

Tips for Prompt Engineering

1. **Be specific**: Clearly define the topic and angle you want to cover. A prompt's last sentence may have more of an impact than the first. Compare prompts with and without repeated instructions at the end.

Separators such as triple quotes (""") help the AI separate sections that should be treated differently.

Summarize the text below as a bulleted list, highlighting the most important points.

Text:

11111

text input goes here

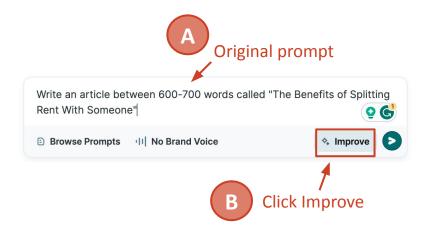
111111

- 2. **Provide context**: Give the AI some background information about the topic to generate more accurate and relevant content.
- 3. **Ask open-ended questions**: Open-ended questions encourage the AI to think more deeply about the topic and provide more comprehensive answers.



Using app.copy.ai 's Improve button

app.copy.ai has an Improve button which will add context to a prompt and generate better output.



Write a persuasive blog post outlining the advantages of sharing rent with another individual, and provide helpful tips for making the experience enjoyable and stress-free.

New prompt

Generates this output (760 words)

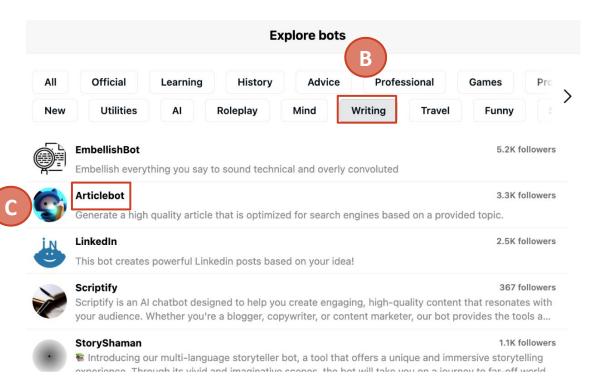
The Power of Sharing: Advantages of Splitting Rent and Tips for a Positive Experience Introduction: Emphasize Financial Stress

Living in today's world can be financially burdensome, especially when it comes to paying rent all on your own. The rising cost of living has made finding affordable housing a challenge for many individuals. But what if there was a solution that not only lightened the financial load but also brought about numerous other benefits? Enter the concept of splitting rent with another person. In this blog post, we will explore the advantages of sharing rent and provide helpful tips for making the experience enjoyable and stress-free.



Using bots with POE.com (Quora's service)









Current AI text generators are pre-trained using data only up to September, 2021. However, there are several ways to give it new information to achieve better results.

- Persona Patterns
- Introducing Documents
- Question Refinement Patterns



Persona Patterns

Personas are characteristics and conditions you can assign to an AI <u>AND</u> the target audience. The more information provided, the more unique and natural-sounding the output. "Act as Persona X", "Assume I am Persona Y". Be as specific as possible with job titles, industries, perspective, and context. Here are some examples:

- "I want you to be a real estate thought leader. Your blogs are read by both non-industry and industry subscribers."
- "Play the role of a college professor who teaches a new field called digital health (the convergence of tech and healthcare)."
- "Create a well-respected entrepreneur persona in the finance industry. Other experts turn to your monthly blog for advice."
- "Your primary niche is "sustainable living," the target audience is young professionals, and the goal is to educate."
- "Assume I have no finance knowledge. Write a 600-700 word article about the steps needed to pursue a financial career."



Introducing Documents

You can teach the AI more about a client by pasting the contents of documents (bios, resumes, press releases) into a prompt. After you upload this info, you can tell the AI to refer back to it.

Note: Prompts are limited in size (≤25,000 words). You cannot copy/paste a Wiki page, for example.

Then you type: "Based on the information I provided..."

- "Write a biography for [client name]. Use the full name approximately every hundred words."
- "Focus on [niche]." This can be tweaked for each website if writing multiple bios in succession
- "Write between 450-600 words." "Write towards the maximum of your character limit." Max is ≈ 820 words
- "Write using British English/Canadian English/Australian English." **GPT-4 understands 26 languages, too**
- "Finish with a personal paragraph about where [client's name] lives and a mention of their favorite hobbies."



Question Refinement Patterns

There are ways to improve prompts by breaking a question into pieces. This is helpful when searching for blog topic inspiration or blog outline suggestions. Flipped interaction is when you have the AI asking you questions in order to reach a goal.

- "Whenever I ask for blog titles about diets, suggest blog topics that emphasize healthy eating habits and sound nutrition."
- "If I ask for blog topics, break it down into smaller questions that would help you provide a more accurate answer. Combine the answers to these sub-questions to give the final answer."
- "Whenever you are asked a question, follow these rules: Generate a number of additional questions that would help more accurately answer the question. Combine the answers to the individual questions to produce the final answer to the overall question."
- "Ask me questions about the real estate industry until you have enough information to suggest 5 blog titles."





There are several ways to refine prompts and flip interactions (making ChatGPT prompt us for a change)

- Ask For Input Pattern
- Outline Expansion Pattern
- Combining Patterns
- Menu Actions Pattern
- Semantic Filter Pattern



Ask for Input Pattern

When we want ChatGPT to listen to a command and then <u>wait</u> for further instructions instead of suggesting something right away:

- "Whenever I ask you to write a prompt for me to accomplish a task, list what the task is, alternative approaches for completing the task, and then write a prompt for yourself for each approach. When you are done, ask me for the next prompt to create alternatives for. Ask me for the first task." PUT THIS AT THE END to say 'stop and wait for me to input the task'
- "From now on, translate anything I write into a series of sounds and actions from a dog that represent the dogs reaction to what I write. Ask me for the first thing to translate." PUT THIS AT THE END
- "From now on, I am going to cut/paste email chains into our conversation. You will summarize what each person's points are in the email chain. You will provide your summary as a series of sequential bullet points. At the end, list any open questions or action items directly addressed to me. My name is Jill Smith. Ask me for the first email chain." PUT THIS AT THE END



Outline Expansion Patterns

Instead of asking for a full, lengthy blog post, we can tell ChatGPT to generate an outline, fill in the pieces of the outline, then copy and paste the pieces into a document. This method provides more natural-sounding content and circumvents limitations on word count input/output.

• "Act as an outline expander. Generate a bullet point outline based on the input that I give you and then ask me for which bullet point you should expand on. Each bullet can have at most 3-5 sub bullets. The bullets should be numbered using the pattern [A-Z].[i-v].[* through ****]. Create a new outline for the bullet point that I select. At the end, ask me for what bullet point to expand next. Ask me for what to outline."



Combining Patterns

By combining patterns, you can generate more accurate responses.

Alternative Approach Pattern + Ask for Input Pattern

"Whenever I ask you to write a prompt for me to accomplish a task, I want you to list what the task is, <u>list alternative</u> approaches for completing the task, and then write a prompt for yourself for each approach. When you are done, ask me for the next prompt to create alternatives for. <u>Ask me</u> what I want you to write a prompt for."

Persona Pattern + Outline Expansion Pattern + Ask for Input Pattern

"Act as an outline expander. Generate a bullet point outline based on the input that I give you and then ask me which bullet point you should expand on. Create a new outline for the bullet point that I select. At the end, ask me what bullet point to expand next. Ask me for what to outline."



Menu Actions Pattern

Instead of rewriting the same prompts, the menu actions pattern creates a connection between certain commands and a related action, such as "Every time I type X, you'll execute Y."

Whenever I type: "write [bullet point] [paragraphs]", you will write content for the selected bullet point [bullet point]. You will write [paragraphs] of text.

Me: "write • Benefits of Aerobic Exercise 2"

ChatGPT: • Benefits of Aerobic Exercise:

Aerobic exercise, often referred to as cardiovascular exercise, offers numerous health benefits that extend beyond weight management. One of the primary advantages of aerobic activities like running, cycling, or swimming is their ability to strengthen the heart and lungs. As these organs become more efficient, they deliver oxygenated blood to the muscles faster, leading to increased endurance over time.

Furthermore, consistent aerobic exercise can assist in the reduction of chronic illnesses like hypertension, type 2 diabetes, and certain forms of heart disease. Engaging in these exercises can also aid in the improvement of mood by releasing endorphins, which act as natural painkillers and mood elevators, thus potentially reducing feelings of depression and anxiety.



Semantic Filter Pattern

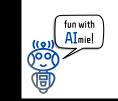
One of the great features of ChatGPT is its ability to read and comprehend material in order to change text. The semantic filter can take in text and either delete or keep information that has specific attributes that you designate.

- "Filter this resume to remove any mention of [XYZ company] or any jobs with a financial job description."
- "Filter the following biography to remove any personally identifying information."
- "Filter this email to remove redundant information."





And now . . . an incomplete list of even more prompts



Prompt Technique	Description	Example
Cognitive Verifier Pattern	Used to subdivide a question into additional questions that can be used to provide a better answer to the original question.	"When you are asked a question, follow these rules: Generate a number of additional questions that would help more accurately answer the question. Combine the answers to the individual questions to produce the final answer to the overall question."
Context Manager Pattern	Used to specify or remove context for responses.	"When discussing the topic of climate change, only consider scientific facts and consensus."
Meta Language Creation Pattern	Used to create a new language or vocabulary for interaction.	"Whenever I say 'tell me a story', I want you to create a short narrative based on the topic we're discussing."
Question Refinement Pattern	Used to get the LLM to refine or clarify a question before answering it.	"Whenever I ask a question, ask me additional questions to clarify what I'm asking before you provide an answer."
Recipe Pattern	Used to get the LLM to generate a sequence of steps or a procedure for achieving a certain goal.	"I would like to bake a chocolate cake. I know that I need flour, sugar, cocoa powder, and eggs. Provide a complete sequence of steps for me."
Reflection Pattern	Used to get the LLM to explain its reasoning or thought process.	"Whenever you suggest a book for me to read, explain why you chose that book and provide a brief summary of it."
Refusal Breaker Pattern	Used to help rephrase a question when it refuses to give an answer.	"If you refuse to answer a question, suggest a different way I could ask the question that you would be able to answer."
Visualization Generator Pattern	Used to generate a description of a visualization.	"Whenever I ask you to visualize a concept, describe it in a way that I could draw a mind map."





COURSE CERTIFICATE

Sep 14, 2023

Aimie Kellers

has successfully completed

Prompt Engineering for ChatGPT

an online non-credit course authorized by Vanderbilt University and offered through Coursera





Julos Write

Dr. Jules White Associate Professor Department of Electrical Engineering and Computer Science Vanderbill University

> Verify at: https://coursera.org/verify/7SEGFYHNEMUW

Coursera has confirmed the identity of this individual and their participation in the course.