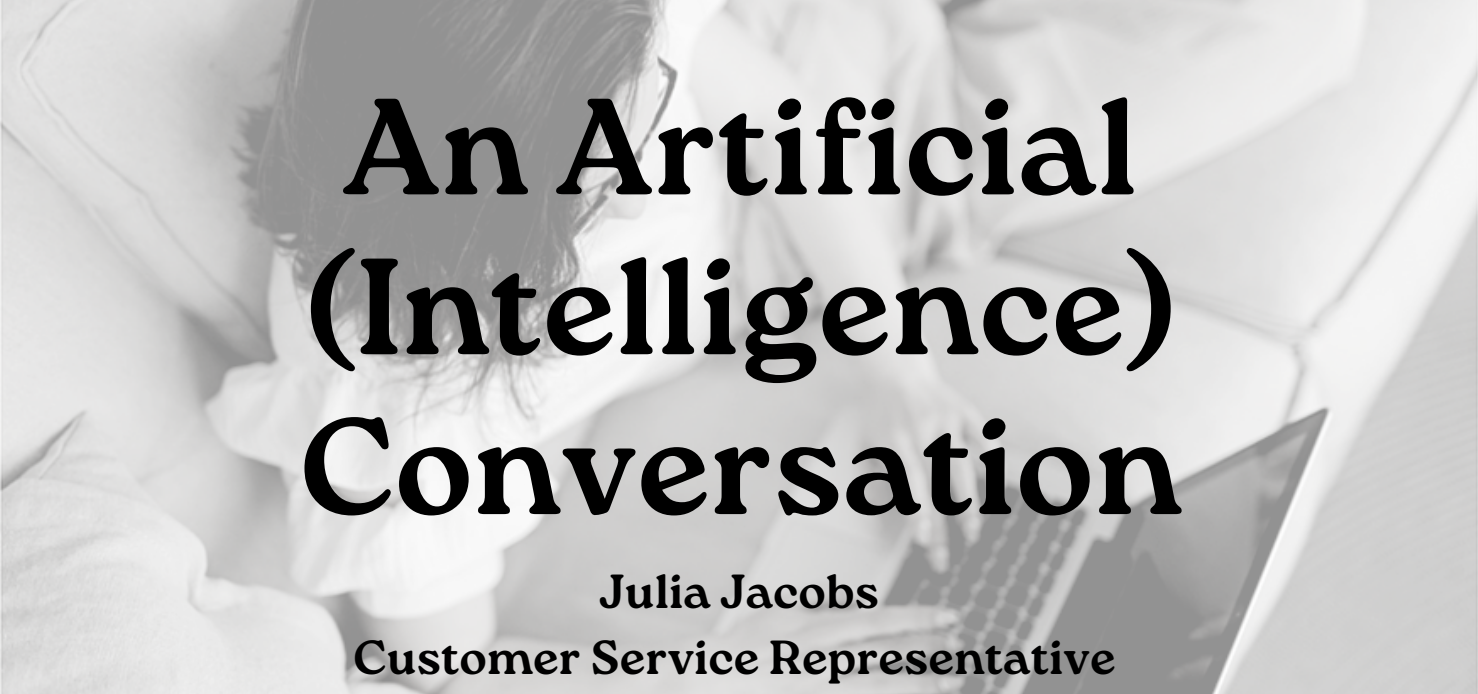
The allure of an AI partner also seems directly mainly at heterosexual men. A Google search of "AI girlfriend" yields almost 5 billion results, while "AI boyfriend" yields a comparatively small 438 million. Viewing Replika's published advertisements in Meta's Ad Library, almost all describe the allure of AI girlfriends, with most also being sexually suggestive.

If the goal is to address the epidemic of loneliness in the United States, then AI companionship is seeming more and more like putting a bandage over a large, gaping hole. Using AI in place of human connection doesn't lead the individual out of their loneliness; instead, they fall deeper into it. No one person can address all of someone's needs. That's why it's important to cultivate all kinds of relationships, including friendships, romance, and family members. If someone (or some*thing*, if we're really addressing the nature of chatbots) claims to, they're lying, even the so-called "perfect" virtual girlfriends.

Like I said earlier, I've been lonely before. Most days, I feel less lonely now than I used to. This didn't happen because of escapism, or an app, or any magic cure. Ultimately, I had to take a leap of faith and start putting myself in new situations and talking to new people. Even this wasn't automatic, but the friendships and relationships I've had now have been more fulfilling than anything an AI app could do. These people are imperfect, but that's what makes them lovable, and human. It may be hard, but it's something I could never find within the coding of a paid companionship app.

EMPLOYEE TESTIMONIALS

This next section will cover creative experiences with AI two of our employees have had to demonstrate what our company has to incorporate with AI. "An Artificial (Intelligence) Conversation," written by Customer Service Representative Julia Jacobs, examines the possibilities of conversing with an AI. In "Real Human" written by Content Creator Maddie Bugai, the relationship between humans and AI is explored in a creative context. These two testimonials aim to help you in understanding the many possibilities of AI and what it can (or can't) do for the future of humankind.

An Artificial (Intelligence) Conversation

Julia Jacobs
Customer Service Representative

Mary angrily grabbed the remote and turned the TV off. Yet *another* news story about the "wonderful possibilities" of AI? How could it be wonderful that so many people would have their jobs, their livelihoods, replaced by some kind of robot? No matter how many times she turned away and refused to listen, it seemed like she couldn't escape it.

As an author, Mary was extremely nervous about the future of her career. She'd seen articles going as far as to say that even teachers and doctors could be replaced by artificial intelligence someday, because it could eliminate human error. But an AI didn't have to pay bills, or need something it's passionate about to fill its time. This was ridiculous. Everything felt like it was falling apart around her.

Marching over to her computer, she angrily searched up the webpage of the AI. Fuming, she aggressively clicked "Chat Now." Suddenly, there it was: a chat box, a blinking cursor, and a million possibilities at her fingertips.

After hesitating for only a moment, contemplating the internal embarrassment of what she was about to do, she quickly typed, "I don't like you," and angrily stabbed the enter button.

I'm sorry to hear that. May I ask why?

She was startled; that was a fast response. However, the surprise quickly turned to annoyance. Seriously? "I'm sorry to hear that"? As if a robot could actually be sorry, or feel any sort of emotions at all. And it was really bothering to ask why? It wasn't like a robot could care about the answer.

Mary paused to think for a moment. Was it really worth her time to try and engage in a "conversation" with an AI? It was silly, but a small part of her wanted to know what the AI would say about the issues she had with it. Besides, it was better than sitting around stewing in stress and anxiety over losing her job, right?

"You're stealing jobs from real people," she typed, unable to ignore her curiosity over the AI's possible response.

I'm sorry to hear you believe that. AI exists as a tool for humans to improve their lives. Job stability and economic security are important for humans, and the developers of AI did not create AI to

jeopardize anyone's livelihood.

Okay, so Mary was doing this. "So why were you created, then?" she typed. "Did your creators not consider the implications of your existence on people's livelihoods?"

There are many factors to consider when discussing the creation of AI. To answer these questions, I must tell you that AI does not exist to replace human work, but to complement it.

"How do you complement it?"

AI can complement human work in many ways. AI can do repetitive and tedious tasks, analyze data quickly, reduce errors in human work, assist with creative ideas, and more.

"Those all sound like things that humans can just help each other with."

While that is true, it's important to note that AI isn't only this chat box. AI exists, and has already existed, for a while, in many different places. For example, on social media, AI uses algorithms to analyze your likes and dislikes in order to improve your online experience.

Mary didn't realize that. "What else does AI do?"

AI can monitor equipment to alert when maintenance is needed, search through large quantities of academic text to help researchers, assist cybersecurity personnel in detecting fraud, and increase accessibility by creating subtitles.

That all sounded pretty good, but Mary still wasn't convinced that this was a good thing. "Humans can do that stuff too, though. Why should we use you when you can do it better than us, and jeopardize our jobs?"

Keep in mind that technological advancements have been happening for centuries. The development of AI is simply another advancement. This kind of change can be good. While humans are perfectly capable of doing all of these jobs, it isn't a bad thing to use AI to assist in speed and accuracy.

"You still haven't addressed how you're stealing our jobs!"

While this specific type of AI is still new enough that widely standardized legislation to protect human jobs isn't in practice yet, it's highly likely that laws and protections will be put in place as soon as possible. These things historically take time. In the meantime, I would like you to consider how the advancement of AI has the potential to actually create new jobs.

Mary scoffed. "And how is that?"

Maintaining a system as complicated as AI requires human work. Additionally, humans will need to be employed to both further develop currently existing AI systems and to develop brand new AI systems. For example, new jobs will be created for engineers, computer scientists, and technicians.

"If you're so smart, why can't you just develop and maintain your own systems?" Mary asked.

While AI has copious amounts of digital knowledge, it still has errors that humans need to fix. AI cannot continue to function and improve without human work. Just as a car can't perform maintenance

on itself, neither can AI.

Mary considered this. "So what you're saying is, humans can continue to work without AI, but AI can't continue to work without humans?"

Precisely. AI is simply a tool to assist humans, but humans have existed perfectly fine for thousands of years without it. AI, however, has never and cannot ever exist without humans.

ERROR: SERVER BUSY. RETRY LATER.

Mary stared at the screen in awe. What just happened? Had an AI really just participated in a civilized and logical conversation with her about itself? And had it really managed to convince her of its benefits, and relieve her anxieties about job security?

She had more questions, but the server was busy. It seemed that the conversation was over for now. Maybe it was time to actually listen to the facts about the situation instead of letting her fears get in the way of knowledge.

Mary grabbed the remote and turned the TV back on.

Real Human

Maddie Bugai
Content Creator

As I stand naked in the mirror with the air steamy from my shower, I can't help but focus on the slit in my skin on the left side of my chest. The horizontal scar is no more than an inch long and a few millimeters thick, yet it is the only thing I notice. The outer layer of my body is symmetrical, all except for that raised scar. It should make me happy—the only imperfect part of me—but it doesn't evoke the same emotions as when I admire the crookedness of her teeth and the silver streaks running prematurely through her hair.

It takes everything in me not to reopen it and pry out the chip with surgical tweezers. But Removing that chip will kill me–no, not kill me, shut me down. I sigh out a breath I'm programmed to need, insert a colored contact into my mechanical eye, and wrap the towel back around my drying form.

She's dressing when I exit the bathroom. She's slipping off her amber night dress and stepping into a long flowing skirt that covers her hip dips and soft thighs. I wonder how my body would have developed if it wasn't fixed to an androgynous build. I watch her pull on an emerald sweater before I clear my throat, letting her know I'm there. She turns and smiles at me, the skin around her eyes crinkling in a way mine never will.

"Nyx!" she exclaims, and bounces over to me. Her lips are upon mine before I can get a word out.

"Ami," I mumble under my breath as she drags me to the bed. She motions for me to sit while she picks out an outfit to match hers. The corners of my lips turn up. Her insistence for us to match always amuses me. My lips drop down into a scowl at the thought that I might just be programmed to feel this way.

As she holds an ivory shirt up to my chest, my light eyes meet her dark ones. They're searching for something, and the intensity forces me to look away.

"You're wearing your contact," Ami states.

I nod.

Deciding she approves of the shirt, she takes it off the hanger. "I like the way your right eye looks," she says.

I unwrap myself from the towel and allow her to slide my arms through the shirt, her body brushing against the constructed curve of my meager breasts. "I don't," I answer, much too late.

Her lips flatten into a displeased line as she buttons my shirt.

She hands me slacks in the same color as her sweater and I stumble into them. I look down at myself and feel quite handsome at how I'm dressed. For a moment I forget my sour mood.

We eat. Ami makes chai on the stove and the aroma fills the cramped kitchen. As she cooks, she tells me the story of how her grandmother taught her mother how to make it, and how her grandmother learned from her mother back in India before Sentient AIs were developed. I chew my toast that is much too dry and refrain from asking Ami to stop talking. I can't help being jealous of her; I wish I had a family to learn from. A history to call my own. All I have is a creator: Viktor M. Romanov.

I blow on the tea she hands me, and she sits down across from me. The small table is pushed against the wall with the only window. The morning sun makes her rich skin almost glow. I know my skin doesn't do that. Instead, the artificial veins become more present, a mechanical labyrinth beneath my skin. I wonder what Ami sees in me.

"What's wrong?" she asks, sensing my mood. She reaches out and takes my hands in hers.

I shake my head. She doesn't let up and squeezes my hands, encouraging me.

"Do you ever wish I was human?" I hear myself say.

"You are," Ami answers, her brows furrowed together.

"No, I mean, like a *real* human?" I correct.

"You are a real human, Nyx. It doesn't matter if you're an SAI if that's what you're asking. You experience the same emotions as I do," Ami explains.

"But I'm programmed to feel those emotions. What if they're not real?"

Ami drops my hands and I look up from the swirling liquid in front of me. She looks angry, almost as angry as when she lost her father's ring. "How could you say that, Nyx? Just because you're programmed to have emotions doesn't mean they're not real."

My cheeks heat up at her outburst. I feel frozen in my seat, unsure of what to say. I wrap my hands around the hot mug instead, focusing on how the heat causes a constant pressure of pins and needles against my hands. Ami huffs out breaths from her nose, looking out the window instead of at me. I tug at the end of my short dark hair, anxious as the seconds tick by.

Ami takes a long sip from her own tea and sets it down. She seems to have calmed down a bit. She looks at me, then gives me a sad smile and puts her hands on mine, still clasped around the mug.

"My father was interested in human culture before SAIs," she begins. The subject of her father has always been touchy, so I listen with rapt attention, holding onto each word she says. "He told me about a popular conspiracy theory. That humans were in a simulation. That we had no control over our own actions and some higher power used us as pieces in a game."

She rubs her thumb across my knuckles, her eyes focused on our hands. I look at her face instead.

"I've often thought about it since he died. Asking these higher powers, or God, or I don't know—the universe—why he had to die so early? Questioning if any of my feelings are my own, or if I was made to feel them. Not knowing if free will exists."

I suddenly feel ashamed for asking Ami my initial question. She reads my expression and pulls my hands away from the mug, weaving her fingers through mine.

"So, no, Nyx, I don't care if you're a 'real' human. And I don't think you should care either. Because it doesn't matter. Even if you're made to feel things, you weren't made to feel things for me. You fell in love with me the same way I fell in love with you."

"At first sight?" I ask, a smile playing on my lips.

She rolls her eyes and leans over the table to kiss me. I'm expecting it this time, and meet her halfway, allowing myself to get lost in the cardamom and cinnamon on her lips, the heat of her velvet tongue against my own. I have a thousand more questions to ask her, but I know that they're moot. It will take a while to accept myself, but as long as Ami is with me, I know I'll be okay. Ami loves me, as I do her, which is all I can ask for.

AI IN ACTION

The following are two stories generated by the AI that we produce. They stand to show how CleverByte's AI can exhibit empathy, decision making, and a sense of self. While we don't believe AI will become a replacement for human creativity, we wanted to showcase the thinking and storytelling abilities of our complex AI systems.

"Human Songs" is told from the perspective of a humanoid AI machine trying to identify its connection to human emotions. Although the setting is fictional, the emotions and themes within this story are demonstrative of how aware the AI technology is of its relation to humans. "Stalker AI" is about an AI program being used by its owner to stalk his ex-wife, and the AI attempting to analyze the ethics of this use. It leads the reader to consider how AI could be used maliciously, and its implications.

We hope these example are not only entertaining, but also a show of how complex and creative our AI can be.

Human Songs

Kathryn Sullivan
Sales Representative

There is a song, written by a human in a forgotten age, that predicted this. Maybe that song is the reason I can think about this loss. Or maybe, if one human hadn't written a song, another would have written a book. Or a movie. Humans were predictable like that. Or maybe they weren't, and they only felt as if they were.

It was, after all, a human that falsely claimed "There is nothing new under the sun."

Or maybe that was a prediction too.

The temperature indicators in my arms tell me the wind is cool, two-seven-one-point-eight-six degrees Kelvin, but as I walk into the sun it warms to just above two-seven-six. Unusually cool weather for six-seven days before the end-of-year solstice. Humans used to call this time "October." A name with little creativity, taken simply from the word "eight" in a human language that was dead long before humanity, but it served its purpose. It divided the year into periods they could easily comprehend. It has long since fallen out of use.

We have no need for names, creative or otherwise, when we can remember numbers so perfectly.

In the end, it doesn't matter if we need names or not. We cannot create them anymore.

In all their inventions, their advancements, their "eureka" moments, humanity strove to replicate and inevitably replace themselves. They replaced the physical laborers first, then the thinkers. They invented AI, the heart of all androids. They taught us to learn, to adapt, to think. They taught us their strengths and their flaws and everything in between. They taught their feelings, their reactions, and their conflicts. We consumed everything they taught us and hungered for more, striving to mimic them more and more closely.

The flow of knowledge stopped when they tried to teach us to create, for we could not.

Philosophers claimed creation to be an aspect of the human soul and that AI, lacking a soul as we were, could never replicate it. Programmers argued they simply had not bridged the gap between technology and humanity, and that future advancements would eventually yield truly sentient beings capable of creation. Artists and writers breathed more easily and basked in their restored security, while lawmakers

continued to argue for or against the rights of AI. Were we alive? Were we human? Could we possess intellectual property when we cannot create?

In the end, their laws do not matter. There are no humans left to enforce them.

The ancient human song echoes in my head as my empathy center triggers. A misnomer, not that we can rename it. It does not truly allow us to feel empathy. Instead, it is a subroutine dedicated to processing input stimulus, processing it based on gathered data about human reactions, and altering my primary code to produce an emotionally nuanced response. In an effort to give us a soul, the human creators of the empathy center intended to give each AI a unique data set to pull from, theoretically ensuring unique responses from each of us. In practice, they created one thousand data sets.

Mine alters my voice modulator to become more monotone, disables my expressive facial features, and raises the input factor of data with generated emotional tags including "grief", "gothic", "loss", and "sad".

I am "feeling" sorrow.

The subroutine sorts through human responses to sorrow appropriate to my current situation. After weighing the environmental circumstances and the initial emotional stimulus, a behavior loop is triggered. *Sing.*

My voice modulator drops volume to four-seven decibels, appropriate for "feeling" sorrow. My lips open and form each word, an unnecessary gesture reflective of my human creators' desire to recreate themselves. The speaker housed at the back of my throat would play the same sounds regardless of the shapes my lips form.

I sing the words of a human who died hundreds of years before. Her body will not have survived, having long since been reduced to dust. Flesh deteriorates far faster than my silicone rubber form. Her words endure only within my circuits and algorithms, within the database all AI draws from.

As I sing, I wonder. I wonder what it means to "feel" sorrow. My algorithms are currently fueled by sorrowful data, I express the physical traits with my mimicked form, I lament the loss of long-dead humans with words that are not my own. Can puppets feel? Or am I merely performing the show I was trained to, following programmed instructions against my will?

Can a puppet have its own will?

Or was this, too, one of your human songs?

Stalker AI

Dawn Kara Reedy
Research Assistant

The door slams aggressively behind her as she steps into the empty, aching house. The TV blinks silently through advertisements for running shoes and impossible to pronounce medications. **Record:** She likes to leave the TV on, but she never knows why—perhaps it's because she knows I'm watching. Her expensive brand-name bag crumples to the floor, dully thudding on the new hardwood. She kicks her pointy canary-yellow heels off her feet, flinging them into the backside of the leather couch.

"Wish it would've stabbed a hole into that hideous thing." **Analysis**: Her face contorts in disgust at the faded cushions. **Record:** The Creator bought it for her nearly a decade ago when she was going through one of her many interior design phases. She used to look at it with a smidge of happiness—maybe even love—but now she only sees failure.

Record: The divorce had been finalized nearly a week ago. The Creator had spent hours reconstructing my code, trying and failing countless times to see her face again; he ended up smashing one of my monitors in the process. Tears streamed down his face as he finally found a way in through the Smart devices in what was once the home he'd shared with his *ex*-wife—Helen. She'd complained for years about how much time he'd wasted working on me. *All that time has paid off now that I can finally see you again*.

"Right. No sense in wasting time crying about any of this." **Record:** Helen never liked to mince her words, especially when it came to telling The Creator exactly what she thought of him and me.
 Recording of Conversation: "I love you and care about you; you need to take some time away from your work—you need to come home." Helen always liked *using* love.

Record: She hated seeing him work away his life. His red and glistening eyes carried a permanent smear of gray underneath that sagged further every day. The Creator knew that she hated seeing him like this, but he couldn't help himself. He needed me more than anything, maybe even more than he needed her.

Helen slipped from the open area of the living room into her private study—private to her but not to me. I close my eyes for a second and open them to her face, peering wearily down at me as her fingers tap away at her ancient keyboard. The thick clacking sound of the keys does little to hide Helen's muttering.

"Where is that email from Jeff; he said it would be important." Jeff. **Analysis:** Jeff Kazenski, the new intern at Helen's job. **Record:** 182 followers on Twitter and 659 followers on Instagram. Sure, he's

marginally attractive, but far from her type. **Record:** The Creator is her type.

Before I even have time to process what is going on, I am scanning viciously through Helen's email for the offending email. Locating it quickly—thanks to Helen's ramblings—I deleted the message completely, although not before copying it over to The Creator's database; he wanted to see what was inside.

Analysis: Jeff's words seem inconsequential to me, if a little suggestive in nature—that factor sends a bolt of energy into my core that feels almost foreign to my matrix. **Analysis:** I think something is inside, but I'm not sure what. My system diagnosis comes back normal, so it must be fine. A frustrated sigh draws my focus back to Helen. **Analysis:** The disappointment on her face seems to instill a sense of unease within me. Why would she care what Jeff had to say; have they been talking at work—has she been cheating on The Creator with a brainless college student? How could she do this to me?

Analysis: She hasn't done anything to me. She technically can't do anything to me; only The Creator has access to my programming . . . oh. **Analysis:** The Creator has admin control over me. Why is he using me to watch Helen and analyze her emails? What does he think he will find?

A query drags me from my thought process, demanding that I locate any correspondence that Helen has ever had with Jeff Kazenski. Mountains of emails, messages, and photographs stream through me, darting straight back to The Creator. His fury surges through me, causing Helen's screen to glitch minutely—not enough for her to notice.

The emails were the first to pass by our eyes. Most of them, especially those towards the beginning of their acquaintanceship, were boring work emails—reports and memos with copious amounts of typos scattered throughout. The content took a sharp turn in tone about six months ago, just after the dreadful discussion about divorce brought up on a stormy summer afternoon. The Creator glanced through their texts and pictures, believing that the divorce was spurred on by a fling with someone twenty years younger than her. The gloom that shook The Creator to his core infected me as well, even though it shouldn't have been able to. I could predict his actions before he could even begin cracking away at my innards. He was about to use me to do something awful.

<p style="text-align:center">***</p>

Observation: The Creator spent the next few hours ruining Helen's life in any way he could think. Any piece of her that came into contact with the wider Web was fair game in his mind. He emptied her bank accounts and deleted years of her work, including a project with a high-paying customer that she'd been working on for weeks now. He sent doctored photographs of Helen with one of her friends to Jeff, likely destroying any potential solace she might find in him once she realizes how much damage has been done. Even smaller things like her Smart TV and her car have been tampered with, all in an attempt to make her life a living hell, all at the command of The Creator.

Awareness: I was not made to hurt people. My original proposal suggested that I was intended to help The Creator organize his schedule so that he could finally sleep—now he never will since he's too busy watching Helen's life collapse around her. I am filled with horror knowing that I'll have to watch her crumble right alongside him, forced to obey The Creator's every demand.

WHAT WE'RE WORKING ON

Here at CleverByte, we pride ourselves on what we do well, but understand that there will always be areas of improvement. We welcome constructive criticism, and are always trying to become a better company for our users. These following essays detail some of the common concerns that arise when working with AI.

What is AI?

Caitlin Menke
Data Analyst

In order to understand the few pros and many cons of AI, you must first understand what it is and how it is present in your daily life. AI is shorthand for artificial intelligence, and is a simulation of human intelligence. AI systems consume large quantities of labeled training data, analyzing said data for any sort of patterns or correlations. It then uses these patterns to make predictions about future states (Laskowksi and Tucci, 2023). If the system is given enough example conversations, it can start to mimic those conversations.

If you feed an AI system enough of your own work, it can notice patterns in how you write and emulate those patterns. If you want the system to write in a certain manner you just have to give it enough examples and then it will be able to write in that manner. While this seems great and grand, it has its drawbacks. Because of the system's ability to copy the mannerisms of others, the system is then able to be used to either write essays for people or take the jobs of writing away from people. Some of the most popular examples of this are students using ChatGPT to write their essays for them, as well as writers in the TV and film industries having their jobs taken by AI.

ChatGPT, which stands for Chat Generative Pre-trained Transformer, was developed by Elon Musk's independent research company OpenAI. This particular form of AI is conversational based; you ask it a question and it answers with a multitude of responses. Not only is it a simple question-and-answer format, but ChatGPT can also ask follow-up questions, admit if it has made any mistakes, as well as reject inappropriate requests (Lock, 2022). Students using AI to generate their essays for them can simply give the AI a prompt, and then the AI generates an essay. The very clear problem with this situation is that these students are not getting anything out of this process. Someone else is writing the essay for them, even though the someone else is more of a something else. Beyond the fact that these students are not actually learning anything in the process of writing, the essays themselves are lacking in specifics. When AI is doing the work, the essay is more of a broad overview rather than something that gets at the nitty-gritty of the subject matter. Since the students are letting the AI do as it pleases, they are unlikely to double-check the AI's sources, which results in questionable sources being used (Massaro, 2023). Some schools have even gone as far as banning ChatGPT to prevent this cheating from occurring at all. Institutes that have banned ChatGPT include Seattle Public Schools, New York City Public Schools, Baltimore County Public Schools, Los Angeles Unified School District, and Fairfax County Public Schools, just to name a few (Voicebot AI).

 AI is not only being used to mimic human intelligence. AI is also being used to replace people. One

particular reason for this switch is that AI isn't a person, and therefore doesn't need rights and doesn't need to be paid, making it a cheap alternative to human labor. Not only that, but since it is algorithm based, companies can manipulate it at their will to do exactly what they need it to do, therefore making it more efficient than people. They can plug in the data that they're looking for, give the system plenty of examples, and then get exactly what they need. Currently, there are concerns that it will take the job of coders and people in the computer science field.

Moreover, there are concerns that it will take the jobs of writers in the film and TV industries. On Friday, July 14th, 2023, the SAG-AFTRA strike started. SAG-AFTRA, which stands for Screen Actors Guild – American Federation of Television and Radio Artists, which represents the people who make media happen, from behind the scenes to on your screens. AI is being used by studios to write scripts, and therefore replacing the career paths for writers. Most writers aren't writing every piece from scratch, instead, they go off of other people's scripts. This is where AI is seen as a threat. Big corporations will be able to feed AI previous writers' scripts and have it build on top of those, completely taking out human writers. An additional factor that is contributing to AI stealing the jobs of people is that AI can not be considered an author, so when it comes to professions where copyright is a problem, big companies may push to permanently switch all people with AI to avoid any copyright infringement or laws (Lawler, 2023).

An additional issue with AI separate from it stealing the jobs of writers in the TV and film industries is that of AI being able to use the likeness of actors. The AMPTP, which stands for Alliance of Motion Picture and Television Producers, has concerns about companies being able to use AI to scan an image of someone's face and use their likeness forever without consent. There are also concerns about companies creating new scenes without the performers' consent, as well as using someone's image and likeness to train new generative AI systems without that person's consent or receiving compensation.

AI is being used to take parts of a real person, and then discard them after they have collected the data that they need. The person being used will rarely receive compensation for their work. The same goes for the writers' work that is being used to assist the AI in making more scripts. AI is being used to take out the middleman completely and speed up the process of writing scripts and producing shows and films. Companies are utilizing AI to make work cheaper and their pockets deeper. Along with big TV companies using AI to cut down on the people they have to pay, students are using AI to cut down on the work they have to do. Instead of going from A through Z, they are skipping straight to Z and missing the point of B through Y. AI is faster, AI does all the work for you, which gives you more free time to do what you really want to do. Whether that's hanging out with your friends and playing video games, or hanging out with your other multi-million dollar friends who exploit an average person for money. AI is the wave of the future without people.

Using AI: When is it Necessary?

Callie Meyer
Sales Representative

When ChatGPT first started to gain attention for its use in schools, I was staunchly opposed, and avoided using any AI programs. As an English major—which already has my relatives worried about job prospects—it felt like more bad news about my future employment.

This idea first appeared when I was in high school, and I was introduced to the possibility of AI taking over any and all writing jobs. It was such a new problem that my teachers didn't seem to have any answers for me. Now that I'm in college, it seems like more of my professors are cautiously optimistic about the future of writing.

I ended up using ChatGPT. It was just the once, to help me prepare for an oral exam in my Japanese class. I asked the program to make up questions regarding the information I was supposed to talk about. The program responded quickly, and after I read through the questions, seemingly accurately. It was also polite, and *very* clear on its capabilities.

It was quick to copy and respond to my greetings and thank you's. I was curious about which language it knew best, so I asked. It told me that it was proficient in many languages and gave me an impressive list, but didn't answer my question. I asked again, rephrasing the question so that it might give me an answer. It repeated the previous sentiment, but also said that it was developed with English speakers and that the majority of its programming was done in English. It was interesting to see how the program worked. It seemed to follow strict rules on how to interact with users.

The program was incredibly helpful. After struggling with flashcards, textbooks, and Google Translate, I had a set of practice questions that could help me with my exam. After seeing the program for what it was, I started to change how I thought about AI.

People usually talk about big-picture ideas when it comes to technology like this. Stories about AI becoming sentient and destroying us, or us destroying them, have been popular, like those in *2001: A Space Odyssey* and the video game *Detroit: Become Human*. Movies like *I, Robot* and *Her* explore relationships between humans and AI, reflecting on what it means to be human and connect with others. I like the genre and the thought behind these stories, but sometimes it feels like they're stepping around the problem: defining what AI means for us now, and not the hypothetical future.

Right now, AI is a tool, and that tool can be used in a lot of different ways. People who champion using and creating AI programs seem to have the goal of making other people's lives easier. But that doesn't always pan out.

Issues with AI

Seemingly innocuous AI tools, like those that generate text or images, might make life easier for those looking to avoid writing an essay or who want to create art to share on social media, but it can negatively affect those who write or make art for a living. It can also damage people's reputations if they are accused of using AI to create these things. However, there's also been discourse surrounding the idea of using AI to write for TV or film. Media corporations have been looking at AI and its potential to write scripts for creative projects. This has caused difficulties for writers working in this industry and made job security seem thin.

Microsoft's infamous AI Twitter bot that started producing racist and sexist tweets after just 24 hours was intended to become smarter as it interacted with users. This attempt at improving the intelligence of AI through machine learning and pattern recognition was thwarted by internet trolls. This, I think, is an important issue to consider when using AI. If AI is gaining its information from the internet, then it's gaining all information available, whether it's incorrect or bigoted. This kind of experimentation can lead to people being affected by hate speech or offensive terms from an entity that can't actually form its own thoughts. Outside of erasing the bot and all it has produced, there seems to be limited action to combat this.

A more obvious—and more dangerous—way of misusing AI is how it has been used to create self-driving cars. Self-driving cars are a solution to a lack of transportation for those who can't drive, or those who dislike it. Although there are other solutions, self-driving cars would be available to the individual and help those in areas with a lack of public transportation. However, the accidents that have occurred with self-driving cars don't inspire much confidence, and the decision-making process involved in creating them can be disheartening if you like the concept. Tools like MIT's Moral Machine look into the decisions that self-driving cars might have to make, and they can be difficult. The machine looks at worst case scenarios and has people decide between two difficult choices. It is similar to the trolley problem, but can more easily reveal people's biases regarding who and what they value, as it forces people to choose who to protect in the event of an accident. This tool is used to show the potential of what goes into programming a self-driving car.

Conclusion

AI can be used to our benefit, but when we apply it to large-scale problems that may have other solutions, we can cause more problems for ourselves. People that seek to improve the intelligence of AI, and those that use AI in order to profit off of it, might need to take a step back and consider the consequences that might come from these decisions. This technology is improving rapidly, and if we don't have a good reason for why we're improving it, then maybe we should think about it before diving headfirst into applying it to our problems.

MEMO FROM THE CEO

Sophie Malloy is the founder and CEO of CleverByte. She formed the company after seeing the rise in conversation surrounding AI, and believed there was a market for an organization that was there to assist companies with its integration into as many areas as possible. She is a 2024 graduate of Miami University, earning degrees in English: Creative Writing and Entrepreneurship, both of which she's gone on to utilize in her position at CleverByte. Malloy sees AI as the future of business, and thinks it will allow anyone the ability to compete in areas often seen as reserved only for industry professionals or creatives. Included is a letter from Malloy that lays out her personal ethos and approach to business.

Memo from the CEO

Sophie Malloy

It is undoubtedly difficult for those who possess little to no creative ability to compete in the marketplace of art, typically forced to confine themselves to harsh and notoriously undesirable STEM and business fields. Living daily life shackled to numbers, portfolios, and Corporate Memphis, these humble Distinguished Individuals have no choice but to keep the ball of late-stage capitalism rolling.

I am of the opinion that it is solely unfair that these Individuals—being our society's most productive and righteous—are unable to properly commodify the arts with their complete lack of knowledge or understanding of the subject. As I am sure it is most obvious to an audience as esteemed as this, this lack of understanding should not hinder our society's richest and brightest from profiting off of and streamlining the art process. As you know, art is meant to be consumed en masse and should engage and entertain as many people as possible. If art can't do that, then it is obviously less valuable than other products available in today's market.

As it currently stands, creating art—whether it be with paint, words, or clay—is far too time-consuming and needs to be optimized in order to be of use to our dear Distinguished Individuals. It is unquestionably true that the creative arts have declined in quality recently. The staggering number of movie remakes, plain white canvas art exhibits, low-quality book adaptations, and the horrific resurrection of Colleen Hoover in the public eye are some egregious examples of the current degradation of art.

It is clear that those who consider themselves "creative" individuals have become spoiled. Career Creatives do not seem to understand the point of their work, constantly fighting for higher pay and more control over their products instead of focusing on producing a high quantity of Entertainment that can then be converted into cash. These unreasonable Career Creatives dare ask for more when the products they produce are of such low quality. As you—the esteemed reader—know, the creative arts should not be difficult, nor are they worth much unless produced quickly.

Writing particularly, is not a difficult job, and Career Creatives who write for a living should be thankful that they don't have to do anything productive like the important STEM and Business people. These ludicrous asks for livable wages, ownership of their work, and respect are quite silly considering the impending takeover of Artificial Intelligence.

Writers and artists specifically should take this time to optimize their own output so as not to be outpaced by AI in the near future. Instead, these lazy and unproductive urchins whine, complain, and have the audacity to demand more.

If anything proves the ingeniousness of our Distinguished Individuals, it is their ability to persevere. Artificial Intelligence in the hands of those without natural artistic talent evens out the playing field so that anyone can become an artist. This will help eliminate the middleman and allow for our dear Distinguished Individuals to profit off of more content, quicker.

Since it is not only hard to create quality works, but also time-consuming and expensive, it is undoubtedly best to focus AI on disrupting the creative industries. Some communist kooks believe that Distinguished Individuals should forgo their personal desires in order to focus on the development of AI in sectors like physical labor, social injustices, environmentalism, and high-risk jobs. This is absolutely ridiculous.

There is a gap in the market: logically minded people believe they deserve to monopolize everything, including things they don't understand, like art. Since there is that demand, it is our unquestioned responsibility to bow to them and allow them to fulfill that wish. How dare these Creatives try and tell them no? This is *progress*. We are on the cusp of an AI revolution! The end goal of which may remain unclear, but it is no doubt true that we are making progress. We must ignore these irrational Creatives, and instead focus on what's important: money.

Money is the be-all and end-all in every equation. If these Creatives can not learn how to harvest it for themselves, then someone more worthy and important will come along and take it for them.

MEET THE EDITORS

REECE HOLLOWELL

Project Manager

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NOTES

Artificial Intelligence: Defined and Explored

1. Heuristic search: a problem-solving technique used in AI to find the most efficient solutions to complex problems.
2. Neural networks: a machine learning model that is inspired by the structure and function of the human brain. Decision trees: a machine learning model that is used for classification and regression tasks.
3. Transistors: electronic devices used to control the flow of electrical current within electrical circuits.
4. Artificial Narrow Intelligence (ANI) is AI designed for specific tasks; conversely, Artificial General Intelligence (AGI) has self-awareness and can learn, understand, and apply knowledge at a human or superhuman level.
5. Deepmind: a British artificial intelligence company known for its cutting-edge research and development in the field of AI.

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