

How to perfect your prompt writing for ChatGPT, Midjourney and other AI generators

February 24 2023, by Marcel Scharth



Credit: Midjourney/Marcel Scharth, Author provided

Generative AI is having a moment. ChatGPT and art generators such as DALL-E 2, Stable Diffusion and Midjourney have proven their potential, and now millions are wracking their brains over how to get their outputs to look something like the vision in their head.

This is the goal of prompt engineering: the skill of crafting an input to

deliver a desired result from generative AI.

Despite being trained on more data and computational resources than ever before, generative AI models have limitations. For instance, they're not trained to produce content aligned with goals such as truth, insight, reliability and originality.

They also lack common sense and a fundamental understanding of the world, which means they can generate flawed (and even nonsensical) content.

As such, prompt engineering is essential for unlocking generative AI's capabilities. And luckily it isn't a technical skill. It's mostly about trial and error, and keeping a few things in mind.

ChatGPT

First, let's use [ChatGPT](#) to illustrate how prompt engineering can be used for text outputs. If it's used effectively, ChatGPT can generate [essays](#), [computer code](#), [business plans](#), [cover letters](#), [poetry](#), [jokes](#), and more.

Since it's a chatbot, you may be inclined to engage with it conversationally. But this isn't the best approach if you want tailored results. Instead, [adopt the mindset](#) that you're programming the machine to perform a writing task for you.

Create a content brief similar to what you might give a hired professional writer. The key is to provide as much context as possible and use specific and detailed language. You can include information about:

- your desired focus, format, style, intended audience and text length

- a list of points you want addressed
- what perspective you want the text written from, if applicable
- and specific requirements, such as *no jargon*.



Image created using Midjourney. Prompt: oil painting of a child with their grandparent enjoying a moment together and looking at each other. The child's face is full of wonder and the grandparent's face is lined with years of living, nostalgia, happy and sad memories and the wisdom of their years. Detailed faces. -- ar 3:2 -- no glasses

If you want a longer piece, you can generate it in steps. Start with the first few paragraphs and ask ChatGPT to continue in the next prompt. If you're unsatisfied with a specific portion, you can ask for it to be

rewritten according to new instructions.

But remember: no matter how much you tinker with your prompts, ChatGPT is [subject to inaccuracies](#) and [making things up](#). So don't take anything at face value. In the example below, the output mentions a "report" that doesn't exist. It probably included this because my prompt asked it to *use only reliable sources*.

> MA

Write an article about the concept of Artificial General Intelligence (AGI). Use the style of newspapers such as The New York Times, The Economist, and The Guardian. The intended audience is the general public. Mention the historical roots of the term AGI. Address the current predictions of AI researchers about the possibility of AGI and the potential timelines. Outline the arguments of both the sceptics and those who believe we should take the possibility of AGI seriously instead of dismissing it as mere science fiction. Use only reliable sources. Write at least 500 words.



Artificial General Intelligence (AGI) has been a topic of discussion in the scientific and technological community for several decades. The concept of AGI is based on the idea that machines could be created with the ability to think and understand like a human. This is in contrast to the current state of Artificial Intelligence (AI), which is limited to specific tasks and is unable to think beyond its programming.



The term AGI was first used by John Searle in 1980 and has since been developed by researchers, including psychologist and computer scientist Steven Pinker, who defined it as the capacity of a machine to perform any intellectual task that a human can. AGI is considered the ultimate goal of AI development and is seen as the future of AI.

The current predictions of AI researchers about the possibility of AGI vary widely. Some believe that AGI is a distant dream and that it may never be achieved. Others, however, believe that AGI is achievable within this century and that it could revolutionize society. A report by the US National Academy of Sciences predicted that AGI could become a reality within the next few decades and that its impact on society could be profound.

There are those who believe that AGI should be taken seriously, as it has the potential to solve many of the world's problems, from disease and poverty to environmental degradation. They argue that AGI could be used to create machines that could solve complex problems and improve the lives of people all over the world. This view is supported by researchers such as Nick Bostrom, who argues that AGI has the potential to be a valuable tool for humanity and that it should be pursued.

On the other hand, there are also those who believe that AGI is a dangerous idea and that it

↻ Regenerate response



I used prompt engineering to get ChatGPT to write this news article, which provides inaccurate information.

Art generators

Midjourney is one of the most popular tools for art generation, and one of the [easiest for beginners](#). So let's use it for our next example.

Unlike for text generation, elaborate prompts aren't necessarily better for image generation. The following example shows how a basic prompt combined with a style keyword is enough to create a variety of interesting images. Your style keyword may refer to a genre, art movement, technique, artist or specific work.

The following images were based on the prompt *leopard on tree* followed by different style keywords. These were (from the top left clockwise) *synthwave*, *hyperrealist*, *expressionist* and *in the style of Zena Holloway*. [Holloway](#) is a British photographer known for capturing her subjects in ethereal and somewhat surreal scenes, most often underwater.

You can also add keywords relating to:

- image qualities, such as "beautiful" or "high definition"
- objects you want pictured
- and lighting and colors.

With Midjourney, you can even use certain specific commands for different features, including `—ar` or `—aspect` to set the [aspect ratio](#), `—no` to omit certain objects, and `—c` to produce more "unusual" results. This command accepts values between 0-100 after it, where the default is 0 and 100 leads to the most unusual result.

You can also use `—s` or `—stylize` to generate more artistic images (at the expense of following the prompt less closely).

The following example applies some of these ideas to create a fantasy

image with a dreamlike and futuristic look. The prompt used here was *dreamy futuristic cityscape, beautiful, clouds, interesting colors, cinematic lighting, 8k, 4k —ar 7:4 —c 25 —no windows*.

Midjourney accepts multiple prompts for one image if you use a double colon. This can lead to results such as the image below, where I provided separate prompts for the owl and plants. The full prompt was *oil painting of an ethereal owl :: flowers, colors :: abstract :: wisdom —ar 7:4*.

A more advanced type of prompting is to include an image as part of the prompt. Midjourney will then take the style of that image into account when generating a new one.

A good way to find inspiration and ideas is to explore the [Midjourney gallery](#) and [style libraries](#).

A career of the future?

As generative AI models enter [everyday life](#), prompting skills are likely to become more [in-demand](#), especially from [employers](#) looking to get results using AI generators.

Some [commentators](#) are asking if becoming a "prompt engineer" may be a way for professionals such as designers, software engineers and content writers to save their jobs from automation, by integrating generative AI into their work. Others have [suggested](#) prompt engineering will itself be a career.

It's hard to [predict](#) what role prompt engineering will play as AI models advance.

But it's almost a given that more sophisticated generators will be able to handle more complex requests, inviting users to stretch their creativity.

They will likely also have a better grasp of our preferences, reducing the need for tinkering.

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