



INTRODUCTION TO AI AND APPLICATIONS

BETC105 / 205

Module 2

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Outline

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1. Introduction to Artificial Intelligence

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2. How Does AI Work?
3. Advantages and Disadvantages of Artificial Intelligence
4. History of Artificial Intelligence
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 - b. Reactive Machines
 - c. Limited Memory
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 - b. Informed Search Algorithms:
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Outline

Module 2: Introduction to Prompt Engineering

1. Introduction to Prompt Engineering

1. Overview of Prompt Engineering
2. The Evolution of Prompt Engineering
3. Types of Prompts
4. How Does Prompt Engineering Work?
5. The Role of Prompt Engineering in Communication
6. The Advantages of Prompt Engineering
7. The Future of Large Language Model (LLM) Communication

2. Prompt Engineering Techniques for ChatGPT

- Introduction to Prompt Engineering Techniques
- Instructions Prompt Technique
- Zero, One, and Few Shot Prompting
- Self-Consistency Prompt

3. Prompts for Creative Thinking

- Introduction to Creative Thinking with Prompts
- Unlocking Imagination and Innovation

4. Prompts for Effective Writing

- Introduction to Writing with Prompts
- Igniting the Writing Process with Prompts





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Module 2: Introduction to Prompt Engineering

Ajantha Devi Vairamani and Anand Nayyar, Prompt Engineering: Empowering Communication, 1st Edition, CRC Press, Taylor & Francis Group

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Module 2: Introduction to Prompt Engineering

What is AI?

- AI is the broad field of making machines think and act like humans.
- Teach computers to learn, reason, and make decisions.
- Everyday Examples:
 - Google Maps → Finds the fastest route.
 - Netflix → Recommends movies based on your past choices.
 - ATM Machines → Detects fraud automatically.
 - Key Point: AI is the umbrella term. Everything else, including LLMs and GenAI, comes under AI.





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LLM (Large Language Model)

- LLMs are a type of AI model designed to understand, process, and generate human-like language.
- How It Works: Trained on huge amounts of text (books, articles, websites) so it learns patterns of language.
- Examples:
 - ChatGPT → Answers questions like a human.
 - Google Gemini / Bard → Summarizes long documents.
 - Simple Analogy:
 - Think of an LLM like a very smart English dictionary + storyteller.
 - If you ask, “Explain photosynthesis,” it writes an answer as if a teacher explained it.





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GenAI (Generative AI)

- A special branch of AI that can create new content like text, images, audio, or video.
- How It Works: Uses models like LLMs to generate something new based on patterns it has learned.
- Examples:
 - Text → ChatGPT writes essays or poems.
 - Images → DALL·E or MidJourney creates paintings from descriptions.
 - Music → AI composes songs.
 - Simple Analogy:
 - If AI is the brain, and LLM is the language expert,
 - GenAI is the artist that creates new things.

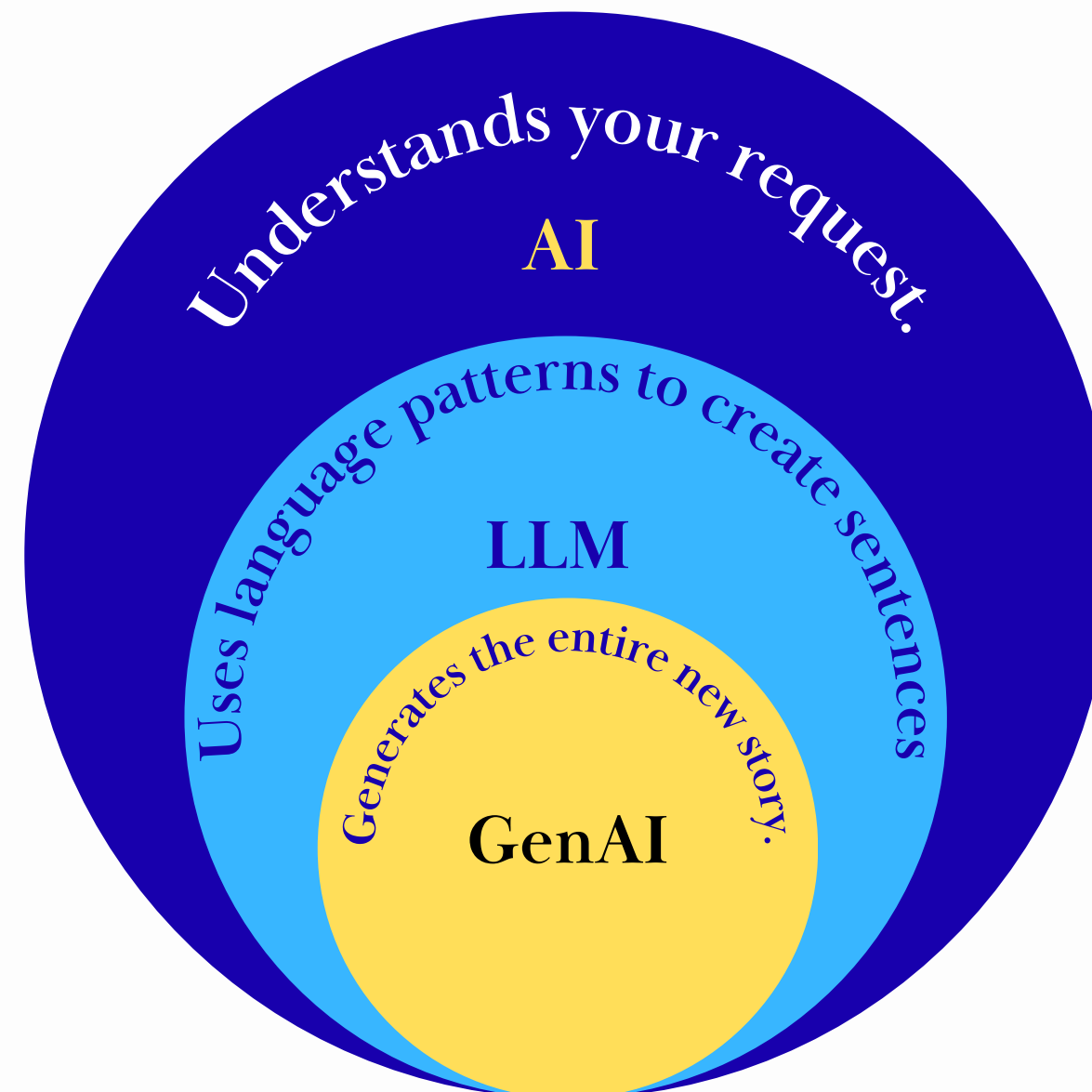




Module 2: Introduction to Prompt Engineering

GenAI (Generative AI)

- Imagine you're in a classroom:
- AI = The entire school → Many teachers for different subjects.
- LLM = The English teacher → Specializes in understanding and writing language.
- GenAI = A creative writing teacher → Not only explains grammar but also writes poems, stories, and essays for you.





Module 2: Introduction to Prompt Engineering

1. Overview of Prompt Engineering

- A prompt is simply the input instruction you give to an AI model. It can be a question, command, or example that guides the model to produce the desired response.
- **Key idea:** The better and clearer the prompt, the better the output.

Why is a Prompt Required?

- **Guides the AI:** A prompt helps the AI understand the context and generate a relevant response.
- **Directs the Output:** The quality of the AI's response depends on how well the prompt is crafted. A good prompt leads to better, more accurate results.
- **Contextual Clarity:** It ensures the model responds to a specific task, reducing ambiguity in what is expected.

Example of a Good Prompt:

- **Good Prompt:**
- *"Write a short story about a dragon and a knight who become friends."*
- This prompt is clear, specific, and gives the model a clear task, so it can generate a relevant story.

Example of a Wrong Prompt:

- **Wrong Prompt:**
- *"Tell me about dragons."*
- This prompt is too vague, and the AI might give a general response about dragons without focusing on the specific task of creating a story or narrative.

Think of an LLM as a knowledgeable chef.

- If you say: "Make food" → The chef is confused.
- If you say: "Make a vegetarian pasta with mushrooms, spinach, and cheese" → The chef gives you exactly what you want.





Module 2: Introduction to Prompt Engineering

1. Overview of Prompt Engineering

Why Are Prompts Important?

- **Guides the AI:** Prompts tell the AI what you want it to do. Without a clear prompt, the AI might give you something completely unrelated.
- **Helps Generate Accurate Results:** The more specific and detailed your prompt is, the more accurate and useful the AI's output will be.

How is Prompt Engineering Useful?

- **Optimizing Output:** By crafting better prompts (known as prompt engineering), we can improve the quality of the AI's responses.
- **Control the AI:** You can direct the AI to write stories, summarize text, generate images, and more, based on how well you ask for it.

Simple Example:

- **Bad Prompt:** "Tell me about cats." - (Because the prompt is: 1. Too Vague, 2. Lack of Focus & 3. Can Lead to an Unfocused Answer)
- **Good Prompt:** "Write a fun short story about a cat who travels to the moon."





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1. Overview of Prompt Engineering

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Module 2: Introduction to Prompt Engineering

Instructions Prompt Technique

The Instructions Prompt Technique involves providing specific guidelines to guide the AI model's output. This helps ensure that the generated text aligns with the desired objectives and meets the task's requirements.

- This technique ensures that AI responses are focused and appropriate for the task at hand by giving clear instructions.

Examples:

- **Customer Service:**
 - **Instruction:** "Responses should be professional and provide accurate information."
 - **Result:** The AI will generate responses that are formal and factually correct.
 - **Example Prompt:** User Query: "How can I reset my password?"
- **Legal Document:**
 - **Instruction:** "The document should comply with relevant laws and regulations."
 - **Result:** Ensures the document follows legal standards.
 - **Example Prompt:** User Query: "Please create a non-disclosure agreement."
- **Product Review:**
 - **Instruction:** "The review should be unbiased and informative."
 - Combined with role prompting (tech expert) and seed-word prompting (smartphone features), it generates a detailed and balanced review.
 - **Example Prompt:** User Query: "Write a product review for the new smartphone."

Combining Techniques:

- Instructions can be paired with other techniques (like role prompting or seed-word prompting) to increase the precision and control of the model's output.



Module 2: Introduction to Prompt Engineering

2 The Evolution of Prompt Engineering



Year	Milestone	Description
1966	ELIZA	Developed by Joseph Weizenbaum, ELIZA was a chatbot that used simple pattern-matching to simulate a conversation, marking the beginning of prompt-based interaction.
1970s	SHRDLU	Created by Terry Winograd, SHRDLU was a natural language processing system capable of interpreting commands and reasoning about a virtual environment.
1990s	Mad Hatter Dialogue Systems	Systems like Jabberwacky and ALICE used humor and open-ended conversations, pushing the boundaries of natural language interaction.



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2 The Evolution of Prompt Engineering



Year	Milestone	Description
2000s	Template-based Approaches	Models like Madalyn and Galatea used user input to fill predefined templates, setting the foundation for structured prompt engineering.
2017	The Transformer Revolution	The introduction of the Transformer architecture sparked a revolution in NLP, leading to models like GPT-3 and Jurassic-1 Jumbo, which brought prominence to prompt engineering.
2020s	Adjusting and Refining LLMs	Refinement and fine-tuning of large language models for specific tasks, using techniques like few-shot learning and conditional generation for precise control.



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Types of Prompts



Prompt

1

Natural Language Prompts

These prompts are written in natural human language, making them more intuitive for developers to interact with the model. The goal is to provide instructions that mimic human speech, making the communication more natural.

Prompt: "Can you explain how photosynthesis works?"

Output: "Photosynthesis is the process by which plants convert light energy into chemical energy stored in glucose."

2

System Prompts

System prompts are pre-written instructions or templates that guide the AI model on how to respond. These prompts can direct the format, style, or tone of the output, providing a clear framework for the model to follow.

Prompt: "Write a formal email explaining the delay in project delivery."

Output:
"Subject: Project Delivery Delay
Dear [Recipient],
I regret to inform you that due to

3

Conditional Prompts

Conditional prompts involve setting specific conditions or limitations that direct the model's behavior based on certain criteria. These conditions can be framed as logical statements, like "If X, then Y", guiding the model on what to produce in different scenarios.

Prompt: "If the user asks about weather, provide a weather update. If the user asks about sports, provide the latest sports news."

Input: "What's the weather like today?"
Output: "The weather today is sunny with a high of 25°C."





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4. How Does Prompt Engineering Work?

Prompt engineering is a systematic process that involves crafting effective instructions for Large Language Models (LLMs) to get the best output. The process is iterative, meaning you might need to refine your prompts multiple times to achieve the desired results.

Steps for Effective Prompt Engineering

Step 1: Understand the Task Thoroughly

- Goal: Know exactly what you want the LLM to do before crafting the prompt.
- Questions to ask yourself:
 - What outcome am I expecting?
 - What kind of answer am I looking for (e.g., creative, factual, instructional)?
- Example:
 - If you want a poem, understand if you need it to be creative or educational. If you need the model to generate a formal email, the prompt needs to be task-specific.





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4. How Does Prompt Engineering Work?

Step 2: Use Precise and Simple Language

- Goal: Make sure the LLM understands your prompt clearly.
- Tip: Avoid using technical jargon or overly complex terms. Your language should be direct and simple.

Example:

- Vague Prompt: "Create a response to the user's inquiry."
- Precise Prompt: "Write a formal email apologizing for a delayed response."

The second prompt gives clear, understandable directions, leaving no room for confusion.





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4. How Does Prompt Engineering Work?

Step 3: Add Specific Details

- Goal: The more detailed the prompt, the better the response.
- Tip: Provide enough context or constraints to guide the model effectively. Specificity helps the model understand your exact requirements.

Example:

- **General Prompt:** "Write a poem."
- **Specific Prompt:** "Write a poem about the joy of summer, with imagery of the beach and sunshine."

The second prompt gives the LLM more to work with, increasing the chance of generating a relevant poem.





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4. How Does Prompt Engineering Work?

Step 4: Provide Examples

- Goal: Help the LLM understand the type of output you're expecting.
- Tip: If possible, provide a sample output that demonstrates the desired style or format. This helps the model align its output with your expectations.

Example:

- **Prompt:** "Write a summary of the following article in bullet points."
- **Example Output:**
 - "Article Summary:
 - • Discusses the impact of climate change.
 - • Explores renewable energy solutions."

Providing an example shows the model exactly how you want the summary to look.





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4. How Does Prompt Engineering Work?

Step 5: Experiment and Refine

- **Goal:** Prompt engineering isn't perfect from the first try.
- **Tip:** Test different prompts to find the one that works best. Experimentation and iteration are key to discovering the most effective approach.

Example:

- If you're not getting the right answer, try rephrasing the prompt or adding more context to see if the response improves.



Module 2: Introduction to Prompt Engineering



4. How Does Prompt Engineering Work?

Step	Explanation	Example
1. Understand the Task	Be clear about your expectations and goals.	"Write an apology email for a delayed response."
2. Use Precise Language	Avoid jargon, keep it simple, and be clear.	"Write a formal letter" vs. "Create a letter to apologize."
3. Add Specific Details	Include enough context or constraints for better results.	"Write a poem about summer with imagery of the beach and sunshine."
4. Provide Examples	Show the LLM the type of output you're expecting.	"Write a summary of this article in bullet points like this: ..."
5. Experiment and Refine	Keep refining your prompts by experimenting with different versions.	Adjusting wording or adding extra context to improve model output.



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5. The Role of Prompt Engineering in Communication



Function	Explanation	Example
Improving Specificity & Clarity	Clear, precise prompts ensure unambiguous communication.	"Write an email apologizing for the delay in the meeting and offer a rescheduled time."
Increasing Creativity & Engagement	Prompts spark creativity, generating engaging and thought-provoking outputs.	"Write a short story about a young artist who discovers a magical paintbrush."
Adapting Communication Styles	Prompts adjust the tone to match different contexts (formal, casual, persuasive).	"Write a formal email requesting a meeting."
Overcoming Linguistic Barriers	Prompts help LLMs translate languages with accuracy and cultural sensitivity.	"Translate into Spanish: 'Could you please provide me with the details by tomorrow?'"
Ethical Issues	Ethical prompt design ensures fairness, inclusivity, and prevents manipulation or bias.	Avoiding prompts that generate biased, harmful, or discriminatory content.



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6. The Advantages of Prompt Engineering



Task	Benefit	Example
Question Answering	Increases accuracy in providing factual responses.	"What is the capital of France?" → "Paris"
Creative Writing	Enhances creativity and produces engaging, imaginative content.	"Write a poem about a sunset" → Creative poem generation.
Machine Translation	Improves precision and ensures context-aware translations.	"Translate 'Hello' to French" → "Bonjour"
Coding	Helps in generating accurate and effective code.	"Write a Python function for factorial" → Generates correct Python code.



Module 2: Introduction to Prompt Engineering



7. The Future of Large Language Model (LLM) Communication

- As LLM technology progresses, prompt engineering will continue to evolve, shaping the way we interact with AI models.
- Ongoing research into adaptive prompts and AI behavior control will make communication with LLMs more sophisticated and contextually aware than ever before.
- The future holds exciting possibilities for AI-powered communication, improving everything from language translation to creative collaboration.



Module 2: Introduction to Prompt Engineering

7. The Future of Large Language Model (LLM) Communication



Trend	Description	Example
AI-Powered Negotiation Tools	AI assists in real-time negotiations, providing balanced solutions for win-win agreements.	AI suggesting compromises during a business meeting to ensure a fair deal.
Real-Time Language Translation	LLMs translating languages with understanding of cultural nuances and context.	Seamless cross-lingual communication in a global business meeting.
Customized News Updates	Personalized news feeds tailored to individual interests and preferences.	A personalized news feed focusing on environmental and technological topics.
Automated Prompt Generation	AI systems that generate optimized prompts for tasks.	Automated generation of prompts based on task descriptions.
Adaptive Prompts	Prompts adjust dynamically based on user interactions, improving personalization over time.	An AI assistant adapting its suggestions based on past interactions.
Subtle Cues for Complex Tasks	AI that responds to subtle cues, managing multi-step tasks intuitively.	AI handling multi-step creative projects with minimal input.





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Module 2: Prompt Engineering Techniques for ChatGPT

1. Introduction to Prompt Engineering Techniques

- Prompt engineering involves crafting specific instructions (prompts) to guide how an AI model generates responses.
- By providing clear and structured prompts, developers can direct the AI's output to be relevant, accurate, and high-quality for a wide range of tasks.
- **Goal:**
 - The main goal of prompt engineering is to shape the model's behavior, ensuring that the responses meet the desired standards and objectives for a given task
- **Key Techniques in Prompt Engineering**
 - **Standard Prompts:** Simple prompts that directly ask the AI to perform a specific task.
 - **Role Prompting:** The model is given a specific role to play, influencing the tone, style, or behavior of the response.
 - **Seed-Word Prompting:** The prompt provides a seed word or phrase that the model should build upon, guiding its response based on that initial cue.
 - **Conditional Prompting:** Conditions or limitations are set for the model, such as "If this, then that".





Module 2: Prompt Engineering Techniques for ChatGPT

1. Introduction to Prompt Engineering Techniques

- **Why is Prompt Engineering Important?**
 - **Relevance:** Well-crafted prompts ensure the model produces relevant responses, making them more aligned with the task's objectives.
 - **Accuracy:** Prompt engineering helps the model generate responses that are factually correct and appropriate for the given context.
 - **Versatility:** Different types of prompts can be used to adapt the model's output to fit a wide variety of tasks, from casual conversations to formal reports.
- **The Future of Prompt Engineering**
 - As AI continues to advance, prompt engineering will become increasingly important for optimizing language models. Future developments may involve:
 - Automated prompt generation to streamline the process.
 - Dynamic prompts that adjust based on user interactions or context.
 - Contextual awareness in prompts, allowing the AI to respond more naturally and flexibly.





Module 2: Prompt Engineering Techniques for ChatGPT

2. Instructions Prompt Technique

- The Instructions Prompt Technique is a method used to guide the output of natural language processing models like ChatGPT by providing specific instructions that the model must follow. This ensures the generated text aligns with the desired objectives and requirements of the task.
- **Purpose:** Directs the model to produce outputs based on specific guidelines or criteria.
- **Customization:** Allows for tailoring the model's response to meet particular goals, such as professionalism, accuracy, or legal compliance.
- **How It Works:**
 - **Step 1:** Provide clear instructions to the model. These instructions specify how the model should approach the task or the style of the output.
 - **Step 2:** The model follows these instructions to generate responses that meet the set criteria.





Module 2: Prompt Engineering Techniques for ChatGPT

3. Zero, One, and Few Shot Prompting

- Zero, One, and Few Shot Prompting are techniques in prompt engineering that help guide AI models, like ChatGPT, to generate responses based on different amounts of context or examples. These techniques are useful when you want the model to produce responses with limited information.
 - a. Zero Shot Prompting
 - b. One Shot Prompting
 - c. Few Shot Prompting





Module 2: Prompt Engineering Techniques for ChatGPT

3. Zero, One, and Few Shot Prompting

1. Zero Shot Prompting

- The model generates a response without any examples or context. You simply give a prompt or instruction, and the model uses its pre-existing knowledge to generate an answer.
- **Example:**
 - **Prompt:** "Write a poem about nature."
 - **Output:** A poem generated by the model based on its general knowledge.
- **When to Use:**
 - When you want the model to think creatively without any specific examples.
 - Useful for open-ended tasks or when you want to explore the model's generalization abilities.
- **Limitation:**
 - Sometimes results may be less accurate or relevant without context.





Module 2: Prompt Engineering Techniques for ChatGPT

3. Zero, One, and Few Shot Prompting

2. One Shot Prompting

- **What It Is:**
- The model generates a response based on one example you provide. This single example helps guide the model in understanding the context or task.
- **Example:**
 - **Prompt:** "Summarize the following paragraph: 'The sun rises in the east and sets in the west.'"
 - **Output:** "The sun moves across the sky from east to west."
- **When to Use:**
 - When you have one clear example but still need the model to generate a response with some level of accuracy.
- **Limitation:**
 - If the task is complex, one example might not be enough, and you may need more examples.





Module 2: Prompt Engineering Techniques for ChatGPT

3. Zero, One, and Few Shot Prompting

3. Few Shot Prompting

- The model generates a response based on a few examples you provide. This gives the model more context and helps it generate more accurate and relevant responses.
- **Example:**
 - **Prompt:** *"Write a product review based on these features:
 - Battery life: 10 hours
 - Camera: 12 MP
 - Screen: 6.5 inches"*
 - **Output:** A detailed product review based on the provided features.
- **When to Use:**
 - When you need more context or examples to help the model generate precise and relevant responses.
- **Limitation:**
 - You need to ensure that the examples are relevant and complete to get the best results.



Module 2: Prompt Engineering Techniques for ChatGPT

3. Zero, One, and Few Shot Prompting



Technique	Description	Example
Zero Shot Prompting	The model generates a response without any example or context.	"Write a poem about nature."
One Shot Prompting	The model uses one example to understand the task and generate a response.	"Summarize this sentence: 'The sun rises in the east.'"
Few Shot Prompting	The model uses a few examples to generate a more accurate and relevant response.	"Write a product review based on these features..."



Module 2: Prompt Engineering Techniques for ChatGPT



4 Self-Consistency Prompt

- The Self-Consistency Prompt is a sophisticated technique used in prompt engineering to ensure that the generated text remains coherent and logically consistent with the information provided.
- This technique is particularly useful when you want the AI model, such as ChatGPT, to adhere to specific facts, opinions, or constraints throughout a conversation or task.
- **How It Works:**
 - The main aim of the Self-Consistency Prompt is to maintain coherence and logical consistency in the model's responses.
- **Process:**
 - You provide the model with a prompt that contains key information or facts that the model must remain consistent with during the interaction. This could include background knowledge, established facts, or constraints that the model should adhere to while generating text.



Module 2: Prompt Engineering Techniques for ChatGPT

4 Self-Consistency Prompt



Key Features of Self-Consistency Prompts:

- **Incorporates Key Information:**
 - The prompt includes critical facts, statements, or context that guide the model to maintain consistency.
- **Guides Logical Flow:**
 - Ensures that the model's responses remain logically aligned with the established context throughout the conversation.
- **Balances Detail and Flexibility:**
 - While it's important to provide enough context, it's crucial not to over-restrict the prompt, as that could limit the model's creativity and diversity in responses.



Module 2: Prompt Engineering Techniques for ChatGPT

4 Self-Consistency Prompt



Example:

1. Topic: Climate Change

○ Prompt:

- "Climate change is driven by human activity, particularly the burning of fossil fuels. Scientists agree that the Earth's average temperature has risen by 1.1°C since the late 19th century. Based on this scientific consensus, explain the impact of rising global temperatures on ecosystems."

○ Generated Response:

- The model, guided by the self-consistency prompt, would provide an answer that aligns with the scientific consensus and remains consistent with the data about climate change.



Module 2: Prompt Engineering Techniques for ChatGPT

4 Self-Consistency Prompt



When to Use Self-Consistency Prompts:

- **Educational Content:**
 - Ensures the information presented is accurate and aligned with established knowledge, making it useful for creating educational materials.
- **Technical Discussions:**
 - When discussing specialized topics, like engineering or medicine, where accuracy and adherence to known facts are critical.
- **Decision-Making:**
 - In scenarios where decisions rely on consistent data or logical reasoning, like business strategies or technical choices





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Module 2: Prompts for Creative Thinking

1. Introduction

- In today's world, creativity is essential for innovation and problem-solving across various fields.
- Prompts act as tools to ignite imagination, spark new ideas, and help overcome mental blocks.
- **Types of Prompts:**
 - Open-ended questions challenge conventional thinking.
 - Playful prompts encourage unconventional associations.
- **Benefits of Prompts:**
 - Help expand imagination and discover new possibilities.
 - Guide you to connect unrelated ideas and embrace curiosity.
- **Practical Strategies:** The chapter offers practical exercises that encourage exploration and creative thinking.





Module 2: Prompts for Creative Thinking

2. Unlocking Imagination and Innovation

Key Principles for Fostering Innovation:

1. **Encourage Brainstorming:** Regular sessions to generate and discuss new ideas.
2. **Embrace Failure:** View failure as a learning opportunity, not a setback.
3. **Foster Curiosity and Experimentation:** Promote a culture where exploration is encouraged.
4. **Cross-disciplinary Collaboration:** Bring together diverse teams with different skill sets and perspectives.
5. **Diversity and Inclusion:** Ensure diverse voices and viewpoints are included in the innovation process.
6. **Continuous Learning and Adaptation:** Stay updated with emerging trends and technologies to stay relevant.
7. **Clear Goal-Setting and Autonomy:** Provide employees with freedom and recognition to pursue creative ideas.





Module 2: Prompts for Creative Thinking

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Module 2: Prompts for Creative Thinking

2. Unlocking Imagination and Innovation

Top 10 Prompts for Unlocking Imagination and Innovation:

1. How can unlocking creativity lead to breakthrough innovations?

- This prompt encourages you to explore how fostering creative thinking can lead to significant advancements and innovations in your field or industry.
- Usefulness: It helps organizations understand that creativity is essential for achieving major breakthroughs.

2. The impact of a creative mindset on problem-solving and innovation.

- This prompt examines how a creative mindset helps overcome challenges and leads to new solutions.
- Usefulness: It highlights that the way we approach problems affects the quality and novelty of solutions.





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Top 10 Prompts for Unlocking Imagination and Innovation:

3. Strategies for cultivating a culture of innovation through imagination.

- This prompt focuses on methods for creating a work environment where creativity and imagination are at the forefront of the organization's values.
- Usefulness: It provides strategies to build a culture of innovation that encourages new ideas to flourish.

4. The role of play and experimentation in stimulating imagination for innovation.

- This prompt stresses the importance of play and experimentation in generating new ideas and innovative thinking.
- Usefulness: It emphasizes that taking risks and testing new concepts can stimulate creativity and lead to innovation.





Module 2: Prompts for Creative Thinking

2. Unlocking Imagination and Innovation

Top 10 Prompts for Unlocking Imagination and Innovation:

5. Inspiring a sense of wonder to fuel creative thinking in the workplace.

- This prompt suggests ways to bring a sense of curiosity and awe to the workplace to inspire creative exploration.
- Usefulness: It encourages leaders to cultivate an environment where wonder and curiosity drive creative thinking.

6. Can education systems enhance or inhibit imagination and innovation?

- This prompt invites discussion on whether traditional education systems foster or limit creative thinking and innovation.
- Usefulness: It can lead to conversations about how education impacts creativity and innovation in the real world.





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Top 10 Prompts for Unlocking Imagination and Innovation:

7. How embracing failure can foster a culture of innovation through imagination.

- This prompt explores how learning from failure and treating it as an opportunity can enhance innovation and encourage creativity.
- Usefulness: It helps organizations understand that failure is not something to avoid, but a learning experience that fosters innovation.

8. Integrating technology to amplify creative thinking and innovation.

- This prompt looks at how technology can enhance and support creative processes and innovation.
- Usefulness: It guides organizations to leverage new technologies that can facilitate idea generation and problem-solving.



Module 2: Prompts for Creative Thinking

2. Unlocking Imagination and Innovation



Top 10 Prompts for Unlocking Imagination and Innovation:

9. The importance of interdisciplinary collaboration in unlocking innovation.

- This prompt highlights the value of bringing together people from different disciplines to create innovative solutions.
- Usefulness: It encourages collaboration between teams with diverse backgrounds, leading to new perspectives and ideas.

10. The role of leadership in fostering a culture of imagination and innovation.

- This prompt explores how leaders can play a vital role in encouraging creativity and establishing an innovative culture.
- Usefulness: It shows that leadership plays a crucial role in creating an environment where innovation thrives





Outline

Module 2: Prompt Engineering Techniques for ChatGPT

Ajantha Devi Vairamani and Anand Nayyar, Prompt Engineering: Empowering Communication, 1st Edition, CRC Press, Taylor & Francis Group

1. Introduction to Prompt Engineering

1. Overview of Prompt Engineering
2. The Evolution of Prompt Engineering
3. Types of Prompts
4. How Does Prompt Engineering Work?
5. The Role of Prompt Engineering in Communication
6. The Advantages of Prompt Engineering
7. The Future of Large Language Model (LLM) Communication

3. Prompt Engineering Techniques for ChatGPT

1. Introduction to Prompt Engineering Techniques
2. Instructions Prompt Technique
3. Zero, One, and Few Shot Prompting
4. Self-Consistency Prompt

4. Prompts for Creative Thinking

1. Introduction
2. Unlocking Imagination and Innovation

5. Prompts for Effective Writing

1. Introduction
2. Igniting the Writing Process with Prompts





Module 2: Prompts for Effective Writing

Introduction

- A prompt for effective writing is a specific instruction, question, or idea that helps guide the writer in generating creative, focused, and coherent content.
- Prompts can serve as a starting point when you're unsure how to begin writing or need inspiration.
- They encourage you to explore different writing styles, overcome writer's block, and tackle a wide range of topics.
- **Types of Writing Prompts:**
 - **Creative Writing Prompts:** These prompts encourage imagination and creativity. They're perfect for writers working on fiction, poetry, or storytelling.
 - **Descriptive Writing Prompts:** These focus on developing skills to describe people, places, or objects in detail.
 - **Problem-Solving Writing Prompts:** These help you tackle challenges or work through critical thinking in your writing.
 - **Reflective Writing Prompts:** These encourage you to explore your thoughts, experiences, and feelings.
 - **Persuasive Writing Prompts:** These help you practice convincing readers of your viewpoint on a particular issue.





Module 2: Prompts for Effective Writing

Igniting the Writing Process with Prompts

"Igniting the Writing Process with Prompts" is a helpful guide designed to kickstart your writing journey. It provides creative prompts and practical strategies to help writers of all levels overcome obstacles like writer's block and improve their writing skills.

1. Encourages Creativity

- Prompts inspire new ideas and spark imagination for writing. They give you a starting point when you don't know where to begin.
- Example:
 - Prompt: "Write about a character who discovers a hidden door in their house."
 - This prompt gets you thinking about mystery and adventure, helping you start a story even when you're stuck.





Module 2: Prompts for Effective Writing

Igniting the Writing Process with Prompts

2. Overcomes Writer's Block

- If you're struggling to write, prompts help you break through writer's block by giving you a clear direction for your writing.
- **Example:**
 - **Prompt:** "Describe a place where you feel most at peace."
 - This prompt helps you focus on writing a peaceful scene, even if you feel stuck with ideas.





Module 2: Prompts for Effective Writing

Igniting the Writing Process with Prompts

3. Refines Storytelling Skills

- Prompts help you develop storytelling skills by encouraging you to think about different characters, settings, and conflicts.
- **Example:**
 - **Prompt:** "Write a dialogue between two people who have just met for the first time."
 - This prompt helps you focus on creating characters and conversation, improving your dialogue-writing skills.





Module 2: Prompts for Effective Writing

Igniting the Writing Process with Prompts

4. Enhances Expression

- Prompts encourage you to express yourself in new ways, whether you're writing fiction, essays, or poetry.
- **Example:**
 - **Prompt:** "Write a poem about a rainy day."
 - This prompt helps you explore descriptive language and develop your creative expression.





Module 2: Prompts for Effective Writing

Igniting the Writing Process with Prompts

5. Provides Clear Pathways for Writing

- Prompts act as guides that lead you through the writing process, making it easier to organize thoughts and ideas.
- **Example:**
 - **Prompt:** "Write an essay arguing why online education is the future."
 - This helps you structure your thoughts, guiding you to create a clear argument for the essay.





Module 2: Prompts for Effective Writing

Igniting the Writing Process with Prompts

6. Builds Confidence

- By using prompts, writers gain confidence because they know exactly where to start and can practice regularly.
- **Example:**
 - **Prompt:** "Write a letter to your future self."
 - Writing something personal like this can make you feel more comfortable with expressing your thoughts and ideas.

Why These Prompts Are Helpful:

- **Stimulate Creativity:** Help you think of new ideas and ways to approach writing.
- **Improve Writing:** Develop better storytelling, descriptive writing, and expression.
- **Build Confidence:** Encourage regular practice and creativity, making writing feel easier.





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Thank You

Module 2 - Completed