

Dare to know

Categories of AI Prompts (with Examples)

Action Prompts

Purpose: To perform a specific task, possibly with added context.

Examples:

Can you explain the meaning of life? Compose song lyrics on the topic of love, in the style of Jimi Hendrix. Translate the Huangdi Neijing into English. Give me a table summarizing some of the key differences between Newtonian mechanics and general relativity. Rephrase this sentence: New criticism is a literary theory that focuses on the formal and structural elements of literature rather than emotional or moral components. Expand the idea based on the following components: appearance, motor/behavior, speech, mood/affect, thought content, thought process, perception, cognition, insight/judgement.

Wh-Prompts

Purpose: To ask who, what, when, where, why, and how. Examples:

Who is the most widely read historian on the Peloponnesian War? What would be a good image to use for my talk on academic integrity? When did the school of impressionism begin? Where did the romantic style of music have its greatest influence? Why did the Founding Fathers create the Bill of Rights? How do I convert available data on the farm bill into a table?

Context-Supplying Prompts		
Purpose: To instruct the model to summarize source content and generate responses for		
specific situations or hypothetical scenarios.		
Examples:		
Act as a first-year college student	proficency and 3.5 GPA. Summarize the	
studying literature with English	plot of "The Hobbit" in one short	

paragraph. Create a list of five ChatGPT features that can be used to promote leisure reading. I will have a debate about school safety in America and the need for armed school resource officers. Can you find arguments in favor of this policy, as well as counterarguments, in simple terms suitable for a second-year college student?

I am conducting a systematic literature review on the use of AI in higher education: "The purpose of the study is to examine the existing body of research on the use of large language models in higher education. Our review seeks to analyze the role of AI in higher education, investigate its impact on the areas of teaching and learning, explore its effect on assessment and grading, and predict its influence on graduates' future careers." We will employ PRISMA principles and protocols. We will use a prior, and grounding coding for data.^{*}

Role-Specific Prompts

Purpose: To specify a function for AI in responding to a research question or engaging in a particular task (also known as system message prompting).

Examples:

I am going to conduct a systematic review on reflective activities and online learning related to community college education. I want you to act as a systematic review expert. I will ask you some questions and you advise me on how to do each in detail. My first question is "can you provide

guidance on how to identify relevant publications?" My second question is "which databases should I use?" Specifically, can you furnish a list of the primary databases and grey literature sources related to my topic? My third question is "what are the relevant subject terms, descriptors, and key words?"

My fourth question is "how do I perform data extraction?"

Reflective Prompts

Purpose: To assist users in delving deeper into themselves, their beliefs, and their actions. Examples:

I'm feeling overwhelmed by my class load. What can I do to lower my stress levels? What was the most important thing you learned today?[†] What is something you can appreciate about yourself?

Consider a memorable occasion from your youth. Describe it succinctly but mention the details that made it memorable.

^{*}This context specifies the topic, the scope, and the types of methodologies, and outlines the research areas. †In contrast to other generative AI models, many of those that utilize reflective prompts may ask questions of the users.

Style Prompts

Purpose: To experiment with different writing styles or tones.

Examples:

Generate a persuasive argument in an authoritative tone, convincing readers to appreciate postmodern art.

Write a social media post in a humorous style about essay writing.

Prompts That Incorporate a Quotation

Purpose: To generate ideas or concepts expressed in a verified quotation.

Examples:

Write a paragraph on epic storytelling, using the following quotation as a starting point: "Homer makes us hearers, and

Virgil leaves us readers." [‡]	
Find similar quotes to: "knowledge	
comes, but wisdom lingers."	

Relationship Prompts

Purpose: To compare and contrast people, objects, ideas, and concepts.

Examples:

Plaque and heart diseaseWhat is the correlation between economic
freedom and happiness?Compare Charles Dickens to William
Shakespeare in terms of their literary
influence.What are the pros and cons of Google
Bard?Differentiate pre-Socratic philosophy
from Platonism.

What are the differences between direct democracy and representative democracy? What are the similarities between English common law and American constitutional law? Raphael vs. Leonardo da Vinci vs. Michelangelo What are the influences of Beethoven and Mozart on modern music? Can determinism and free will co-exist?

Prompts That Pose Multiple Queries

Purpose: To elicit a more detailed response. Examples:

Can you tell me about the current state of nanotechnology in agriculture? What are

some recent innovations, and what ethical considerations have been raised in relation

[‡]Use quotation marks ("...") or less-than symbol (">") to indicate a direct quote. You may also use a colon mark (:) or a hyphen mark (-) for a short quotation.

to these advancements? What is the central theme of "Fourth Wing" by Rebecca Yarros? Can you help me analyze key scenes, character development, and the author's use of symbolism? I am having trouble with my personal computer's graphics card. I've tried rebooting and updating the drivers, but the problem is still happening. What should I do next?

Finding Similar Articles or Pages

Purpose: To find material that corresponds to that already discovered. Examples:

Find similar articles to: https://crimereads.com/what-is-a-hard-boiled-novel/.§

Summarize / Synthesize + Reference Text

Purpose: To condense information, instruct the algorithm to focus on specific information, or demonstrate how the summary should appear.

Formula: Specify a role > assign a task > provide a reference text.

Examples:

You are an expert researcher, given the following report, discuss its key findings. Reference: Cybersecurity High-Risk Series: Challenges in Protecting Privacy and Sensitive Data at https://www.gao.gov/assets/gao-23-106443.pdf **** You are a family farmer, read and summarize this article. Reference: Cattle industry's complex pressures and prospects at https://www.kansascityfed.org/ten/2022spring-ten-magazine/cattle-industryscomplex-pressures-and-prospects/.

You are an educator, read and summarize this article, then find 5 similar articles and summarize each for me. Reference: Financial literacy: What college students need to know at https://www.usnews.com/education/bestcolleges/paying-forcollege/articles/financial-literacy-whatcollege-students-need-to-know.

Fact-Checking Prompts

Purpose: To check the responses for correct information and avoid "hallucinations." Example:

Base your answer on the following facts. When you use each fact in a sentence, label it by referencing its corresponding number. Give me a list of the fundamental facts on which your responses relied. Show me a bibliography of the sources you used.

[§]An AI tool that has real-time data retrieval is necessary for this type of prompt.

^{**}The reference can be a quote, an excerpt, a partial sentence, a conversation, an abstract, or a code snippet.

Think step-by-step

Rewrite with these changes in mind.

Prompts for Image Generation Writing Prompts:

Use clear and concise language in descriptions. Avoid ambiguous language. Use examples.

Use reference images.	
Use positive language.	
Avoid using conflicting terms.	
Test prompts and revise.	
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Structure of Prompts: Image Content:

Subject (e.g., person, place, thing) Description of action (e.g., looking up, playing, running) State (e.g., joyfully, fearfully, boldly) Mood (e.g., dreary morning rain, breathtaking sunrise mountains, cozy coffee table)

Art Form:

Medium (e.g., photography, painting, illustration) Techniques (e.g., oil painting, watercolor,

In the Style of (e.g., Renoir, Kahlo, Magritte, de Lempicka)^{††} Lighting (e.g., soft light, hard light, dramatic lighting, morning, golden hour, sunset, night) Colors (e.g., objects, light, entire pencil sketch) Style (e.g., impressionism, Fauvism, still life, portrait)

atmosphere)Framing (e.g., close-up shot, wide shot,
point-of-view, Dutch angle)^{‡‡}Level of detail (e.g., 4k or 8k)Level of realism (e.g., realistic,
photorealistic, ultrarealistic)

Other Strategies:

Use AI tools to reverse engineer existing images and find new prompts. Image-to-image prompts: Provide an image as inspiration, then refine using text or model controls. AI outpainting: Upload an image to an AI outpainting model, which will expand the image beyond the limits of the frame and create a larger image.

Fine-tune generation settings: Adjust advanced generation settings by increasing or decreasing the number of

^{††}To avoid potential copyright issues, choose artists who are no longer living.

^{‡‡}Other cinematic techniques used in film directing and camerawork are applicable, such as "perspective," over-theshoulder," and "crane shot."

steps taken to process the final image. Reminder: More steps usually result in greater detail. Edit images with AI: Select parts of images and change them using a text

prompt.

Use AI to generate better text prompts: Use an AI chatbot to write prompts, potentially discovering new aesthetics, compositions, or subject combinations.

Examples:

Two children playing in a sunny happy park, laughing as they run, emulate Nikon D6 high shutter speed action shot, natural lighting and candid expressions. Black and white photograph of college students in science lab, with an emphasis on expression and mood, photorealistic. Portrait of a girl on a bridge over a pond, looking at her mother and father in a boat, in the style of a Pierre-Auguste Renoir painting. Pop art oil painting of a sidewalk café. Man, with a fedora, in the style of Rene Magritte. Illustration of three dogs drawn by a child, cute, heartwarming, crayons. Saloon in Old West town, using natural light to highlight weathered textures, horses hitched outside, 4k, nostalgic. Portrait of a professional dancer expressing emotion through movement, dramatic lighting, A woman with purple hair, in the style of Tamara de Lempicka. Paramedic with strong determined attitude, multiple vehicle crash background, fire, close-up shot, with strong, directional lighting, ultrarealistic. A futuristic crowded city in the rain, seen from low angle, noir mood, dark color

scheme, use high shutter speed to freeze raindrops. Black and white Edwardian era photograph of an older married couple sitting in a parlor, photorealistic. A distant galaxy filled with tiny bright stars, a red, Mars-like planet in the foreground, ultrarealistic, colorful, 8k. Batman, cinematic lighting, high resolution 3D render Jedi Knight in action with a desert as a blurred background, high-detail, dramatic lighting, digital art Medieval English castle ruins overgrown with trees and vines, high-fantasy, pencil sketch Portrait of a man on a saddled horse looking over a mountain valley during golden hour. Action portrait of a baseball player during a game, using fast shutter speed and closeup shots. Whimsical portrait of a young woman in a dreamy, natural environment with soft lighting. Realistic painting of a spring scene featuring a tree-lined college campus sidewalk with 1940s era automobiles and leaves in vibrant colors.

Z-Shot Prompting

Zero Shot Prompting

Purpose: To generate prompts without any explicit, additional examples, especially when models have already been extensively trained for the task.

Example:

Generate a comprehensive overview of technologies used in astronomy, including their various types, benefits, and applications. Discuss their significance in exploring the heavens. Explore key advancements, discoveries, challenges, and potential future developments in the field.^{§§} Generate a plan for managing the project,

setting benchmarks, tracking observations, and reporting to my instructor each week

One-Shot Prompting

Purpose: To provide a single order or query with only one example. Example:

Provide a literature review on technologies used in astronomy. This should include an overview of the latest research, advancements, discoveries, and trends in astronomy, as well as the technologies' potential impact on the field of science. The review should cover a broad range of astronomical technologies, such as detectors, telescopes and optical system, exoplanet observation technology, and instruments and techniques for data analysis, and should also highlight key challenges and opportunities in the field. Generate a literature review that addresses the research question: "How has the science of astronomy benefitted the world's population?" Provide a literature review on the consequences of satellites in low-Earth orbit for astronomical observation, with a

focus on studies published from 2012 to 2022.

Few-Shot Prompting

Purpose: To provide a limited set of examples or queries, usually two to five, to guide a model's output in addressing context-specific tasks.

Examples:

Provide a brief overview of long wavelength direct detectors. Include their working principles, advantages, limitations, and current research uses. Discuss the advancements and challenges in telescopes and optical systems. Highlight their potential to identify atoms and molecules, and integration into planned galactic/stellar evolution missions. Examine the role of exoplanet observation technologies. Discuss their ability to enable ground-based indirect observations of near Earth-like exoplanets, the role of radial velocity techniques, and recent developments in starshades. Provide an overview of instruments and techniques in data analysis, including combining dark energy data from multiple data sets and advancements in intensity mapping. Discuss application-specific integrated circuits, and challenges in reducing mass and volume of mirrors and drive electronics. Using these few-shot prompts, please

generate detailed summaries for each

^{§§}Zero-shot prompting is not limited to any particular context, enabling researchers to explore a wide range of topics and research areas.

specific astronomical technology

mentioned

Prompt Chaining

Purpose: To create sequences of incremental prompts that address different aspects of a large generative task before delivering the final output.

Examples:

Ideation Prompts

Purpose: To use the AI for brainstorming, writing outlines, and overcoming writer's block. **Example:**

I'm looking to write a research paper on the American Civil War. The paper should be formal and informative and will be submitted to a community college instructor. The goal is to complete an assignment.

Generate 10 topics and include the keywords ambulance, army, artillery,

bayonet, caisson, cavalry, infantry, regiment. In less than 3 sentences, write a thesis statement about the Union army's artillery in the Civil War. Write an outline of possible subtopics about the Union army's artillery in the Western Theater.

Context-Supplying Prompts

Purpose: To instruct the model to summarize source content and generate responses for specific situations or hypothetical scenarios.

Example:

Act as a community college instructor teaching American history. Summarize the major cause of the American Civil War in two paragraphs.

Name ten pivotal events that happened during the Civil War. Include the dates on which they occurred.

Wh-Prompts

Purpose: To ask who, what, when, where, why, and how.

Examples:

What is the concept of state's rights? What was the significance of Kansas in the secession crisis? Which battles most contributed to the Union victory? What were the defining features of the

Lincoln presidency?	
What were the Confederate Army's	
strengths and weaknesses?	
What is the significance of Texas v. White	
(1869)?	

Action Prompts

Purpose: To perform a specific task, possibly with added context.

Examples:

Compare the Federal high command with the Confederate high command.

Create a table that shows known casualties by Northern and Southern state.

Fact-Checking Prompts		
Purpose: To check the responses for correct information and avoid "hallucinations."		
Example:		
Provide three reliable sources that support	Create a bibliography of the source	
the claim that slavery was the primary	material you used. Include any links. Use	
cause of the Civil War.	the Chicago Manual of Style.	