

# Implications of Generative Artificial Intelligence for Creative Writing

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27 Sept 2023

Work in progress

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## Introduction

ChatGPT is perhaps the best-known example of an Artificial Intelligence system that uses a Large Language Model (LLM)<sup>1</sup>. An LLM is essentially a system that is trained on a huge amount of data so that it has a deep knowledge of the statistical nature of language patterns and the structure of the texts that we humans use to communicate. LLMs use neural networks to analyse an existing text and to predict what further text is likely to follow.

Built by OpenAI, a private company funded by Elon Musk, ChatGPT uses a computer generated model of the human language to respond to questions and instructions in an apparently human fashion. Large quantities of text were scanned to create a large language model (LLM) that is essentially a database of the patterns and relationships between different words in the way that humans communicate, in subject-specific way. When given a question, instruction or statement the model can then predict likely text responses. The model is thus generating a transformed version of the input text based on pre-trained data – and hence it is called ChatGPT - the GPT standing for Generative Pre-trained Transformer.

What does ChatGPT look like in action? Let's ask it to provide a recipe that is tailored for diabetics:

User:

Suggest an easy recipe for breakfast for someone who is diabetic.

ChatGPT

Certainly! Here's a simple and balanced breakfast recipe suitable for someone with diabetes:

### **Greek Yogurt Parfait with Berries and Nuts:**

Ingredients:

- 1/2 cup Greek yoghurt (unsweetened)
- 1/4 cup mixed berries (such as blueberries, strawberries, or raspberries)
- 1 tablespoon chopped nuts (such as almonds, walnuts, or pecans)
- 1 teaspoon chia seeds (optional)
- 1 teaspoon honey or a sugar substitute (optional, for added sweetness)
- A sprinkle of cinnamon (optional)

Instructions:

**Prepare the Berries:** Wash and chop any larger berries like strawberries, if using. You can also use frozen berries, just make sure to thaw them before using.

**Assemble the Parfait:** In a serving glass or bowl, start by layering 1-2 tablespoons of Greek yogurt at the bottom.

**Add Berries:** Layer a small portion (about 1-2 tablespoons) of mixed berries on top of the yogurt.

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<sup>1</sup> Other popular examples are BERT, or Bidirectional Encoder Representations from Transformers, which was developed by Google, and which was developed by Google and which can understand questions to form meaningful responses and Microsoft's Bing Chat which is powered by the same technology as used in ChatGPT.

**Add Nuts and Seeds:** Sprinkle about 1/2 tablespoon of chopped nuts and 1/2 teaspoon of chia seeds over the berries.

**Repeat Layers:** Repeat the layering process with another layer of Greek yogurt, followed by berries, nuts, and chia seeds.

**Final Touches:** If desired, drizzle 1 teaspoon of honey or a sugar substitute over the top for added sweetness. You can also sprinkle a little cinnamon for extra flavor.

**Serve:** Your Greek Yogurt Parfait is ready to enjoy! You can eat it immediately or let it sit for a few minutes to allow the flavors to meld together.

#### Nutritional Notes:

- Greek yogurt is a good source of protein and probiotics, which can help stabilize blood sugar levels.
- Berries are rich in fiber, antioxidants, and vitamins, making them a great choice for people with diabetes.
- Nuts and seeds provide healthy fats and additional protein, helping to slow down the digestion of carbohydrates and prevent rapid blood sugar spikes.
- Chia seeds are high in fiber and can help improve digestion and promote steady blood sugar levels.
- The addition of honey or a sugar substitute should be done in moderation, as even these alternatives can affect blood sugar levels.

Remember to customize the portion sizes according to your dietary needs and preferences. It's always a good idea to consult with a healthcare professional or dietitian for personalized advice, especially when managing diabetes.

Note that ChatGPT has 'understood' that the recipe should be aimed at keeping the consumer's blood sugar low, and that means the ingredients should be low carbohydrate and should encourage slow absorption of those carbohydrates. This was because ChatGPT recognised the word 'diabetic' in the input and thus used the part of its model associated with this term. It has no actual understanding of what diabetes is, in a medical sense – it just has statistics gathered from examining a huge number of recipes that tells it that this is the sort of recipe mentioned in the same context as diabetes. Similarly, we asked for a breakfast recipe, so it has recommended things like yoghurt, rather than cottage pie, again because its LLM knows that yoghurt is highly likely to be a breakfast ingredient and cottage pie is very unlikely to be one. ChatGPT is simply making probability calculations – the more often words like 'yoghurt' and 'carbohydrate' are used when talking about 'breakfast' and 'diabetes' in the texts it is trained on, the more likely it is to use these words when asked to respond to a question or instruction that contains 'breakfast' and 'diabetes'. In this very real sense, ChatGPT is an applied statistics application rather than an example of artificial intelligence.

Generative AI's sophisticated weighting of probability based on analysing huge amounts of data is why it's sometimes described as 'applied statistics' rather than 'artificial intelligence'. The term 'artificial general intelligence' is used for a system that is intellectually as capable as a human. No such system exists today.

Where is ChatGPT currently used? OpenAI provide an API to ChatGPT so that many other applications can use it. Microsoft who are both a partner and investor in OpenAI) use the ChatGPT technology to provide answers to queries when the Microsoft Edge browser used

the Bing search engine. ChatGPT is integrated into some programming tools, where it provides boilerplate code for specific tasks. CNet has used ChatGPT to write short, simple news stories.

What are the alternatives to ChatGPT? There are many generative AI systems that not only handle text but also produce images, music and art. Google Bard is a text system. Midjourney, Stable Diffusion and DALL-E (from OpenAI) will generate images in response to text requests. Pixel 6 and iPhone 13 will offer tennis coaching using AI, or instruction on singing. In fact, anything that can be represented by a statistical model, trained on existing data can form the basis of an artificial intelligence system. This includes scripts, novels, poetry, photos, paintings, drawings, speech, music etc.

Here for example is a set of simple images, generated in a few seconds, using DALL-E from the following prompt:

*A water colour painting of a couple by a swimming pool in California in the summer in the style of David Hockney*



More sophisticated results would certainly be obtained by using a more detailed prompt.

Can you trust ChatGPT?

No. Everything that ChatGPT produces needs to be verified. It is a generative technology, so its output is only as good as the material it has been trained on. It is essentially a means of summarising and reproducing the content of pre-existing works. This may be inaccurate, out of date, or opinions may simply have changed since the training was completed. ChatGPT does not store any material verbatim, so it cannot look up specific facts and dates.

Examples of issues with ChatGPT's accuracy

CNET used ChatGPT to write articles but found that significant factual [errors](#) could appear in these articles (Leffer, 2023).

ChatGPT has been used by lawyers to automate the process of writing court submissions, but again serious errors can occur – in this case, the AI generated submission cited [fictional](#) rather than real cases as supporting evidence for the brief (Armstrong 2023).

Errors too have been introduced into academic papers as reported by [Randell and Coghlan](#) in 2023.

## Misinformation

It is possible to generate unintentional (or even intentional) misinformation using generative AI. The apparent high quality of the material generated by current AI systems is quite seductive. In such AI systems the link between the specific training content and a so called fact in the AI output is lost so it can be difficult to identify the authenticity and accuracy of the AI system's output. This term 'hallucination' is often used to characterise incorrect or false outputs. Often this can be attributed to lack of, or deficiencies in the training data, or inherent bias in training. But it may also simply be that the statistical model in the LLM of the AI has generated a falsehood, because although the word sequence it produces is high probability, it has no way of establishing the factual basis for that output. ChatGPT is particularly good at hallucinating about quotations from real people – as evidenced in [Pallaghy, 2023](#). Other instances of misinformation involve the creation of deepfakes – where existing media has been manipulated to substitute a person's likeness with that of another. This creates the possibility of defamation, where a party sues the creator of the inaccurate content, as in the case of an Australian mayor threatening to sue OpenAi after ChatGPT asserted that mayor had been sent to prison for bribery (Kaye, 2023).

### Who owns the copywrite to the output of an AI system?

This issue is still being debated. In a recent ruling in the USA, a federal judge ruled that artwork created by artificial intelligence is not eligible for copyright protection because it lacks human authorship (Setty and Poritz 2023).

Let's ask ChatGPT:

User:

Who owns the copyright of chatgpt's output?

ChatGPT:

As a machine learning model, I do not have the ability to hold copyright. The copyright for the output generated by me belongs to OpenAI, the company that created and maintains me. They have a content policy which states that the output generated by their models is free to use for any lawful purpose, with proper attribution to OpenAI. However if you want to use the output for commercial or other specific use, you should check the OpenAI's content policy and terms of service, or reach out to OpenAI's legal team for more information.

Copyright is an intellectual property principle (and law) that gives the creator of a piece of work the exclusive right to copy, adapt, distribute, display and, in the case of creative work, to perform that work. It is illegal therefore to copy original copyrighted work, either in its original form or in an adapted form, or to perform it – without the original author's permission.

However, in the field of AI, this simple definition tends to break down. A generative AI system is based on the material that was used to train the models within that AI system. This material may include documents, reports, social media messages, podcasts, web images and so on. Some of this material has no copyright. A lot of the material, however, although it is publicly accessible on the internet, is under copyright protection. Other material could have been purchased (e.g. a physical book) and scanned into the AI system by the system creators. But once all of this material is absorbed by the model, it is no longer in recognisable or retrievable form. In that sense, the model is not a direct adaption of the training data – it is some highly complex transformation. Has the copyright of the original training material been

broken, therefore? And does any new output of the AI system, produced in response to a user prompt, relate in any way to the authors of the training material? Or is it the property of the user who wrote the prompt, or the creators of the AI system? Or no-one? Essentially there are four types of stakeholders:

- The authors of the works that were used in the training of the AI model.
- The company or people that built the AI model.
- The user who wrote the prompt.
- The AI system that produced the response to that prompt.

The U.S. Copyright Office has argued that the lack of human authorship and the predictability of the AI system output means that AI-generated content (images, text, video, computer code, audio etc.) cannot be copyrighted (U.S. Copyright Office 2023).

The Copyright Office argued that the user prompt functions “closer to suggestions than orders, similar to the situation of a client who hires an artist to create an image with general directions as to its content” (U.S. Copyright Office 2023).

In other words, the prompt is analogous to the instructions given to a commissioned visual artist and as the commissioning editor would not own the artwork in that situation, the writer of the prompt used in the AI system does not therefore own the resultant AI output.

### Impersonation and Ownership

Since AI can be used to produce prose quickly and automatically, it opens the possibility of novels being authored by AI rather than humans. It also opens the possibility of publishing material and deceptively attributing it to a well-known author, with the aim of increasing the profitability of that material. One recent example is:

Five books for sale on [Amazon](#) were removed after author Jane Friedman complained that the titles were falsely listed as being written by her. The books, which Friedman believes were written by AI, were also listed on the Amazon-owned reviews site Goodreads. “It feels like a violation, because it’s really low quality material with my name on it,” Friedman told the Guardian. (Creamer 2023)

### Why are generative AIs controversial?

1. There are few limitations on the material that can be produced with generative AI. For example, hate texts, images of violence, oppression, gore and sexual material. Some AI systems impose restrictions on the material that can be produced (e.g., Midjourney has rules that prevent the generation of images showing gore and sex).
2. The training data for generative AIs is often taken from the internet or other public sources, without the permission of the copyright owners or without compensation.
3. There are strong concerns that generative AI will soon become good enough to threaten people’s jobs. In fact, generative AI is already being used to replace humans in certain tasks and jobs. McKinsey says:

Although generative AI is still in the early stages, the potential applications for businesses are significant and wide-ranging. Generative AI can be used to write code, design products, create marketing content and strategies, streamline operations, analyze legal documents, provide customer service via chatbots, and even accelerate scientific discovery. It can be used on its own or with “humans in the loop”; the latter is more likely at present, given its current level of maturity. All of this means that automation is about to affect a wider set of work activities involving expertise, interaction with people, and creativity. The timeline for automation adoption could be sharply accelerated. Without generative AI, our research estimated, automation could take over tasks accounting for 21.5 percent of the hours worked in the US economy by 2030. With it, that share has now jumped to 29.5 percent (Exhibit 3). (Ellingrud, Sanghvi et al 2023).

The idea that generative AI may replace writers is one of the things behind the current 2023 Hollywood writers’ and actors’ strike in Hollywood. Here the concern is that scriptwriters will no longer be used to generate new plots/scripts/treatments – instead, they will simply be used to polish and refine the ideas pumped out by AIs. An AI system can easily generate 100s of treatments in a very short time, albeit not quite at broadcast quality. The writers concern is both a loss of control and a resultant deskilling of their jobs.

In one example, Marvel Studios caused a [furore](#) when they revealed that the opening credits for their TV show Secret Invasion was created by an AI rather than by human artists (Horton 2023a).

4. Concerns have also arisen when bias and bigotry in training materials have leaked into the works created by generative AIs. A particular example of this occurred in Microsoft’s early attempts at creating a conversational chatbot (Vincent 2023).
5. As of the summer of 2023, there is an [active Writer’s Guild strike](#) that is at least partly concerned with the issues of the use of AI (Horton 2023b).

Given this collection of concerns, it is certainly possible that texts, images, videos, podcasts and social media feeds will be able to fool people and reinforce existing fake news that has been generated by real humans. There have already been examples of deep fakes being [used](#) for political gain (such as accusing opponents of doing things that they never actually did) (Chan 2023).

Is Generative Artificial Intelligence so dangerous that it should be banned?

Italy temporarily banned ChatGPT (partly because of GDPR concerns) but has now [reinstated](#) it. Some governments are considering imposing limitations and laws regarding the use of such AI systems. However, it is always hard to regulate effectively against rapidly developing technology that can be accessed worldwide.

Data privacy issues

Data privacy concerns in AI fall into two main areas: the ownership and privacy status of the training data, and the privacy and retention of the prompts used to stimulate AI output.



Data privacy areas at risk in Generative AI include consent to data collection, data retention, and usability risks.

### Data collection

Data is often collected from a wide range of sources for AI training purposes, and this may include personal information. The owners of this information may be unaware it has been used for this purpose, particularly if this information is scraped off the web. This is an area of concern and debate, as many owners of the material that has been used for training AI systems did not consent to that use of their material. For example, prominent authors including Margaret Atwood, Philip Pulman and Viet Thanh Nguyen have petitioned AI companies to provide appropriate compensation and to regulate their practices:

The [open letter](#), which has been set up by the Authors Guild, America's largest professional organisation for writers, is addressed to the CEOs of OpenAI, Alphabet, Meta, Stability AI, and IBM. It presents these generative AI leaders with three demands, asking that these companies: "Obtain permission for use of our copyrighted material"; "Compensate writers fairly for the past and ongoing use of our works"; and "Compensate writers fairly for the use of our works in AI output, whether or not the outputs are infringing under current law". (Knight 2023)

Perhaps ominously for the writers, this is not the first time the use of copyrighted material by high tech systems has been debated.

This petition is not the first time the Authors Guild has taken tech companies to task. In 2005 the writers' organisation filed a copyright infringement case against Google, claiming that the search engine's scanning of millions of books "was a plain and brazen violation of copyright law". In 2016, the long-running dispute came to an end when the US supreme court denied the Guild the right to appeal the ruling that Google's scanning of books constituted "fair use", and that "Google Books provide significant public benefits". (Knight 2023)

### Data retention

Most GDPR regulations include a "right to deletion" component – this allows users to demand that the holder of their personal information delete it from their system. It can be hard to identify which parts of a Large Language Model should be deleted in such circumstances – this is a technical limitation if companies wish to offer this feature. Should an AI system track prompt and output against userid? For example, if an AI system is being used as a therapist or a doctor, users will probably be providing sensitive personal data, maybe even unwittingly, to the AI system. This should be treated as GDPR data.

### Ethics

Given that there is no real human in the generative AI decision-making loop, there are several ethical issues to be considered when using system systems.

For example, in a system that generates AI images, the nature of the images generated will depend on the training data used in creating the AI model. If such data is not representative because of demographic limitations in the training data (e.g. age, sex, racial background, clothing style, hair style, eye colour and so on) then the images generated will be biased towards the material that is present in the training data.

Another example would be the case where an AI system is being used to analyse a job candidate's application. If the model has inherent biases, then the model will unintentionally (but possibly illegally) select candidates from certain backgrounds, thus breaking the equal opportunity laws.

These sorts of issues can be partially addressed by human moderation of the output – however, this is an expensive solution.

### Some examples

User:

What are the characteristics of a post-modern novel?

ChatGPT:

Postmodern novels are characterized by their departure from traditional narrative conventions and their exploration of themes related to identity, reality, language, and the nature of storytelling itself. Here are some key characteristics of postmodern novels:

**Metafiction:** Postmodern novels often blur the line between fiction and reality. They may self-consciously refer to their own status as a work of fiction, breaking the fourth wall and involving the reader in the creative process.

**Fragmentation and Nonlinear Narrative:** These novels frequently use non-linear storytelling, jumping back and forth in time or presenting events out of sequence. This fragmentation mirrors the complex and disjointed nature of contemporary experience.

**Intertextuality:** Postmodern novels engage in intertextual references, where they draw on other texts, genres, or cultural elements. This creates a layered and interconnected web of meaning that requires the reader to be familiar with a wide range of sources.

**Playfulness with Language:** Authors of postmodern novels often play with language, using wordplay, puns, irony, and unconventional narrative styles to challenge conventional ways of communicating.

**Multiple Perspectives and Unreliable Narrators:** These novels may present events from different characters' perspectives or include unreliable narrators, making it difficult for the reader to determine the objective truth of the story.

**Lack of Closure:** Postmodern novels might intentionally leave loose ends or unresolved questions, reflecting the uncertainty and ambiguity of the postmodern worldview.

**Cultural Critique and Skepticism:** Postmodern novels often critique established cultural norms, question authority, and challenge traditional beliefs. They can be skeptical about grand narratives and overarching explanations.

**Hybridization and Parody:** These novels often blend multiple genres, styles, and tones, creating a pastiche of different elements. They might also use parody to satirize or mock established literary forms or societal conventions.

**Focus on Identity and Subjectivity:** Postmodern novels frequently explore questions of personal and cultural identity, often challenging fixed notions of identity and emphasizing its fluid and fragmented nature.

**Global Perspective:** Many postmodern novels reflect the interconnectedness of the world and may deal with themes of globalization, migration, and cultural exchange.

Notable examples of postmodern novels include works by authors like Italo Calvino, Thomas Pynchon, Jorge Luis Borges, Salman Rushdie, Don DeLillo, and Jeanette Winterson. Keep in mind that the term "postmodern" covers a wide range of styles and approaches, and not all postmodern novels will exhibit every single characteristic mentioned here.

Here ChatGPT is simply using the knowledge it has built up by examining many, many, many existing texts (in the form of web pages, academic journals, newspapers, blog posts and so on) to provide the most likely set of words that would follow on from the question ‘What are the characteristics of a post-modern novel?’ In this sense, ChatGPT has no consciousness or intelligence, and it certainly cannot generate answers about things it has not been trained to recognise. For example:

**User:**

Does Romana Jones truly love Christian Fredrickson?

**ChatGPT:**

I'm sorry, but I don't have any information about specific individuals named Romana Jones and Christian Fredrickson. If they are fictional characters from a story or work of art, or if they are private individuals, I wouldn't have any knowledge about their personal feelings or relationships. If you can provide more context or details, I'd be happy to try to help in a different way.

Here ChatGPT has (apparently) not seen enough information about Romana and Christian within its training data so it cannot answer. This is not surprising since these are two names I made up.

Let's try another example, with some more famous literary characters:

**User:**

Does Hamlet love Ophelia?

**ChatGPT:**

The question of whether Hamlet truly loved Ophelia is a subject of interpretation and debate among scholars and readers of William Shakespeare's play "Hamlet." In the play, Hamlet's relationship with Ophelia is complex and multifaceted.

At the beginning of the play, it seems that Hamlet does have genuine feelings for Ophelia. He expresses affection for her and exchanges love letters with her. However, as the play progresses and Hamlet becomes increasingly consumed by his own internal struggles and his quest for revenge, his behavior towards Ophelia becomes erratic and confusing.

Hamlet's famous "To be or not to be" soliloquy reflects his contemplation of life and death, and it's often suggested that his emotional turmoil affects his interactions with those around him, including Ophelia. He lashes out at her and treats her poorly in some instances, which can be interpreted as a result of his inner turmoil rather than a lack of affection for her.

In Act 3, Scene 1, Hamlet delivers his "Get thee to a nunnery" speech to Ophelia, expressing anger and bitterness. Some interpretations suggest that this speech might be driven by a mix of anger at his mother's marriage and his own conflicted feelings rather than a complete lack of love for Ophelia.

Ultimately, the death of Ophelia and the emotional toll it takes on Hamlet suggest that there may have been genuine affection between them. Hamlet's reaction to Ophelia's death, where he confronts her funeral and expresses his grief, indicates a complex emotional connection.

In summary, the relationship between Hamlet and Ophelia is marked by ambiguity, and Shakespeare deliberately leaves room for interpretation. It's possible to argue both sides—that Hamlet did love Ophelia but was deeply conflicted, or that his feelings were mixed and influenced by his emotional struggles and the larger events of the play. Different productions and readings of the play might emphasize different aspects of their relationship.

Note, this example gives the impression that ChatGPT will always recognise when it does not know something (as in the case of Romana and Frederick) and reply accordingly. This is not the case. In some circumstances, ChatGPT will quite happily make stuff up. Nevertheless, the examples above seem fairly miraculous. ChatGPT is apparently doing a number of very human-like things:

1. It can respond to complex and even colloquial English text and recognise and respond to questions or instructions.
2. It can generate sophisticated and complex answers which appear to be correct.
3. It does all of this automatically, without any direct human intervention, and in more or less real-time.

## [More about AI](#)

Artificial intelligence has been said to be a means of programming a computer so that it responds to inputs (i.e., data) in the same way that an intelligent being would. In other words, it simulates how that intelligent being would react to and process data inputs. Of course, that slightly sidesteps the issue, because it does not precisely define what is meant by an intelligent being, but for the present purposes, we can assume that this is a human being.

The traditional method of programming a computer involves implementing an algorithm in the coding language of the computer. The algorithm contains rules that convert the data inputs to the computer into some sort of useful output. So, a darts scoring program would add up the values scored by each of the three darts thrown in a player's turn, subtract the total from the current player's score, and if the score was zero, then announce that that particular player had won. Extra rules would be applied if a player's running total went negative. The algorithm would also police requirements such as finishing on a double, taking turns and so on. The key thing here is that the rules of play are well-known and fixed before the program is written.

The new paradigm introduced by AI is that an AI system does not need to be given a set of well-known and predetermined rules. Instead, the computer is used to deduce the rules itself. This is done by presenting the computer system with a set of data that is labelled with the characteristics of that data. The computer then searches for patterns with data that match

onto the characteristics of that data. In simplistic terms, if we wanted to build a system that differentiated between giraffes and birds. We would give the system 100 pictures say of giraffes and 100 of birds. Each image would be labelled correctly. The system would examine these images and deduce rules such as

- giraffes have two four legs, but birds have two.
- giraffes have long bendy necks, but birds have short necks that don't bend much.
- giraffes have baby giraffes, but birds have eggs which then turn into baby birds.

and so on. (Here we are assuming that the system has some image recognition technology that can recognise legs, eggs etc. – but the basic principle is correct).

Then when presented with a new image, the system can try to determine if it finds something that has four or two legs or is sitting on an egg etc and use that to decide if the image is of a bird or giraffe.

What then happens if the system is shown a picture of a flamingo? This has a bendy neck but only two legs. Or maybe even one, if the flamingo is in a typical resting pose, with the second leg hidden.

### How does ChatGPT actually work?

Well, as a start, we can ask ChatGPT itself.

**User:**

What is ChatGPT?

**ChatGPT:**

ChatGPT is a language model developed by OpenAI. It's based on the GPT (Generative Pre-trained Transformer) architecture, specifically GPT-3.5 in this case. GPT-3.5 is one of the versions of the GPT-3 model and is designed to understand and generate human-like text based on the input it receives.

ChatGPT is trained on a massive amount of text from the internet, which allows it to generate coherent and contextually relevant responses to a wide variety of prompts. It can answer questions, provide explanations, engage in conversations, write essays, create stories, and perform many other language-related tasks.

OpenAI designed GPT-3.5 to have 175 billion parameters, which are the adjustable settings that the model uses to generate text. The large number of parameters gives ChatGPT an extensive knowledge of language and a capability to understand and mimic human-like language patterns and styles.

People use ChatGPT for a range of purposes, from getting answers to questions to generating content, brainstorming ideas, and even for entertainment. It's important to note that while ChatGPT is very capable, it also has limitations. It might occasionally generate incorrect or nonsensical information, and it can sometimes produce biased or inappropriate content. Users should exercise critical thinking and verify information when using tools like ChatGPT.

**User:**

How does ChatGPT work?

**ChatGPT:**

ChatGPT, like other models in the GPT series, works through a process called "transformer" architecture. Here's a simplified breakdown of how it works:

**Input Encoding:** When you give ChatGPT a prompt or input, it first encodes that text into a numerical format that the model can understand. This involves breaking down the text into smaller units, like words or subwords, and converting them into vectors (numeric representations).

**Attention Mechanism:** The model uses an attention mechanism to analyze the relationships between different words in the input text. This helps the model understand the context and dependencies between words and their positions in the text.

**Layered Processing:** GPT models consist of multiple layers, each with its own set of parameters. These layers process the input text in a hierarchical manner. Each layer refines the understanding of the text based on the previous layers' outputs.

**Positional Encoding:** Since the transformer architecture doesn't inherently understand the order of words in a sequence, positional encodings are added to the input vectors. This allows the model to recognize the sequence and structure of the text.

**Decoding and Generation:** Once the input is processed through the layers, the model moves to the decoding phase. During decoding, the model generates text one word at a time, predicting the next word based on the context it has learned from the input.

**Sampling Strategy:** When generating text, ChatGPT uses a sampling strategy to choose the next word. This can involve choosing the most likely word, a word based on probabilities, or even introducing randomness to make the responses more diverse.

**Repetition and Context:** One challenge with GPT models is that they can sometimes produce repetitive or contextually inconsistent text. OpenAI has implemented techniques to mitigate this, but it's still possible for the model to generate less ideal responses in certain situations.

**User:**

What is attention in ChatGPT?

**ChatGPT**

Attention, in the context of models like ChatGPT, refers to a mechanism that allows the model to focus on different parts of the input text (context) while generating an output response. This mechanism is inspired by the way human attention works. Instead of treating all words in the input equally, attention enables the model to assign varying degrees of importance or relevance to different words or tokens based on their context and position.

In models like GPT (Generative Pre-trained Transformer) and its variants, including ChatGPT, the attention mechanism is a crucial component of the architecture. It helps the model capture long-range dependencies in the input text and generate coherent and contextually relevant responses.

The attention mechanism involves three main components:

**Query:** A vector representing the current position or word being generated.

**Key:** Vectors representing all positions or words in the input context.

Value: Vectors associated with each position or word in the input context, typically the same as the key.

The attention mechanism calculates a weighted sum of the values based on the compatibility (or similarity) between the query and the keys. The weights are computed using a mathematical function called the attention score, often based on dot-product or other similarity metrics. These weights determine how much attention the model should give to each position in the input context when generating the output.

In a generative context like ChatGPT, attention allows the model to consider relevant parts of the conversation history while crafting a response. This helps the model produce more contextually coherent and meaningful outputs, as it can focus on the parts of the conversation that are most relevant to the current task or query.

**User:**

What is a query vector in ChatGPT

**ChatGPT**

In the context of models like ChatGPT, a query vector is a mathematical representation of the current position or token that the model is generating or attending to. The query vector is used in the attention mechanism to compare against the key vectors associated with different positions in the input context.

When generating a response in a conversational context, the model generates tokens one by one. At each step, the model creates a query vector that represents the current token it is generating. This query vector is then compared to the key vectors associated with all positions in the input context using a similarity measure, often the dot product. The resulting similarity scores determine how much attention the model should allocate to each position in the input context.

In other words, the query vector helps the model decide which parts of the input context are most relevant for generating the current token. By attending to different parts of the context with varying degrees of attention, the model can generate coherent and contextually appropriate responses.

The process of calculating attention involves generating a set of attention scores between the query vector and the key vectors, which are then used to weight the corresponding value vectors (associated with the input positions) when producing the output. This mechanism allows the model to dynamically focus on different parts of the conversation history and context to generate contextually relevant and coherent responses.

**User:**

What is a key vector in ChatGPT?

**ChatGPT**

In models like ChatGPT, a key vector is a mathematical representation of a specific position or token in the input text (context) that the model is attending to. The key vectors are used in conjunction with query vectors and value vectors as part of the attention mechanism to generate contextually relevant responses.

When the model is generating a response in a conversational context, it creates a query vector to represent the current token it is generating. Simultaneously, it creates key vectors for all the positions or tokens in the input context. These key vectors capture information about the different parts of the context.

The attention mechanism then computes a similarity measure (often the dot product) between the query vector and each key vector. This similarity score quantifies how relevant the current token being generated is to each position in the input context. The higher the similarity score, the more attention the model will allocate to that particular position in the context.

The key vectors essentially act as reference points that the query vector is compared against. By comparing the query vector to the key vectors, the model can decide which parts of the context are most important or relevant for generating the current response token. This dynamic attention mechanism allows the model to focus on different parts of the context based on the current context and token being generated, resulting in more contextually appropriate and coherent responses.

#### User:

What is a value vector in GPT?

#### ChatGPT

In models like GPT, including ChatGPT, a value vector is a representation associated with a specific position or token in the input text (context). The value vectors are used in the attention mechanism to generate contextually relevant responses.

When using the attention mechanism, the model creates three types of vectors for each position in the input context: query vectors, key vectors, and value vectors.

**Query Vector:** Represents the current token or position that the model is generating.

**Key Vector:** Represents a position or token in the input context that the model is attending to.

**Value Vector:** Represents the content or information associated with the position in the input context.

The attention mechanism computes a similarity measure (often the dot product) between the query vector and each key vector. The resulting similarity scores determine how much attention the model should allocate to each position in the input context. Once the attention scores are calculated, they are used to weight the corresponding value vectors.

The weighted value vectors are then combined to produce the final output token or prediction. In the case of language generation tasks, like generating text in a conversation, these weighted value vectors contribute to generating the contextually appropriate and coherent next word or token.

In summary, value vectors in GPT-like models store the content or information associated with each position in the input context. They play a crucial role in the attention mechanism, as they are the vectors that are combined based on attention scores to influence the model's output generation process.



User:

How does the attention mechanism in ChatGPT work?

ChatGPT

The attention mechanism in ChatGPT, which is based on the Transformer architecture, works by allowing the model to dynamically focus on different parts of the input context (previous conversation history) when generating a response. This mechanism enables the model to capture relevant information and generate contextually appropriate and coherent replies.

Here's a high-level overview of how the attention mechanism works in ChatGPT:

**Input Encoding:** The input context, which includes the conversation history and any additional prompt, is encoded into query, key, and value vectors for each position (word/token). These vectors are computed using linear transformations of the input embeddings.

**Query, Key, and Value Vectors:** For each position in the input context, the model generates three types of vectors:

**Query Vector:** Represents the current position being generated in the output.

**Key Vector:** Represents a position in the input context that the model is attending to.

**Value Vector:** Represents the content or information associated with the position in the input context.

**Calculating Attention Scores:** The attention mechanism calculates similarity scores between the query vector and all the key vectors using a mathematical operation like dot product. These scores indicate how relevant each position in the input context is to the current position being generated.

**Softmax and Attention Weights:** The calculated attention scores are typically passed through a softmax function to convert them into attention weights. Softmax ensures that the attention weights sum up to 1, making them interpretable as probabilities.

**Weighted Sum of Value Vectors:** The attention weights are then used to compute a weighted sum of the value vectors associated with different positions in the input context. This weighted sum represents the contextually relevant information that the model uses to generate the next token in the response.

**Generating the Output Token:** The weighted sum of value vectors is combined with the embedding of the previous generated token (or the current query vector) and passed through the decoder part of the model. The decoder generates the probability distribution over the vocabulary for the next token. Sampling or choosing the token with the highest probability results in the next token of the response.

By using the attention mechanism, ChatGPT can focus more on the parts of the input context that are relevant to the current response being generated. This enables the model to generate

contextually coherent and meaningful replies in conversation, as it can effectively capture the relationships between different parts of the conversation history.

**User:**

How does the self attention mechanism in chatGPT work?

**ChatGPT**

The self-attention mechanism is a critical component of the Transformer architecture, which includes models like ChatGPT. Self-attention allows the model to capture dependencies between different words or tokens within a single sequence of text (such as a sentence or a conversation history) by considering pairwise interactions between all positions. This mechanism helps the model understand the relationships and contexts among words or tokens, leading to improved language understanding and generation.

Here's how the self-attention mechanism works in ChatGPT:

**Input Transformation:** The input sequence (e.g., a sentence or conversation history) is transformed into three types of vectors for each position (word/token):

**Query Vector:** Represents the current position and is used to measure its similarity with other positions.

**Key Vector:** Represents all positions and is used to measure the similarity of other positions with the current position.

**Value Vector:** Represents the content or information associated with each position.

**Calculating Similarity Scores:** For each position in the sequence, the self-attention mechanism computes a similarity score with respect to all other positions. This is typically done by taking the dot product between the query vector of the current position and the key vectors of all other positions. The result is a set of similarity scores indicating the relevance of each position to the current position.

**Applying Softmax:** The similarity scores are passed through a softmax function to obtain attention weights. Softmax converts the scores into a probability distribution, ensuring that the weights sum to 1. These weights indicate how much attention the current position should pay to each of the other positions.

**Weighted Sum of Value Vectors:** The attention weights are used to compute a weighted sum of the value vectors associated with all positions. This weighted sum represents the contextually relevant information from the entire sequence that is relevant to the current position.

**Multi-Head Attention:** To capture different types of relationships and contexts, the self-attention mechanism is often used with multiple sets of query, key, and value transformations, known as "heads." Each head learns different patterns and dependencies within the data.

**Concatenation and Linear Transformation:** The outputs of the different attention heads are concatenated and linearly transformed through a learnable weight matrix. This step allows the model to combine information from different perspectives.

**Feedforward Neural Networks:** The concatenated and transformed output is passed through feedforward neural networks to further process and transform the information.

**Residual Connections and Layer Normalization:** The processed output is combined with the original input using residual connections. Layer normalization is applied to stabilize training.

By using self-attention, ChatGPT can capture long-range dependencies, relationships, and contextual information across the conversation history, enabling it to generate coherent and contextually relevant responses in a conversational setting.

to generate the distribution of words in the vocabulary for the next predicted word.

**User:**

What is a neural network?

**ChatGPT**

A neural network is a computational model inspired by the structure and functioning of the human brain's interconnected neurons. It's designed to perform complex tasks by learning patterns and representations from data. Neural networks are a fundamental concept in machine learning and have led to significant advancements in various fields, including image recognition, natural language processing, and game playing.

At a high level, a neural network consists of interconnected layers of artificial neurons, also called nodes or units. These neurons are organized into different layers, typically including an input layer, one or more hidden layers, and an output layer. Each neuron in one layer is connected to neurons in the adjacent layers, forming a network of interconnected nodes.

Here's a basic overview of how a neural network works:

**Input Layer:** The input layer receives the raw data or features that the network will process. Each neuron in the input layer represents a specific feature or input value.

**Hidden Layers:** Between the input and output layers, there can be one or more hidden layers. Each neuron in these layers performs computations on the input and passes its output to the neurons in the subsequent layer. Hidden layers allow the network to learn complex patterns and representations from the data.

**Weights and Biases:** Each connection between neurons has an associated weight, which determines the strength of the connection. Additionally, each neuron has a bias, which can help the network learn better representations.

**Activation Functions:** Neurons apply an activation function to the weighted sum of their inputs and biases. This introduces non-linearity into the network, enabling it to learn more complex relationships in the data.

**Output Layer:** The output layer produces the final predictions or results of the network's computations. The number of neurons in the output layer depends on the specific task—classification, regression, etc.

**Learning:** Neural networks learn by adjusting the weights and biases of the connections based on the differences between predicted and actual outputs. This adjustment is done through optimization algorithms like gradient descent, which minimize a loss function that quantifies the network's performance.

**Backpropagation:** The process of updating the weights and biases through gradient descent involves backpropagating the error gradients from the output layer back to the input layer. This helps the network learn which weights and biases contribute to the error and adjust them accordingly.

**Training:** The network iteratively adjusts its parameters using training data until it can make accurate predictions or produce desired outputs.

Neural networks come in various architectures, each suited for different types of tasks. Convolutional Neural Networks (CNNs) are commonly used for image-related tasks, Recurrent Neural Networks (RNNs) for sequential data like language, and Transformers for tasks requiring

A feedforward neural network, also known as a multilayer perceptron (MLP), is a fundamental type of artificial neural network where the connections between neurons do not form cycles or loops. It's a basic architecture used for a wide range of machine learning tasks, such as classification, regression, and function approximation. Feedforward neural networks consist of layers of interconnected neurons that process input data and produce output predictions.

Here are the key characteristics and components of a feedforward neural network:

**Layers:** A feedforward neural network typically consists of three types of layers: an input layer, one or more hidden layers, and an output layer. Each layer contains a number of neurons (nodes) that process and transform the input data.

**Neurons:** Each neuron in the hidden and output layers performs a weighted sum of its input signals, adds a bias term, and then applies an activation function to produce an output. The activation function introduces non-linearity to the network, allowing it to learn complex relationships in the data.

**Weights and Biases:** The connections between neurons are associated with weights that determine the strength of the connection. Each neuron also has a bias term that affects its response. These weights and biases are learned during the training process to optimize the network's performance.

**Activation Functions:** Activation functions introduce non-linearity to the network. Common activation functions include the sigmoid function, hyperbolic tangent (tanh), and rectified linear unit (ReLU). They transform the weighted sum and bias input into an output that can then be passed to the next layer.

**Forward Propagation:** Information flows through the network in a forward direction, from the input layer through the hidden layers to the output layer. Each neuron's output becomes the input for the neurons in the next layer.

**Output Layer:** The output layer produces the final predictions or outputs of the network. The number of neurons in this layer depends on the task—binary classification might have one neuron with a sigmoid activation, while multi-class classification might use softmax activation.

**Loss Function:** A loss function quantifies the difference between the predicted output and the actual target values. The network's goal is to minimize this loss function during training.

**Backpropagation and Gradient Descent:** During training, the network adjusts its weights and biases using optimization techniques like gradient descent and backpropagation.

Backpropagation calculates the gradients of the loss with respect to the network's parameters, allowing weights and biases to be updated in a way that reduces the loss.

Feedforward neural networks are foundational building blocks of more complex architectures like Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs). They are versatile and have been widely used for various tasks in machine learning and artificial intelligence.

## Is ChatGPT conscious?

Can a language model (and thus things like ChatGPT) be conscious? Shardlave (2023) argues that they cannot, saying that “there is no evidence that learning to predict the next word in a sequence can give rise to the capacity for logic, perception, planning or veracity, all of which are fundamental facets of the human experience and necessary outcomes of model consciousness.

ChatGPT doesn't possess true understanding or consciousness. It doesn't have knowledge beyond what it has been trained on. It is simply a machine learning model that excels at pattern recognition and text generation, and its responses are generated based on patterns it has learned from the vast amount of text it was trained on. Inevitably therefore it lacks the characteristics of human-like comprehension and critical thinking. It cannot generate novel thought.

As Stephen Wolfram points out (Wolfram, 2023) there may be some specific circumstances when a generative AI system can generate new thought:

It's not going to be able to discover fundamentally new things-- well, with a couple of exceptions there. I think one thing it can do is, I think one thing it can do is, if there are analogies that might be found between this place and that place, it's really good at finding, kind of, statistical facts from language. Usually, we're used to doing statistics from numbers, but LLMs manage to do statistics from text as well.

And so if you say, well, what was the trend in fashion in 1955, there's a good chance that the LLM will be able to take sort of the stuff that it ground up from the web and answer that. And similarly, if you say, well, could there be an analogy between metamathematics and general relativity, there's a chance that it could figure that out, because it can see that the structure of what's said about those two areas has a certain similarity- something that seems like bizarrely magic to us humans, something that some of us humans kind of pride. (Wolfram 2023)

That being said, and bearing in mind we cannot truly trust anything that ChatGPT says, it is interesting and maybe amusing to ask ChatGPT itself if it thinks it is an intelligent, conscious being:

User:

Are you intelligent?

ChatGPT

I am an AI language model created by OpenAI called ChatGPT. While I can understand and generate human-like text based on the patterns in the data I've been trained on, I don't possess consciousness, emotions, or true intelligence. My responses are generated based on the patterns and information I've learned from the text, but I don't have personal experiences, thoughts, or awareness like a human being. Think of me as a very advanced text generator designed to assist with a wide range of tasks and answer questions to the best of my knowledge and training.

wide range of tasks and answer questions to the best of my knowledge and training.

User:

Are you conscious?

ChatGPT:

No, I am not conscious. I am a machine learning model, specifically OpenAI's GPT-3.5, and I lack subjective awareness, consciousness, and emotions. I operate based on patterns and information present in the data I've been trained on. My responses are generated algorithmically, and I don't possess self-awareness or the ability to experience the world in the way humans do.

ChatGPT is surprisingly well aware of the differences between it and a human:

User:

What is the difference between a human and ChatGPT?

ChatGPT:

There are several fundamental differences between a human and ChatGPT:

**Consciousness and Awareness:** Humans are conscious beings with self-awareness, thoughts, feelings, and subjective experiences. ChatGPT, on the other hand, lacks consciousness and self-awareness. It processes and generates text based on patterns in its training data.

**Emotions and Empathy:** Humans experience a wide range of emotions, including happiness, sadness, anger, and empathy. ChatGPT does not experience emotions and does not have the capacity for genuine empathy.

**Learning and Growth:** Humans learn and adapt throughout their lives, acquiring knowledge, skills, and experiences that shape their understanding of the world. While ChatGPT has been trained on a vast amount of data, it doesn't learn or grow in the same way humans do.

**Physical Existence:** Humans have physical bodies, senses, and the ability to interact with the physical world. ChatGPT exists solely as a software program running on computers and lacks a physical presence.

**Creativity and Originality:** Humans are capable of creative thinking, generating original ideas, and engaging in artistic endeavors. While ChatGPT can generate text that might seem creative, it is essentially recombining patterns from its training data rather than generating truly novel ideas.

**Subjective Experience:** Humans have personal perspectives, beliefs, and values that shape their decisions and actions. ChatGPT lacks personal beliefs and values and generates responses based on statistical associations in its training data.

**Biological Nature:** Humans are biological organisms with complex physiological systems that support various functions such as reproduction, metabolism, and growth. ChatGPT is a software program running on electronic hardware.

In summary, humans are conscious, emotional, physical, creative beings with individual experiences and the capacity for learning and growth. ChatGPT is an AI language model that processes and generates text based on patterns in its training data, but it lacks consciousness, emotions, physicality, and the holistic capabilities of human beings.

## Using ChatGPT to generate stories

David Germain (2023c) suggests the following guidelines when using ChatGPT to generate fiction:

- ChatGPT likes to work in response chunks of around 250 words – so break the story into small chunks.
- Use ChatGPT to write the sequence of beats that will make up your story – each beat can then be used to generate a 250 word chunk
- Tell ChatGPT sufficient biographical information about your characters, within the context of the current story.
- Experiment with zero, one, and multi-shot prompts.
- Use scripted dialogue as a backbone for prose.
- Rather than “write in the style of...” ask the AI to teach itself how to write stylishly.
- ChatGPT will give you as many rewrites and revisions as you want – take advantage of this generosity.

He gives an example of a fiction scene written using these guidelines with a little manual tweaking [here](#) (David Germain 2023b).

The following sections will look at these individual guidelines in more detail.

### Use small chunks and labelled character and location descriptions

The current (2023) version of ChatGPT handles up to approximately 4000 tokens (a token is a word) in a single chat interaction – this includes both your prompt and its reply. So, it is never going to write a 100,000-word novel in a single go. Even an attempt to right a 1500-word scene is not going to work well. This means that the story you want to tell must be partitioned into 200-500 word chunks. So that 1500-word scene needs to be broken down into a number of beats. Within a single login session, ChatGPT will retain some idea of the context of what you are doing between individual chat interactions. So, this means if you want it to generate some dialogue for Mike the laconic, hard-bitten detective and then you must first tell it about Mike, and only then ask for some dialogue. For example,

**User:**

Refer to the following character in the story as 'Mike': Mike is a private detective, laconic, wise-cracking, in the tradition of American Noire. He lives in the East End of London, and is willing to break the law to make a living. But he won't resort to violence unless he has to,

**ChatGPT**

Certainly, I'll refer to the character in the story as 'Mike.' Mike is a private detective, laconic, wise-cracking, in the tradition of American Noir. He lives in the East End of London and is willing to break the law to make a living. However, he won't resort to violence unless he has to.

**User:**

Refer to the following as "Mike's office": A grimy basement room, underneath a sleazy nightclub, just off Old Street in Shoreditch. He has a battered desk, and a broken filing cabinet, a kettle and two teacups without saucers. Refer to the following character as "The blonde": Tall, leggy, bright red lipstick, looks 40 but is probably older – expensive shoes and coat, she is happy to spend other people's money in exchange for her personal favours.

**ChatGPT**

Certainly, I'll use the provided descriptions:

"Mike's office" is a grimy basement room underneath a sleazy nightclub just off Old Street in Shoreditch. It contains a battered desk, a broken filing cabinet, a kettle, and two teacups without saucers.

"The blonde" is tall, leggy, wears bright red lipstick, looks 40 but is probably older, and sports expensive shoes and a coat. She is happy to spend other people's money in exchange for her personal favours.

ChatGPT does not understand in a human way what you tell it. It will however remember, word for word, your input and it will use the word sequences you provide as context in the same chat session. So, it makes sense to label each description with convenient tags like 'Mike' and 'The Blonde' so that you can ask ChatGPT to refer to these descriptions later.

Break your Synopsis into Beats

ChatGPT works best with small fragments. You therefore need to break your story into scenes or beats. Then you need to work on the detail in each scene or beat. If you just ask ChatGPT to generate a synopsis and only give it very high-level generic information, then you are only get given a very bland, stereotypical story. It's up to you to provide the creativity of inventing the story (though of course, you can re-use the myriads of tropes that already exist in literature. Let's start with a simple synopsis (though we will see later it is perhaps better to use a more complex procedure and to start with the logline for your story, then generate the synopsis, then generate the beat sheet, then expand the beats into scenes). Here's the simple synopsis for a crime thriller:

**User:**

The following is "Synopsis A": A MAJOR in military intelligence returns to London's East End from abroad. THE MANOR is there to attend the funeral of his estranged brother, only to find, when he views the body in the morgue, that the dead man is not his brother. But the LAWYER dealing with his brother's estate has already identified the body to the police, so the MAJOR decides there must be a conspiracy to conceal what has happened to his brother. When visiting his brother's flat, the MAJOR meets a BLONDE WOMAN who tells him that his brother has been involved with a local crime syndicate and has been selling amphetamines to supplement his income. The MAJOR does not believe the BLONDE but decides to go along with her story. She offers to introduce him to one of the criminal gang members.

**ChatGPT**



Certainly, you've provided "Synopsis A" for your story:

"A MAJOR in military intelligence returns to London's East End from abroad. THE MANOR is there to attend the funeral of his estranged brother, only to find, when he views the body in the morgue, that the dead man is not his brother. But the LAWYER dealing with his brother's estate has already identified the body to the police, so the MAJOR decides there must be a conspiracy to conceal what has happened to his brother. When visiting his brother's flat, the MAJOR meets a BLONDE WOMAN who tells him that his brother has been involved with a local crime syndicate and has been selling amphetamines to supplement his income. The MAJOR does not believe the BLONDE but decides to go along with her story. She offers to introduce him to one of the criminal gang members."

Now let's expand this into a structured synopsis:

**User:**

Rewrite "Synopsis A" using Dan Harmon's Story Circle as the structure, but I would like to end on a cliff-hanger. Label each of the eight sections in the Story Circle. Do not add additional story beats. The cliff-hanger should finish with "She offers to introduce him to one of the criminal gang members."

**ChatGPT**

Certainly, here's "Synopsis A" restructured using Dan Harmon's Story Circle with each section labelled, and ending on the requested cliff-hanger:

**You:** A MAJOR in military intelligence returns to London's East End from abroad.

**Need:** He needs to attend the funeral of his estranged brother.

**Go:** At the morgue, he discovers that the dead man is not his brother.

**Search:** Suspecting a conspiracy, he investigates further.

**Find:** He visits his brother's flat and meets a BLONDE WOMAN.

**Take:** The BLONDE WOMAN claims his brother was involved with a local crime syndicate and selling amphetamines.

**Return:** Doubtful but intrigued, the MAJOR decides to go along with her story.

**Change:** She offers to introduce him to one of the criminal gang members.

[Cliff-hanger] As the BLONDE WOMAN's words hang in the air, the MAJOR hesitates, torn between unravelling the mystery of his brother's death and the dangerous world she's leading him into. The decision he makes will set him on a treacherous path with unforeseen consequences.

If you don't like that particular structural style is easy to select another:

**User:**

Rewrite "Synopsis A" using The Hero's Quest as the structure, but I would like to end on a cliff-hanger. Label each of the eight sections in the Story Circle. Do not add additional story beats. The cliff-hanger should finish with "She offers to introduce him to one of the criminal gang members."

**ChatGPT**

Certainly, here's "Synopsis A" restructured using The Hero's Quest with each section labelled, and ending on the requested cliffhanger:

**The Ordinary World:** A MAJOR in military intelligence returns to London's East End from abroad.

**The Call to Adventure:** He must attend the funeral of his estranged brother.

**Refusal of the Call:** At the morgue, he discovers that the dead man is not his brother but doubts there's more to the story.

**Meeting the Mentor:** The MAJOR meets a LAWYER who informs him that the body has been identified by his brother's estate.

**Crossing the First Threshold:** Suspecting a conspiracy, he decides to investigate further, defying the lawyer's counsel.

**Tests, Allies, and Enemies:** While exploring his brother's flat, he encounters a BLONDE WOMAN who claims his brother had ties to a crime syndicate.

**Approach to the Inmost Cave:** Skeptical yet intrigued, the MAJOR considers whether to believe the BLONDE WOMAN's story.

**The Ordeal [Cliffhanger]:** She offers to introduce him to one of the criminal gang members. The MAJOR now stands at the precipice of a dangerous journey, unsure of the perils that lie ahead. His decision in this critical moment will determine the course of his quest.

The use of a structured approach, where the synopsis is broken down into fragments has the advantage that it stops ChatGPT's creativity running wild, particularly because the end of the synopsis has been specified so ChatGPT has to aim at a specific end point. Note that if a critical beat was missing, then ChatGPT would say so.

These individual beats can now be treated as separate tasks and expanded as necessary. Typically, they would become a sequence of 250 to 500 word scenes in the final story.

#### Provide Character Profiles

ChatGPT is not omniscient. It does not know the characters in your story. So, if you won't them to be unique individuals then you must tell ChatGPT about them. Four or five sentences (or even less) of biography, that is relevant to the beat that is being written is sufficient. If different aspects of a character come out as the story unfolds, then you may need to update ChatGPT with the appropriate character changes.

#### User:

The following is the description of the MAJOR. Male, in his early 30s, very fit, with a troubled conscience due to his past experiences in various war zones. He has killed both terrorists and civilians, under direct orders but he now questions the morality of his actions. Quiet, taciturn, but highly intelligent, his motivation is to survive, if necessary, at the expense of others. He will protect those he loves though, with his life.

#### ChatGPT

Thank you for providing the description of the MAJOR. Here's a revised version of "Synopsis A" with the MAJOR character's traits integrated:

The Hero's Quest - Synopsis A with Character Traits:

**The Ordinary World:** The MAJOR, a male in his early 30s, very fit but with a troubled conscience due to past experiences in war zones, returns to London's East End from abroad.

**The Call to Adventure:** He must attend the funeral of his estranged brother.

**Refusal of the Call:** At the morgue, he discovers that the dead man is not his brother, triggering his sense of moral questioning.

**Meeting the Mentor:** The MAJOR meets a LAWYER who informs him that the body has been identified by his brother's estate, forcing him to confront his doubts.

**Crossing the First Threshold:** Suspecting a conspiracy, he decides to investigate further, driven by his desire to uncover the truth, even if it challenges his morality.

**Tests, Allies, and Enemies:** While exploring his brother's flat, he encounters a BLONDE WOMAN who claims his brother had ties to a crime syndicate, testing his ability to trust in this unfamiliar territory.

**Approach to the Inmost Cave:** Skeptical yet intrigued, the MAJOR wrestles with the morality of his actions in his pursuit of the truth, all while navigating the complexities of the situation.

**The Ordeal** [Cliffhanger]: She offers to introduce him to one of the criminal gang members. The MAJOR, torn between his survival instincts and the need for answers, faces a critical decision that may lead him down a treacherous path. As he stands at this precipice, the weight of his past experiences and moral dilemmas bears down on him.

### User:

The following is the description of the LAWYER. A big man, muscular but now becoming flabby, used to wielding power over others. He enjoys good food, wine and the company of attractive women. He is prepared to take corrupt actions if he sees a benefit to himself.

### ChatGPT

Thank you for providing the description of the LAWYER. Here's a revised version of "Synopsis A" with the LAWYER character's traits integrated:

The Hero's Quest - Synopsis A with Character Traits:

**The Ordinary World:** The MAJOR, a male in his early 30s, very fit but troubled by his past, returns to London's East End from abroad.

**The Call to Adventure:** He must attend the funeral of his estranged brother.

**Refusal of the Call:** At the morgue, he discovers that the dead man is not his brother, triggering his sense of moral questioning, while the LAWYER, a big man who enjoys indulgence, has already identified the body to the police.

**Meeting the Mentor:** The MAJOR meets the LAWYER, who, despite his muscular past, is now becoming flabby and is willing to take corrupt actions if it benefits him. The lawyer exudes a sense of power, which clashes with the MAJOR's values.

**Crossing the First Threshold:** Suspecting a conspiracy, the MAJOR decides to investigate further, challenging the lawyer's authority.

**Tests, Allies, and Enemies:** While exploring his brother's flat, he encounters a BLONDE WOMAN who claims his brother had ties to a crime syndicate, further complicating the MAJOR's quest.

**Approach to the Inmost Cave:** The MAJOR grapples with his moral dilemmas and the lawyer's influence as he delves deeper into the mystery.

**The Ordeal** [Cliffhanger]: The BLONDE WOMAN offers to introduce him to one of the criminal gang members. The MAJOR now faces a crucial decision, torn between the questionable guidance of the LAWYER and the dangerous path the BLONDE WOMAN is leading him down. His choices may not only affect his quest for the truth but also his own morality.

By providing the backstory to each character you give ChatGPT to differentiate between characters and to show their motivation, and it may help ChatGPT use different linguistic traits for each character when generating dialog.

Use the appropriate number of prompts when generating each scene or beat

A lot of the skill involved in using ChatGPT involves successfully using “prompt engineering”. You can choose to give ChatGPT no prompts, one prompt or multiple prompts.

**Zero shot prompting.** Here you simply give ChatGPT a request. You don’t give it any helpful prompts before making that request. So ChatGPT has no example information to work with.

**One shot prompting.** Here you give ChatGPT one example, and then make your request.

**Multiple shot prompting:** Here you give ChatGPT a bunch of info, before making your request.

One approach is to start with a “zero-shot” approach and accept that the response will be somewhat generic, and they customise or stylise that response with further interactions.

Here’s an example of the zero-shot approach (note, we don’t count the information we have already provided, it is the extra number of prompts that we include in the current chat interaction that we count.

**User:**

Using the MAJOR description and the LAWYER description, write a scripted dialogue for the 'Meeting the Mentor' beat.

**ChatGPT**

Certainly, here's a scripted dialogue for the "Meeting the Mentor" beat:

[The MAJOR stands in a dimly lit room, cluttered with legal documents. He's greeted by the LAWYER, a big man with a sly grin, holding a glass of fine wine.]

**LAWYER:** (raising his glass) Ah, Major, welcome to my humble abode. To what do I owe the pleasure?

**MAJOR:** (eyeing the room) I'm here about my brother. I need answers.

**LAWYER:** (sips his wine) Of course, your brother's passing is quite the tragedy. (pauses) But, you see, everything is in order now.

**MAJOR:** (skeptical) Is it? I've seen the body. It's not him.

**LAWYER:** (smirking) Ah, yes, a bit of a mix-up, you see. These things happen. (leans in) But don't worry; I've already sorted it out with the authorities.

**MAJOR:** (guarded) I want the truth. Who was that man in the morgue?

**LAWYER:** (chuckles) My dear Major, sometimes the truth is more complex than we'd like it to be. What matters is that your brother's estate is in capable hands.

**MAJOR:** (firmly) I'll find the truth, with or without your help.

**LAWYER:** (leans back, considering) You're a determined one, I can see that. But remember, Major, in this world, power can be quite persuasive. I have connections, influence. (pauses) I can make things easier for you. Or much, much harder.

**MAJOR:** (resolute) I've faced tougher challenges than you. I won't compromise my principles.

[The LAWYER's smile fades, and the room grows tense.]

**LAWYER:** (whispers) Principles, my dear Major, can be a luxury. In this game, sometimes it's survival that matters most.

[Their eyes lock, the MAJOR determined, the LAWYER calculating. The meeting sets the tone for their complex relationship as the MAJOR seeks answers and the LAWYER holds hidden agendas.]

Here we are asking ChatGPT to perform a focused task. This is what it is best at, and that is why we have asked for a ‘scripted dialogue’. We can add details about the lawyer’s office, the weather etc if we think we need them later. For the moment we want to develop the interaction between the characters so that we can see how the story develops and how the tension builds.

The dialogue that ChatGPT has generated is pretty bad – it is wordy, crude, artless, and obvious – and should be regarded as a pure draft. It can be improved later.

Keep ChatGPT on the straight and narrow

ChatGPT has a tendency to wander away from the instructions and material you give it. It will even ignore some of the instructions under some circumstances (though it is often not quite clear why it does this). To prevent this, it is best to give ChatGPT explicit instructions whenever possible. It can also be helpful to give it explicit instructions on what it must not do. So, if you are rewriting previously generated dialogue so that is fleshed-out prose, you will need to tell ChatGPT to leave the dialogue unchanged (if that is what you want) and to place the dialogue tags in the prose where you want them. For example:

**User:**

Rewrite “Scripted Dialog” as prose retaining 100% of the original dialogue. Use first person from the perspective of the Major. Use present tense. Ensure that no clauses appear before the dialogue in sentences.

**ChatGPT**

Certainly, here's the scripted dialogue from the "Meeting the Mentor" beat presented as prose:

The room was bathed in a dim, almost ominous light, and the air was heavy with the scent of fine wine. The MAJOR, a man in his early 30s with a fit physique but a troubled conscience, stood at the threshold. Before him was the LAWYER, a big man whose once-muscular frame was slowly giving way to a softer one, a testament to his indulgent lifestyle.

The LAWYER extended a glass of wine toward the MAJOR, a sly grin playing on his lips. "Ah, Major, welcome to my humble abode. To what do I owe the pleasure?"

The MAJOR, his gaze shifting between the cluttered room and the LAWYER, responded with a sense of purpose. "I'm here about my brother. I need answers."

With a sip of his wine, the LAWYER acknowledged the gravity of the situation. "Of course, your brother's passing is quite the tragedy. But, you see, everything is in order now."

The MAJOR, ever the skeptic, pressed on. "Is it? I've seen the body. It's not him."

The LAWYER, his smirk undeterred, maintained his composure. "Ah, yes, a bit of a mix-up, you see. These things happen. But don't worry; I've already sorted it out with the authorities."

Not one to be swayed easily, the MAJOR stood his ground. "I want the truth. Who was that man in the morgue?"

The LAWYER leaned in, his voice dropping to a conspiratorial tone. "My dear Major, sometimes the truth is more complex than we'd like it to be. What matters is that your brother's estate is in capable hands."

But the MAJOR remained firm. "I'll find the truth, with or without your help."

The LAWYER, considering his next move, leaned back in his chair. "You're a determined one, I can see that. But remember, Major, in this world, power can be quite persuasive. I have connections, influence." He paused, his words laden with implication. "I can make things easier for you. Or much, much harder."

The MAJOR's resolve didn't waver. "I've faced tougher challenges than you. I won't compromise my principles."

A tension settled in the room as the LAWYER's smile faded. In that moment, their eyes locked, each man revealing a part of his character. The MAJOR was determined to uncover the truth, while the LAWYER held hidden agendas beneath his facade. The meeting set the tone for their complex relationship, one where the MAJOR sought answers and the LAWYER wielded power and influence, with secrets lurking in the shadows.

Get ChatGPT to pull itself up by its own bootstraps – use it to define and then use a particular style

So far, the prose and dialogue generated by ChatGPT have been pretty poor. We can improve this by teaching ChatGPT how to write in a better style. And we can get ChatGPT to tell us what the lesson material should be. Suppose we want to write in the style say of Lee Child. Let's ask ChatGPT how it would instruct an AI system to write like Lee Child. We can then use that output from ChatGPT as input in the next chat interaction and thus directly instruct ChatGPT to use Lee Child's style in the current story.

**User:**

Create a list of instructions that you would give to an AI so that it wrote dialogue and prose in the style of Lee Child. Consider sentence length, number of questions, rhythm, tone, voice, and other features of language.

**ChatGPT**

To write in the style of Lee Child, known for his fast-paced thrillers featuring the character Jack Reacher, you should focus on creating a concise, action-driven narrative with a strong, confident voice. Here are some instructions for an AI:

**Short, Punchy Sentences:** Emulate Lee Child's trademark style by using short and punchy sentences. Keep paragraphs concise to maintain a brisk pace in both dialogue and prose.

**Active Voice:** Use the active voice to convey a sense of immediacy and action. Avoid passive constructions whenever possible.

**Direct Dialogue:** Lee Child's characters often engage in straightforward, no-nonsense dialogue. Keep dialogue crisp and to the point, with minimal use of subtext.

**Minimal Description:** Limit extensive descriptions of characters, places, and emotions. Focus on providing enough detail to create a vivid picture without slowing down the narrative.

**First-Person Perspective:** Consider using the first-person perspective to allow readers to experience events through the eyes of a single, strong-willed protagonist.

**Repetition for Emphasis:** Lee Child often repeats key phrases or ideas for emphasis. Use repetition strategically to reinforce important points or themes.

**Action-Oriented Verbs:** Choose action-oriented verbs that convey motion, tension, and urgency. These verbs drive the narrative forward.

**Rhythmic Pacing:** Pay attention to the rhythm of your writing. Balance moments of tension and suspense with rapid-fire action sequences to maintain reader engagement.

**Minimal Dialogue Tags:** Use minimal dialogue tags like "said" or "asked." Lee Child often relies on context and the strength of the dialogue itself to convey tone and meaning.

**Confident Voice:** Cultivate a confident narrative voice that exudes self-assuredness. Jack Reacher's character is known for his unwavering determination.

**Questions for Plot Development:** Introduce questions early in the narrative to pique the reader's curiosity and drive the plot forward. These questions should motivate both the protagonist and the reader to uncover answers.

**Clear Goals:** Ensure that your protagonist has clear and compelling goals, typically related to solving a mystery, achieving justice, or uncovering the truth.

**Minimal Flashbacks:** Limit the use of flashbacks or backstory. Lee Child's novels often focus on the immediate plot and keep backstory concise.

**Sudden Twists:** Incorporate unexpected plot twists and revelations to keep readers engaged and guessing.

**Strong, Independent Protagonist:** Create a protagonist who is self-reliant, resourceful, and unyielding in the face of adversity, much like Jack Reacher.

By following these instructions, your AI can capture the essence of Lee Child's style, delivering gripping, action-packed prose and dialogue that keeps readers on the edge of their seats.

We just need to reword these slightly and then we can use them to instruct ChatGPT:

**User:**

Write fast-paced and witty dialogue, which often features long, complex sentences with many clauses. Use rhetorical devices such as parallelism and repetition to create a sense of rhythm and

momentum in dialogue. Characters should speak in a highly educated and articulate manner, using sophisticated vocabulary and allusions to literature, history, and pop culture. In terms of tone, write dialogue that is often marked by a sense of urgency and intensity, as characters engage in heated debates and discussions. The tone can also be humorous, with characters delivering witty one-liners and clever banter. Use a lot of questions, which serves to further the plot and reveal character motivations. Use questions as a way for characters to challenge each other, or to reveal information in a dramatic way. Overall, dialogue should be highly stylized and distinctive.

### ChatGPT

In the dimly lit room, I squared off with the LAWYER, a towering presence exuding an aura of mystery.

"Why, pray tell, have you summoned me into this enigmatic labyrinth of yours?" I inquired, my voice tinged with suspicion and intrigue.

He raised an eyebrow, a sardonic smile playing at his lips. "Do you, my dear Major, harbor apprehensions concerning the fate of your dear brother?"

"The body I laid my eyes upon, dare I inquire, was it indeed the flesh and blood of my kin?" I probed further, my doubts woven into the fabric of my words.

With a theatrical flourish of his glass, he replied, "Ah, the authorities, they have been duly notified, but do you, sir, place trust in such bureaucratic machinations?"

"The veracity of the matter, my good sir, I implore you to elucidate," I urged, my patience now dancing on the precipice of exhaustion.

He leaned in, his voice dripping with enigma. "Power, influence, oh, the tantalizing wares they offer to smoothen one's arduous path."

"Morality, my learned companion, is an unwavering beacon that guides my course," I asserted, my unwavering resolve cutting through the labyrinthine conversation.

Our eyes locked, the room pulsated with the unspoken, a verbal ballet of rhetoric and intrigue. The suspense hung thick, our exchange akin to a duel of wits, with each sentence a rapier thrust in a battle of intellect and will. The LAWYER's enigmatic demeanor, like a shroud of riddles, cloaked the truth we both sought to unveil.

### User:

Rewrite 'Scripted Dialog' as a concise, action-driven narrative with a strong, confident voice. Here are some instructions for an AI using short punchy sentences, using the active voice, using direct dialogue, from the first person perspective of the MAJOR, including repetition for emphasis, using action verbs, and using minimal dialogue tags in a confident voice.

1. **Short, Punchy Sentences:** Emulate Lee Child's trademark style by using short and punchy sentences. Keep paragraphs concise to maintain a brisk pace in both dialogue and prose.



2. **Active Voice:** Use the active voice to convey a sense of immediacy and action. Avoid passive constructions whenever possible.
3. **Direct Dialogue:** Lee Child's characters often engage in straightforward, no-nonsense dialogue. Keep dialogue crisp and to the point, with minimal use of subtext.
4. **Minimal Description:** Limit extensive descriptions of characters, places, and emotions. Focus on providing enough detail to create a vivid picture without slowing down the narrative.
5. **First-Person Perspective:** Consider using the first-person perspective to allow readers to experience events through the eyes of a single, strong-willed protagonist.
6. **Repetition for Emphasis:** Lee Child often repeats key phrases or ideas for emphasis. Use repetition strategically to reinforce important points or themes.
7. **Action-Oriented Verbs:** Choose action-oriented verbs that convey motion, tension, and urgency. These verbs drive the narrative forward.
8. **Rhythmic Pacing:** Pay attention to the rhythm of your writing. Balance moments of tension and suspense with rapid-fire action sequences to maintain reader engagement.
9. **Minimal Dialogue Tags:** Use minimal dialogue tags like "said" or "asked." Lee Child often relies on context and the strength of the dialogue itself to convey tone and meaning.
10. **Confident Voice:** Cultivate a confident narrative voice that exudes self-assuredness. Jack Reacher's character is known for his unwavering determination.
11. **Questions for Plot Development:** Introduce questions early in the narrative to pique the reader's curiosity and drive the plot forward. These questions should motivate both the protagonist and the reader to uncover answers.
12. **Clear Goals:** Ensure that your protagonist has clear and compelling goals, typically related to solving a mystery, achieving justice, or uncovering the truth.
13. **Minimal Flashbacks:** Limit the use of flashbacks or backstory. Lee Child's novels often focus on the immediate plot and keep backstory concise.
14. **Sudden Twists:** Incorporate unexpected plot twists and revelations to keep readers engaged and guessing.
15. **Strong, Independent Protagonist:** Create a protagonist who is self-reliant, resourceful, and unyielding in the face of adversity, much like Jack Reacher.

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#### ChatGPT

The room, dimly lit, held secrets. I, the MAJOR, stood firm. The LAWYER, big and cunning, offered me wine.

"Why are you here?" he asked, smirking.

"I need answers about my brother," I replied, my voice unwavering.

"It's all sorted," he claimed, sipping his wine. "A mix-up."

"I've seen the body," I retorted, my doubts clear.

"Authorities are informed," he assured me, too confident.

"I want the truth," I insisted, my resolve unwavering.

"Power is persuasive," he said, trying to bend me.

"I won't compromise," I declared, firm as a rock.

Our eyes locked, tension brewing. The game was on.

That particular prompt produced some rather disappointing prose. As a human, we could take that prose and simply rewrite it. It might still be faster than generating the final result from scratch. But another approach is simply to keep trying different prompts until the AI-generated prose improves. Even then, it will need a number of human rewrites to bring it up to an acceptable standard. So, let's try again:

**User:**

Try again, but use a lot of questions, which serve to further the plot and reveal character motivations. Use questions as a way for characters to challenge each other, or to reveal information in a dramatic way.

**ChatGPT**

The room was shrouded in dimness, and I faced the LAWYER, a looming presence.

"Why've you summoned me?" I questioned, a glimmer of suspicion in my voice.

"Your brother's fate, you're concerned?" he countered, swirling wine in his glass.

"The body I saw wasn't him, was it?" I probed, my doubts deepening.

"The authorities, they're informed, you trust them?" he replied, a sly smirk playing on his lips.

"What's the real story?" I pressed, my patience waning.

"Power, influence, they can ease your path," he hinted, his voice dripping with implications.

"Morality's not for sale," I challenged, unwavering.

Our gazes locked, the room heavy with unspoken truths. The stage was set, and the questions held the key.

This is not much better. Let's try again, with a more detailed and focussed prompt:

**User:**

Write with descriptive and evocative language to create colourful vivid imagery, and immersive sensory details to create a visceral picture of the events taking place. Use figurative language to depict characters and surroundings in a way that evokes emotion in the reader. Use personification to create a sense of individual body parts, like hands and eyes, being alive. Set a suspenseful and confrontational tone, with emphasis on the reluctance of the LAWYER to reveal a

information in response to the insistence of the MAJOR. Show LAWYER as feeling a sense of deception while remaining objective in the description of the characters and their emotions. The LAWYER voice should be devious and confusing, with a sense of confrontation and suspense throughout.

**ChatGPT**

The room exuded an air of uncertainty, shrouded in dim light that danced along the walls. Facing the LAWYER, a looming figure with shadows cascading across his sly visage, I couldn't help but question the enigma that lay before me.

"Why summon me into this labyrinth?" I demanded, my voice etching the sharp contours of suspicion into the air.

He raised a glass, its contents swirling like secrets within. "Do you harbor concerns for your brother's fate?" His words, like tendrils of smoke, obscured his true intentions.

"The body I beheld, was it truly kin?" I prodded, my doubts unfurling like creeping vines.

"Authorities have been alerted," he offered, his tone veiled in deceptive tranquility, as if beckoning me into treacherous waters.

"The truth, you dangle it like a fragile thread," I persisted, the rhythm of my heartbeat betraying my waning patience.

"Power, influence, such commodities, they can pave your path," he insinuated, his voice a labyrinth of deception and confusion, obscuring the way forward.

"Morality, I hold it dear, as one would cradle a fragile soul," I declared, my unwavering resolve slicing through the smokescreen.

Our gazes locked, the room pulsed with the unspoken, as if secrets thrummed through the very walls. The suspense hung thick, the confrontation imminent, and the LAWYER's devious

This does seem to be better prose. Better in the sense it is closer to the tone and style that I'm aiming for. It still seems rather clunky, rather pompous. One more try:

**User:**

Write fast-paced and witty dialogue, which often features long, complex sentences with many clauses. Use rhetorical devices such as parallelism and repetition to create a sense of rhythm and momentum in dialogue. Characters should speak in a highly educated and articulate manner, using sophisticated vocabulary and allusions to literature, history, and pop culture. In terms of tone, write dialogue that is often marked by a sense of urgency and intensity, as characters engage in heated debates and discussions. The tone can also be humorous, with characters delivering witty one-liners and clever banter. Use a lot of questions, which serves to further the plot and reveal character motivations. Use questions as a way for characters to challenge each other, or to reveal information in a dramatic way. Overall, dialogue should be highly stylized and distinctive.

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"The body I laid my eyes upon, dare I inquire, was it indeed the flesh and blood of my kin?" I probed further, my doubts woven into the fabric of my words.

With a theatrical flourish of his glass, he replied, "Ah, the authorities, they have been duly notified, but do you, sir, place trust in such bureaucratic machinations?"

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Our eyes locked, the room pulsated with the unspoken, a verbal ballet of rhetoric and intrigue. The suspense hung thick, our exchange akin to a duel of wits, with each sentence a rapier thrust in a battle of intellect and will. The LAWYER's enigmatic demeanor, like a shroud of riddles, cloaked the truth we both sought to unveil.

I feel this prose is getting worse, rather than better. Perhaps I would get better results with the most recent version of GPT – here am I using v3.5 but v4 is now available.

### How else can AI help writers?

AI can write CVs, quickly generate blurbs, loglines, material for Twitter tweets, blogs as well as produce ideas or text for stories or scripts.

Perhaps you wish to enhance your social media presence and want to get onto TikTok but don't know what sort of content you should produce, you can ask ChatGPT. Remember, ChatGPT may not have the most recent perspective (today it's training data stops in 2021) and it cannot be completely trusted because of its tendency to make stuff up but it is a great way to brainstorm ideas. For example:

**User:**

I am a screenwriter. Suggest 10 things I can put on Tik Tok to gather a following.

**ChatGPT**

Creating a presence on TikTok can be a fantastic way for a screenwriter to engage with an audience, showcase their talent, and build a following. Here are 10 content ideas you might consider:

#### **1. Script-to-Screen Comparisons**

Show a snippet of your script on one side of the screen and the corresponding filmed scene on the other. This can give viewers insight into how words on paper translate to action on screen.

## **2. Writing Tips and Tricks**

Share your best practices, from overcoming writer's block to creating compelling dialogue. Quick, easy-to-understand tips are usually well-received.

## **3. Story Pitches in 60 Seconds**

Challenge yourself to pitch a screenplay idea in 60 seconds or less. This not only showcases your creativity but also your ability to condense complex ideas into easily digestible forms—a key skill in screenwriting.

## **4. Character Backstories**

Introduce characters from your screenplays, offering small glimpses into their backstories or motivations that may not have made it into the script. Consider this as an exclusive content that can intrigue your followers.

## **5. Collaborations with Filmmakers/Actors**

Team up with actors or filmmakers to enact small scenes from your scripts or to discuss the nuances of bringing a script to life. It can offer a more rounded view of the filmmaking process.

## **6. Script Reading Sessions**

Host live script-reading sessions featuring snippets of your work. You can even invite followers to read parts, turning it into an interactive experience.

## **7. #Duets with Popular Writing Tips**

Use TikTok's Duet feature to respond to or elaborate on popular screenwriting or storytelling advice. This can also help your profile get discovered by fans of the original content creator.

## **8. Review Films or Series**

Offer your unique perspective as a screenwriter when reviewing films or series. Highlight what you think worked well or didn't in terms of the writing, and what you might have done differently.

## **9. Day-in-the-Life**

Show what a day in your life looks like—from the writing process to meetings with producers or brainstorming sessions. This offers a behind-the-scenes look into a screenwriter's life.

## **10. Fan Script Challenges**

Ask your followers to suggest a genre, character, or situation, and then write a short scene or monologue based on those suggestions. Perform it or have an actor perform it and tag the follower who gave you the idea.

Remember, the key to TikTok success often lies in consistency, so try to post regularly. High-quality, engaging content that offers value or entertainment to your audience can help you build a loyal following.

## Conclusions

Whatever creative material (prose, scripts, blurbs, tweets), ChatGPT produces will need rewriting by a human. This does not mean that ChatGPT is not useful though.

ChatGPT can be used to generate first-draft quality material very quickly, (many times faster than a human). The quality may be further improved by careful selection of prompt content and subsequent regeneration.

Because ChatGPT generates material so quickly, it can usefully be used to generate a range of solutions to a particular problem and then a human can choose which is most appropriate.

Because ChatGPT generates material so quickly, it can be used to help to respond to requests to rework a proposal, treatment, script, article, story. This enables the AI literate author to respond to agent, editor, publisher, producer requests much faster (and hence competitively).

Because ChatGPT generates material so quickly it can be used to respond to speculative 'what if' and 'can you change this', or to produce material in a timely fashion in response to real-time events in the world.

ChatGPT cannot be used for research (ie as a reference for factual information, academic arguments, sources of quotes etc) – it simply makes stuff when it does not know the answer. It is not a repository of facts; it is a statistical database of the probabilities of word sequence.

ChatGPT is not intelligent in the human sense, is not conscious and cannot reason in the way humans can.

There are many other AI tools that can help writers – image generation programs, comic writing programs, pitch generation programs etc.

ChatGPT and AI in general are changing extremely rapidly. Capabilities are improving and expanding in weeks and months rather than years or decades. Traditional concepts such as copyright are consequently being disrupted by these changes. Writers without an understanding and a fluency in AI tools are likely to be disadvantaged compared to those that do.

## References

Armstrong, K., (2023) “ChatGPT: US lawyer admits using AI for case research”, *BBC Website*, British Broadcasting Corporation, UK Available at: <https://www.bbc.co.uk/news/world-us-canada-65735769> Accessed 16 Aug 2023.

Setty R. and Poritz I., (2023) “AI-Generated Art Lacks Copyright Protection, D.C. Court Says (1)”, *Bloomberg Law*, USA Available at: <https://news.bloomberglaw.com/ip-law/ai-generated-art-lacks-copyright-protection-d-c-court-rules>.

Bostrom, N, (2005) “What is a Singleton”, *Future of Humanity Institute, Faculty of Philosophy, Oxford University* Available at: <https://nickbostrom.com/fut/singleton>.

Brown S. (2021) “Machine Learning Explained”, *Ideas Made to Matter: Artificial Intelligence*, MIT Sloan, Massachusetts, USA Available at <https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained>.

Chan W., (2023) “Ron DeSantis’ deepfakes of Trump and Fauci are a kind of ‘fascist realism’”, *FastCompany*, USA Available at: <https://www.fastcompany.com/90907288/ron-desantis-deepfakes-of-trump-and-fauci-are-a-kind-of-fascist-realism> Accessed on 16 Aug 2023.

Creamer E., (2023), “Amazon removes books ‘generated by AI’ for sale under author’s name”, *The Guardian*, Available at <https://www.theguardian.com/books/2023/aug/09/amazon-removes-books-generated-by-ai-for-sale-under-authors-name> accessed on 12 Sep 2023.

Ellingrud K., Saurabh Sanghvi S., Singh Danda G., Chui M., White O. and Hasebe P., (2023) “Generative AI and the future of work in America”, *MckInsey Global Institute*, USA Available at: <https://www.mckinsey.com/mgi/our-research/generative-ai-and-the-future-of-work-in-america> Accessed on 16 Aug 2023.

Encyclopaedia Britannica, (2023a) “grammar” *Encyclopaedia Britannica*. Available at: <https://www.britannica.com/topic/grammar>.

Encyclopaedia Britannica, (2023b) “syntax” *Encyclopaedia Britannica*. Available at: <https://www.britannica.com/topic/syntax>.

Germain D., (2023a) “ChatGPT Fiction — A Detailed Demo”, *Medium*, Available at <https://medium.com/@dave.germain.79/chatgpt-fiction-a-detailed-demo-c870221282e4#:~:text=Here's%20an%20example%20of%20a,could%20use%20for%20prose%20writing%3A&text=In%20chat%20%231%2C%20use%20input,Structure%20output%20and%20Character%20Descriptions.&text=In%20chat%20%232%2C%20use%20the,to%20create%20a%20Dialog%20output.&text=In%20chat%20%233%2C%20use%20the,to%20create%20a%20Prose%20output> accessed on 30 Aug 2023.

Germain D., (2023b) “An example of ChatGPT Fiction”, *Medium*, Available at <https://medium.com/@dave.germain.79/an-example-of-chatgpt-fiction-abb77ae922d0> accessed on 07 Sep 2023.

Germain D., (2023c) “7 Tips for Writing Fiction with ChatGPT”, *Medium*, USA available at: <https://medium.com/@dave.germain.79/7-tips-for-writing-fiction-with-chatgpt-6d0e686879a8> accessed on 21 Aug 2023.

Heeswijk, W van, (2023) “Proximal Policy Optimization (PPO) Explained”, *Towards Data Science, Medium*,  
<https://medium.com/r/?url=https%3A%2F%2Ftowardsdatascience.com%2Fproximal-policy-optimization-ppo-explained-abed1952457b>

Horton, A., (2023a) “Marvel faces backlash over AI-generated opening credits”, *The Guardian*, UK Available at: <https://www.theguardian.com/tv-and-radio/2023/jun/21/marvel-ai-generated-credits-backlash> Accessed on 16 Aug 2023.

Horton, A., (2023b) “‘Embrace it or risk obsolescence’: how will AI jobs affect Hollywood”, *The Guardian*, UK Available at: <https://www.theguardian.com/film/2023/aug/21/ai-jobs-hollywood-writers-actors-strike> Accessed on 21 Aug 2023.

IBM (2023) “What are neural networks?” *IBM*, Available at: <https://www.ibm.com/topics/neural-networks>.

Kaye B., (2023) “Australian mayor readies world's first defamation lawsuit over ChatGPT content”, *Reuters*, available at: <https://www.reuters.com/technology/australian-mayor-readies-worlds-first-defamation-lawsuit-over-chatgpt-content-2023-04-05/> accessed 2 Sept 2023.

Knight, L., (2023) “Authors call for AI companies to stop using their work without consent”, *The Guardian*, Available at <https://www.theguardian.com/books/2023/jul/20/authors-call-for-ai-companies-to-stop-using-their-work-without-consent> accessed on 12 Sep 2023.

Lappin S., (2014) “What is Computational Linguistics”, *Blog*, The British Academy.  
Available at: <https://www.thebritishacademy.ac.uk/blog/what-computational-linguistics/>.

Leffer, L. (2023). “CNET Is Reviewing the Accuracy of All Its AI-Written Articles After Multiple Major Corrections “, *Gizmodo* Available at: <https://gizmodo.com/cnet-ai-chatgpt-news-robot-1849996151>. Accessed 16 Aug 2023.

Linguistic Society of America (2023) “What is Linguistics”,  
*Linguistic Society of America*, Available at: <https://www.linguisticsociety.org/what-linguistics>.

Lu A., (2023) “ChatGPT: AI is both smarter and dumber than you think it is”, *Vodafone Web Site*, Vodafone, UK  
<https://www.vodafone.co.uk/newscentre/features/chatgpt-ai-is-both-smarter-and-dumber-than-you-think-it-is/> Accessed 16 Aug 2023.

McKinsey (2023) “What is Generative AI”, *McKinsey and Co web site*, McKinsey and Co, USA. Available at <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai>, Accessed 28 Jun 2023.



Neelakandan L., (2023) “What is a large language model and how does it work?”, *Fast Company website*, Fast Company, USA. Available at <https://www.fastcompany.com/90884581/what-is-a-large-language-model>.

OpenAI (2023) “Introducing ChatGPT”, OpenAI website, Available at: <https://openai.com/blog/chatgpt/>

Ouyang L. Wu J., Jiang X., Almeida D., Wainwright C. L, Mishkin P., Zhang C., Agarwal S., Slama K., Ray A., Schulman J., Hilton J., Kelton F., Miller L., Simens M., Askell A., Welinder P, Christiano P., Leike J., Lowe R., (2023) “Training language models to follow instructions with human feedback” *OpenAI* Available at: <https://arxiv.org/pdf/2203.02155.pdf>

Oracle (2023) “What is Deep Learning”, *Oracle Cloud Infrastructure* Available at <https://www.oracle.com/artificial-intelligence/machine-learning/what-is-deep-learning/>.

Pallagy P., (2023) “ChatGPT is awesome. But here’s a failure mode I discovered. LOL.”, *Medium*, USA, Available at: <https://medium.com/@paul.k.pallaghy/chatgpt-is-awesome-but-dont-trust-it-on-quotes-lol-5f0729390aaf>.

Ramponi M., (2022) “How does ChatGPT actually work”, *Assembly AI* Available at: <https://www.assemblyai.com/blog/how-chatgpt-actually-works/>

Randell B. and Coghlan B., (2023) "ChatGPT's Astonishing Fabrications About Percy Ludgate", *IEEE Annals of the History of Computing*, vol. 45, no. 02, pp. 71-72, doi: 10.1109/MAHC.2023.3272989 Available at <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10148832>.

Ruby M., (2023) How ChatGPT Works: The Model Behind The Bot, *Towards Data Science*, 30 Jan 2023, [Medium](https://towardsdatascience.com/how-chatgpt-works-the-models-behind-the-bot-1ce5fca9628) · Medium, 548 Market St, PMB 42061, San Francisco, CA 94104, Available at: <https://towardsdatascience.com/how-chatgpt-works-the-models-behind-the-bot-1ce5fca9628>.

Shardlow, M. (2023), “Can a language model be conscious?”, *Articles, opinion and research, BCS Website*, British Computer Society Available at: <https://www.bcs.org/articles-opinion-and-research/can-a-language-model-be-conscious>.

Sharir, O., Peleg, B. and Shoham, Y., 2020. The cost of training nlp models: A concise overview. *arXiv preprint arXiv:2004.08900*.

U.S. Copyright Office (2023) “Letter to Van Lindberg, February 2023: Zarya of the Dawn (Registration # VAu001480196)”, *U.S. Copyright Office*, USA Available at: <https://www.copyright.gov/docs/zarya-of-the-dawn.pdf> accessed 2 Sept 2023.

Vincent J., (2023) “Twitter taught Microsoft’s AI chatbot to be a racist asshole in less than a day”, *The Verge*, UK Available at: <https://www.theverge.com/2016/3/24/11297050/tay-microsoft-chatbot-racist> Accessed on 16 Aug 2023

Wolfram, S., (2023) Capstone talk: "LLMs for Physics, and Physics for LLMs", *The Impact of chatGPT talks (2023)*, organisers: Burdge K., Borrow J., Vogelsberger M., Session 3: "The

use of large language models in teaching/administration", MIT Available at:  
<https://www.youtube.com/watch?v=u4CRHtjyHTI> Accessed on 16 Aug 2023.

## Appendix - Definition of Terms

Term	Definition
Artificial Intelligence	The science, technology, construction and use of intelligent machines, including intelligent computer programs.
Artificial General Intelligence (AGI)	An intelligent agent that can accomplish or learn to accomplish any intellectual task that humans can perform.
Artificial Neural Networks	“A subset of <a href="#">machine learning</a> and are at the heart of <a href="#">deep learning</a> algorithms. Their name and structure are inspired by the human brain, mimicking the way that biological neurons signal to one another.” (IBM 2023). The search algorithm used by Google is an example of an Artificial Neural Network.
Cognition	The act of perceiving, remembering, reasoning, judging and problem solving which permits an individual to be aware of their environment.
Computation Linguistics	<p><b>Computational linguistics</b> is the scientific study of language from a computational perspective.</p> <p>Computational linguistics (CL) may be thought of as the study of natural language in the intersection of linguistics and computer science. It is a relatively young scientific field that developed out of the integration of theoretical linguistics, mathematical linguistics, artificial intelligence, and software engineering.</p> <p>One of the reasons that it is difficult to identify CL as a well defined domain of research is that it faces Janus-like in two distinct, but clearly related directions. One of these is an engineering and technology face.</p> <p>In its engineering aspect, CL focuses on natural language processing (NLP). It seeks to develop systems that facilitate human-computer interaction, and to automate a range of practical linguistic tasks. These tasks include (among others) machine translation, text summarization, speech recognition and generation, information extraction and retrieval, and sentiment analysis of text. In the past few decades NLP has grown into a major area of industrial research and development, with large information technology companies like Google, IBM, Microsoft, and Facebook investing increasing amounts of money and research effort into the creation of more refined language technology. A host of small startups devoted to these tasks also now populate the industrial research landscape. As a result CL/NLP has become an important part of the job market for people with degrees in linguistics and related fields.</p> <p>The second face of CL is scientific. Looking in this direction, CL seeks to model natural languages as formal combinatorial systems. It attempts to understand the procedures through which humans are able learn and to represent these systems, given the processing resources of the human brain, and the linguistic data available to</p>

Term	Definition
	<p>human learners. In this, CL shares many of the research objectives of theoretical linguistics and cognitive science.</p> <p>So what is the connection between the two aspects of CL? In order to do good engineering it is necessary to have a solid scientific account of the area of the world that one seeks to manipulate through technology. A complex engineering task like landing a spacecraft on a comet requires a good theory of the physical processes and materials involved in implementing the task. Conversely, engineering work often generates important scientific insights.</p> <p>(Lappin 2014)</p>
Computer Vision/Machine Vision	A system containing sensors and computational units that allow that system to see an object, locate and possibly recognise it and make decisions about it.
Deep Learning	A subset of <a href="#">machine learning (ML)</a> , where artificial neural networks — algorithms modeled to work like the human brain — learn from large amounts of data. Deep learning is powered by layers of <a href="#">neural networks</a> , which are algorithms loosely modeled on the way human brains work. Training with large amounts of data is what configures the neurons in the neural network. The result is a deep learning model which, once trained, processes new data.” (Oracle 2023). Deep learning is often used on phones to perform speech recognition.
Expert Systems	Systems that solve problems that would normally would require human intelligence.
Generative AI	“Generative artificial intelligence (AI) describes algorithms (such as ChatGPT) that can be used to create new content, including audio, code, images, text, simulations, and videos.” (McKinsey 2023)
Grammar	the rules of a <a href="#">language</a> governing the sounds, words, sentences, and other elements, as well as their combination and interpretation. The word grammar also <a href="#">denotes</a> the study of these abstract features or a book presenting these rules. In a restricted sense, the term refers only to the study of sentence and word structure (syntax and morphology), excluding vocabulary and pronunciation. (Encyclopaedia Britannica 2023a)
Knowledge Representations	The study of the world can be represented in the form of knowledge and what kinds of reasoning can be done with that knowledge.
Language Analysis	Computer system that will analyse, understand, and generate natural human-languages.
Large Language Model	“LLMs are machine learning models that utilize deep learning algorithms to process and understand language. They’re trained with immense amounts of data to learn language patterns so they can perform tasks. Those tasks can range from translating texts to responding in chatbot conversations — basically anything that requires language analysis of some sort.” (Neelakandan 2023).

Term	Definition
	ChatGPT incorporates a LLM, as do many other systems.
Linguistics	Linguistics is the scientific study of language. Linguists apply the scientific method to conduct formal studies of speech sounds and gestures, grammatical structures, and meaning across the world's 6,000+ languages. (Linguistic Society of America 2023).
Machine Learning	“A subfield of artificial intelligence that gives computers the ability to learn without explicitly being programmed.” (Brown 2021).
Natural Language	A natural language which has developed naturally, that is by use over a period of time, without conscious design or premeditation. Latin, English and Australian are such languages. Languages that have been created by prior definition and planning are called artificial languages. Examples are computer languages such as Pascal or spoken and written languages such as Esperanto.
Neural Net	<p>Neural networks, also known as artificial neural networks (ANNs) or simulated neural networks (SNNs), are a subset of <a href="#">machine learning</a> and are at the heart of <a href="#">deep learning</a> algorithms. Their name and structure are inspired by the human brain, mimicking the way that biological neurons signal to one another.</p> <p>Artificial neural networks (ANNs) are comprised of a node layers, containing an input layer, one or more hidden layers, and an output layer. Each node, or artificial neuron, connects to another and has an associated weight and threshold. If the output of any individual node is above the specified threshold value, that node is activated, sending data to the next layer of the network. Otherwise, no data is passed along to the next layer of the network.</p> <p>Neural networks rely on training data to learn and improve their accuracy over time. However, once these learning algorithms are fine-tuned for accuracy, they are powerful tools in computer science and <a href="#">artificial intelligence</a>, allowing us to classify and cluster data at a high velocity. Tasks in speech recognition or image recognition can take minutes versus hours when compared to the manual identification by human experts. One of the most well-known neural networks is Google's search algorithm.</p> <p>(IBM, 2023)</p>
Singleton	<p>In set theory, a singleton is a set with only one member, but as I introduced the notion, the term refers to a world order in which there is a single decision-making agency at the highest level. Among its powers would be (1) the ability to prevent any threats (internal or external) to its own existence and supremacy, and (2) the ability to exert effective control over major features of its domain (including taxation and territorial allocation). Many singletons could co-exist in the universe if they were dispersed at sufficient distances to be out of causal contact with one another. But a terrestrial world government would not count as a singleton if there were independent space colonies or alien civilizations</p>

Term	Definition
Symbolic AI	<p data-bbox="507 237 1027 271">within reach of Earth. (Bostrom, 2005).</p> <p data-bbox="507 286 1369 701">In <a href="#">artificial intelligence</a>, <b>symbolic artificial intelligence</b> is the term for the collection of all methods in artificial intelligence research that are based on high-level <a href="#">symbolic</a> (human-readable) representations of problems, <a href="#">logic</a> and <a href="#">search</a>.<sup>[1]</sup> Symbolic AI used tools such as <a href="#">logic programming</a>, <a href="#">production rules</a>, <a href="#">semantic nets</a> and <a href="#">frames</a>, and it developed applications such as <a href="#">knowledge-based systems</a> (in particular, <a href="#">expert systems</a>), <a href="#">symbolic mathematics</a>, <a href="#">automated theorem provers</a>, <a href="#">ontologies</a>, the <a href="#">semantic web</a>, and <a href="#">automated planning and scheduling</a> systems. The Symbolic AI paradigm led to seminal ideas in <a href="#">search</a>, symbolic programming languages, <a href="#">agents</a>, <a href="#">multi-agent systems</a>, the <a href="#">semantic web</a>, and the strengths and limitations of formal knowledge and <a href="#">reasoning systems</a>.</p> <p data-bbox="507 719 1369 781">Symbolic AI was the dominant <a href="#">paradigm</a> of AI research from the mid-1950s until the mid-1990s.<sup>[2]</sup></p> <p data-bbox="507 898 1369 1375">"Until Big Data became commonplace, the general consensus in the AI community was that the so-called neural-network approach was hopeless. Systems just didn't work that well, compared to other methods. ... A revolution came in 2012, when a number of people, including a team of researchers working with Hinton, worked out a way to use the power of <a href="#">GPUs</a> to enormously increase the power of neural networks."<sup>[14]</sup> Over the next several years, <a href="#">deep learning</a> had spectacular success in handling vision, speech recognition, speech synthesis, image generation, and machine translation. However, since 2020, as inherent difficulties with bias, explanation, comprehensibility, and robustness became more apparent with deep learning approaches; an increasing number of AI researchers have called for <a href="#">combining</a> the best of both the symbolic and neural network approaches<sup>[15][16]</sup> and addressing areas that both approaches have difficulty with, such as <a href="#">common-sense reasoning</a>.<sup>[14]</sup></p> <p data-bbox="507 1491 1305 1520"><a href="https://en.wikipedia.org/wiki/Symbolic_artificial_intelligence">https://en.wikipedia.org/wiki/Symbolic_artificial_intelligence</a></p>
Syntax	<p data-bbox="507 1527 1369 2027">the arrangement of words in sentences, <a href="#">clauses</a>, and phrases, and the study of the formation of sentences and the relationship of their component parts. In a <a href="#">language</a> such as English, the main device for showing the relationship among words is word order; <i>e.g.</i>, in “The girl loves the boy,” the subject is in initial position, and the object follows the verb. Transposing them changes the meaning. In many other languages, case markers indicate the grammatical relationships. In <a href="#">Latin</a>, for example, “The girl loves the boy” may be <i>puella puerum amat</i> with “the girl” in initial position, or <i>puerum puella amat</i> with “the boy” in initial position, or <i>amat puella puerum</i>, <i>amat puerum puella</i>, or <i>puella amat puerum</i>. The meaning remains constant because the <i>-um</i> ending on the form for “boy”</p>

Term	Definition
	<p>indicates the object of the verb, regardless of its position in the sentence.</p> <p>Sentences are constructed from phrases or groups of words that have a closer relationship to each other than to the words outside the phrase. In the sentence “My dog is playing in the yard” there is a closer relationship between the words “is playing,” which together form the verb, than between the words “playing in the,” which form only part of the verb and part of the phrase indicating the location of the playing.</p> <p>The study of <a href="#">syntax</a> also includes the investigation of the relations among sentences that are similar, such as “John saw Mary” and “Mary was seen by John.” Syntax received much attention after 1957, when the American linguist <a href="#">Noam Chomsky</a> proposed a radically new theory of language, <a href="#">transformational grammar</a> (<i>q.v.</i>).</p> <p>(Encyclopaedia Britannica 2023b)</p>

## Appendix - AI Writing Tools

As of summer 2023, there are a number of AI tools that claim to perform or assist the process of writing fiction (or many other writing forms).

<b>System</b>	<b>Description</b>
Sudowrite	<p>Generate up to 1,000 words with a simple prompt  Expand upon what <a href="#">Sudowrite</a> has written if you want the <a href="#">content</a> to be longer.  Whole plot, character, and outline planning.  Novel focused  Good user interface  Free trial  Hobby &amp; Study: \$10/month  Professional: \$20/month  Max: \$100/month  <a href="https://www.sudowrite.com/">https://www.sudowrite.com/</a></p>
Jasper	<p>ou can write full-length documents with AI-aided outputs using a long-form document editor.  With the plagiarism detector, you can write without being accused of plagiarism  Speed writing can create a great post or article within minutes!  Integrates with SEO Surfer, a tool for optimizing your content to rank in search engines and analyzing keywords  With enough parameters, this AI writer can almost write your articles for you  Ability to join a Facebook community that offers support, job opportunities, and more  Provides support for multiple languages</p> <p>creator Mode: \$49/month for unlimited words  Teams: \$125/month with unlimited words, 3 seats, and 3 brand voices  Business: Custom pricing</p>
Rytr.ai	<p>ou can write full-length documents with AI-aided outputs using a long-form document editor.  With the plagiarism detector, you can write without being accused of plagiarism  Speed writing can create a great post or article within minutes!  Integrates with SEO Surfer, a tool for optimizing your content to rank in search engines and analyzing keywords  With enough parameters, this AI writer can almost write your articles for you  Ability to join a Facebook community that offers support, job opportunities, and more  Provides support for multiple languages  Free forever plan  Saver plan: \$9/month  Unlimited Plan: \$29/month</p>



<b>System</b>	<b>Description</b>
ChatGPT	<p>ChatGPT can be a valuable tool to help you write a novel in various ways:</p> <p><b>Brainstorming Ideas:</b> If you're stuck on ideas for your novel, you can have a conversation with ChatGPT to brainstorm concepts, plot twists, character traits, and more. It can help you generate fresh and creative ideas to kickstart your writing process.</p> <p><b>Character Development:</b> ChatGPT can assist in developing your characters by suggesting personalities, backgrounds, motivations, and arcs. You can have a conversation with it as if you're interviewing your characters to learn more about them.</p> <p><b>Plot Construction:</b> Create a rough outline of your novel by discussing plot points, conflicts, and resolutions with ChatGPT. It can help you structure your story and provide suggestions for pacing and tension.</p> <p><b>Writer's Block:</b> If you encounter writer's block, engaging in a conversation with ChatGPT can help you break through by discussing your story, identifying the sticking points, and exploring potential solutions.</p> <p><b>Dialogue Practice:</b> Writing authentic and engaging dialogue can be challenging. You can use ChatGPT to practice dialogue between characters, experimenting with different tones, styles, and interactions.</p> <p><b>Worldbuilding:</b> Whether you're crafting a fantasy realm or a futuristic city, you can chat with ChatGPT to explore worldbuilding details like geography, culture, history, and technology. It can help you flesh out the setting of your novel.</p> <p><b>Editing and Feedback:</b> After writing portions of your novel, you can use ChatGPT to review and edit your work. It can provide suggestions for sentence structure, grammar, and clarity. Keep in mind that while it's helpful, it's not a substitute for professional editing.</p> <p><b>Generating Descriptive Text:</b> If you're struggling with descriptive passages, you can collaborate with ChatGPT to craft vivid and engaging descriptions of settings, emotions, and sensory experiences.</p> <p><b>Research Assistance:</b> If your novel requires research on certain topics, ChatGPT can help you find information, summarize articles, and provide background knowledge on subjects you're not familiar with.</p> <p><b>Writing Prompts:</b> If you're working on a specific scene or chapter, you can ask ChatGPT to provide a writing prompt related to that section. This can help you generate ideas and get your creative juices</p>

System	Description
	<p>flowing.</p> <p>Remember that while ChatGPT can be a helpful tool, it's important to retain your unique voice and vision as a writer. Use its suggestions as inspiration and guidance, but ultimately, the novel should reflect your creativity and style.</p> <p>Free (for now) ChatGPT Plus: \$20/month subscription plan</p>
Quillbot	<p>Grammar checker to make sure you're writing grammatically correct sentences every time with an AI novel writing tool that makes it easy to use.</p> <p>Plagiarism checker to ensure your content is 100% yours using a helpful and easy-to-use AI writing tool.</p> <p>They also have a Chrome Extension that you can incorporate into your writing process to help when you don't want to write inside the platform but still want to prioritize the quality of your novel writing software.</p> <p>Free Plan: 125 words in the paraphrase and standard and fluency modes with 1200 words in the summarizer Premium: \$19.95/month</p>
Sassbook	<p>AI writing software to help you generate paragraphs and short-form content.</p> <p>AI fiction writing software to write long-form content and stories</p> <p>AI headline-writing software</p> <p>Free Plan Standard Plan: \$39/month Premium Plan: \$59/month</p>
Grammarly	<p>Grammar checker both in the platform and integrated into your browser through the browser extension.</p> <p>Integration within Google docs</p> <p>Monthly overviews of your statistics with Grammarly and how your writing has improved using this AI writing tool.</p> <p>Free: grammar, spelling, and punctuation Premium plan: \$12/month with full-sentence rewrites and tone suggestions Business plan: \$15/month per member for a style guide, snippets, and brand tones</p>
Wordtune	<p>Rewrite your text</p> <p>Alter the tone of your content</p> <p>Expand or shorten your content writing</p> <p>Spelling and grammar checks</p> <p>Microsoft Word integration</p> <p>Free forever plan Premium: \$9.99/mo The premium for teams: Contact Wordtune</p>
Authors.io	<p>Subject and pacing analysis to ensure your subject matter is accurate and the novel's pacing makes sense.</p> <p>Readability score, because your novel won't sell if it's unreadable</p>

<b>System</b>	<b>Description</b>
	Cliche finder is great if you want to express sentiments without sounding cliché. Marlowe Basic: Free Marlow Pro: \$199/annually Single Report: \$45 one-time payment

And some other AI tools:

<https://www.comicsmaker.ai/>

AI image making

Midjourney, Foto, BING, Dalle-2

Opus

Artflow creates a storyboard - or an animated film - still being developed...

Good way to test out scripts - to brainstorm ideas - to give something to rap off....

See example: [https://youtu.be/oyiALFG\\_0iU?si=ZZ7DiaYCCT19GuQI](https://youtu.be/oyiALFG_0iU?si=ZZ7DiaYCCT19GuQI)

