

A de-jargonised guide to prompt engineering

Term	Definition	Layman's Terms	Example
Prompt Engineering	The process of designing and refining prompts to guide LLMs toward desired outputs ¹ .	Giving clear instructions to an employee to ensure they understand their tasks and deliver the desired outcome.	N/A
Prompt Template	A structured format for prompts, often with variables or placeholders ² .	A template or form with blanks to fill in, making it easier to create consistent and effective prompts.	"Summarize the following text in one sentence: {text}"
Zero-shot Prompting	Providing an instruction to the LLM without any examples ⁵ .	Giving the LLM a task to do with no prior examples to guide it. Like asking a new employee to write a press release without showing them any previous press releases.	"Translate this sentence into Spanish: 'The quick brown fox jumps over the lazy dog.'"
Few-shot Prompting	Providing a limited number of examples (1-5) in the prompt to guide the LLM towards the desired output ⁵ .	Giving the LLM a few examples to learn from before giving it a task. Like showing a new employee a couple of press releases before asking them to write one.	"Translate these sentences into Spanish: 'The cat sat on the mat.' -> 'El gato se sentó en la alfombra.' 'The dog chased the ball.' -> 'El perro persiguió la pelota.' Now translate this

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Multi-shot Prompting	Providing multiple examples (more than 5) in the prompt to guide the LLM ⁷ .	Giving the LLM many examples to learn from before giving it a task. Like giving a new employee a whole folder of press releases to study before asking them to write one.	sentence: 'The quick brown fox jumps over the lazy dog.' Similar to few-shot prompting, but with a larger number of examples.
Chain-of-Thought Prompting	Encouraging the LLM to break down complex tasks into a series of intermediate reasoning steps ⁸ .	Asking the LLM to "think out loud" and explain its reasoning process. Like asking an employee to explain their thought process when making a decision.	"Roger has 5 tennis balls. He buys 2 more cans of tennis balls. Each can has 3 tennis balls. How many tennis balls does he have now? Chain-of-thought: First, find the total number of new tennis balls: 2 cans * 3 balls/can = 6 balls. Then, add the new tennis balls to the original number: 5 balls + 6 balls = 11 balls. Answer: Roger has 11 tennis balls."

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Prompt Chaining	Connecting multiple prompts together to perform a complex task ⁹ .	Breaking down a complex task into smaller sub-tasks and using separate prompts for each. Like assigning different parts of a project to different employees.	Imagine you want to analyze customer reviews. First, you use a prompt to summarize the reviews. Then, you use another prompt to identify the key themes from the summary. Finally, you use a third prompt to generate a report based on those themes.
In-Prompt Examples	Examples provided within the prompt to guide the LLM's response.	Showing the LLM what kind of answer you're looking for by giving it examples within the prompt itself. Like including a template or a previous example in the instructions for a task.	This is essentially the same as few-shot or multi-shot prompting.
System Prompt	A prompt that sets the overall behavior and persona of the LLM ⁸ .	Giving the LLM a specific role or personality to influence its responses. Like telling an employee to "think like a customer" when providing feedback.	"You are a helpful and friendly customer service agent."

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Meta-Prompt	A prompt that instructs the LLM to generate or improve other prompts ¹⁰ .	Asking the LLM to create a prompt for you, or to improve a prompt you've already written. Like asking an employee to design a more efficient workflow for a specific task.	"Write a prompt to generate a creative story about a talking dog."
Mixture of Experts	Using multiple specialized LLMs, each with its own area of expertise, to solve a complex task.	Like assembling a team of experts with different skills to tackle a complex project. Each expert contributes their specialized knowledge to achieve the overall goal.	Imagine you need to create a marketing campaign. You could use one LLM specialized in market research, another in copywriting, and a third in social media marketing. Each LLM would contribute to a different aspect of the campaign.
Hallucination	When an LLM generates incorrect or nonsensical information, often presented with confidence.	Like an employee confidently stating something that is completely untrue. This can happen when the LLM doesn't have enough information or when it misinterprets the information it has.	An LLM might "hallucinate" a historical event that never happened or invent a scientific fact that doesn't exist.

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RAG (Retrieval-Augmented Generation)	A technique that combines LLMs with external knowledge sources to improve the accuracy and relevance of their responses.	Like giving an employee access to a library or database to help them answer questions and complete tasks. This allows the LLM to access and process information beyond its own internal knowledge.	A customer service chatbot might use RAG to access a company's knowledge base and provide accurate answers to customer questions.
Priming	Guiding the LLM to access and prioritize specific parts of its knowledge base by providing context or instructions.	Like giving an employee specific instructions or background information to help them focus on the relevant aspects of a task.	If you want the LLM to generate creative text in the style of Shakespeare, you might prime it with examples of Shakespeare's writing.
Output Formatting	Specifying the desired format for the LLM's output, such as text, code, or a specific data structure ¹¹ .	Like telling an employee how to present their work, whether it's a written report, a spreadsheet, or a presentation. This ensures that the LLM's output is in a usable and understandable format.	You might ask an LLM to generate a list of items in a bullet-point format or to provide data in a JSON format.

Works cited

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