

# AI Chat Prompting for the Home User

*This presentation outlines the **essentials of AI chat prompting** for home users, providing a foundation for anyone looking to enhance their interaction with AI chatbots for personal use.*

FC Computer & Tech Club  
March 18, 2024



Link to YouTube "Generative AI" video:  
<https://www.youtube.com/watch?v=2IK3DFHRFfw>



# Generative AI in a Nutshell

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Jan 2024

How to curate and horizon in the Age of AI

## Prompt Engineering/Design

**Bad prompt:** "Write an app for a website"

**Good prompt:** "Write an app for a website that does X, Y, Z"

**Iterate!** Bad prompt → updated prompt → Good prompt → updated prompt → Good prompt

**Side effect:** Better communication skills overall. Study, Practice, Learn.

## Autonomous Agents

AI agents that can act on their own.

## Using vs Building AI-powered products

Product choice, model choice → Your Product → Model (GPT, Claude, etc.)

## The role of Humans

Is human role X still needed? (doctor, teacher, lawyer, etc.)

Human + AI = ❤️

## Terminology

AI: Analytical, Logical, Computer, etc.  
Generative AI: LLM, Large Language Model, Chat GPT

## Emergent Capabilities

Small model: John, Get, "am"  
Large model: Roleplay, Poetry, Code, Story, etc.

## The Age of AI

Fast Revolution vs Slow Revolution

## Mindset

Denial: "AI can't do my job"  
Positive: "I will be insanely productive!"  
Panic: "AI is going to steal my job!"

## How it works

Neural Network: Input (numbers) → [L, L, L, L] → [E, L, L, L] → Output (Text, Images, Audio, Video)

## Models, models everywhere

Speed, Capability, Cost, Downloadable, Open Source vs Easy to use, Specialized, Integrated

## Model Types

Text → Text: "typical" → "purple" (or "cute", "furry", etc.)  
Text → Image: "Elegant sitting in the woods" → [Image]  
Image → Image: "Ugly cat" → [Image]  
Image → Text: "Fusion of a human and a cat, seated in an armchair"  
Text → Audio: "Punk biking in a city restaurant" → [Audio]  
Text → Video: "Death Valley surfing" → [Video]

## Multimodal Models

Whether-subject

## Taking AI for a walk

Timeline of AI: Fire, Agriculture, Printing press, Steam power, Telegraph

# OpenAI: ChatGPT



How can I help you today?

**Design a database schema**  
for an online merch store

**Create a personal webpage for me**  
after asking me three questions

**Create a content calendar**  
for a TikTok account

**Explain why popcorn pops**  
to a kid who loves watching it in the microwave

Message ChatGPT...



# Microsoft: Copilot

**Copilot**  
Your everyday AI companion

Start a knock-knock joke


Give me a riddle that makes me laugh



Do you think a bear or a lion would win in a fight?

Copilot uses AI. Check for mistakes. [Terms](#) | [Privacy](#) | [FAQs](#) [Get Copilot Pro](#)

Choose a conversation style

More Creative **More Balanced** More Precise

[New topic](#) Ask me anything... 

 0/2000 

# Google: Gemini

Hello, Howard

How can I help you today?

Plan a low-carb meal  
with what's available in  
my fridge



Brainstorm team  
bonding activities for  
our work retreat



Suggest videos to  
quickly solve a  
problem



Help me craft an OOO  
message based on a  
few details



Your conversations are processed by human reviewers to improve the technologies powering Gemini Apps. Don't enter anything you wouldn't want reviewed or used.

[How it works](#) [Dismiss](#)


Enter a prompt here



# ANTHROPIC: Claude



## Good evening, Howard

What can I help you with?  [Start Chat](#) 

New in Claude

### Understand and work with images



Recommend style improvements



Understand objects and how they're used



Extract text from images

# Perplexity AI: Perplexity

The image shows a screenshot of the Perplexity AI website. On the left is a sidebar with the Perplexity logo, a 'New Thread' button with 'Ctrl I' shortcut, and navigation links for 'Home', 'Discover', 'Library', and 'Sign in'. A 'Sign Up' button is at the bottom of the sidebar. The main content area features the heading 'Where knowledge begins', a large green input box with the placeholder 'Ask anything...', and buttons for 'Focus' and 'Attach'. A 'Pro' toggle is on the right. Below the input box are four search suggestions: 'Try searching', 'How high can a kangaroo jump?', 'Why do whales breach?', 'What's the history of Halloween?', and 'The greatest Super Bowl halftime show'.

perplexity

New Thread **Ctrl I**

Q Home

🔍 Discover

📖 Library

🔑 Sign in

**Sign Up**

## Where knowledge begins

Ask anything...

☰ Focus ⊕ Attach

● Pro →

→ Try searching 🦘 How high can a kangaroo jump? 🐳 Why do whales breach?

👻 What's the history of Halloween? 🏈 The greatest Super Bowl halftime show

# Introduction

- What is AI Chat Prompting?
- A method of interacting with AI systems to generate specific responses or actions.
- Involves crafting questions or commands in a way that guides the AI to understand and fulfill the user's intent.



# Importance of Effective Prompting

- Maximizes AI Utility
  - Ensures AI tools like ChatGPT, Google's Gemini, Microsoft's Copilot AI chatbot are used to their full potential.
- Enhances User Experience
  - Leads to more accurate, relevant, and useful responses from AI.
- Facilitates Creative and Productive Use
  - Encourages exploration of AI's capabilities in personal projects, learning, and daily tasks.

# Prompting Tips

- 1. Be Specific
  - Example: Instead of "Tell me about dogs," use "Provide a summary of the history and types of domestic dogs."
- 2. Use Clear and Concise Language
  - Example: "Translate 'Hello, how are you?' into French."
- 3. Specify the Output Format
  - Example: "List the top four longest rivers in the world in bullet points."

# Prompting Tips *(Continued)*

- 4. Include Context When Necessary
  - Example: "As a high school teacher, how can I explain quantum physics simply?"
- 5. Iterate and Refine
  - Example: If the first response isn't satisfactory, refine the prompt with more details or clarity.

# Examples of Effective Prompting

- For Learning
  - Prompt: "Explain the concept of machine learning to a 10-year-old."
- For Daily Tasks
  - Prompt: "Create a weekly meal plan for a family of four, considering a vegetarian diet."
- For Entertainment
  - Prompt: "Write a short story about a time-traveling cat."

# Challenges and Solutions

- Understanding AI Limitations
  - AI models have knowledge cutoffs and may not have the latest information.
- Avoiding Misinterpretation
  - Be as clear as possible to avoid ambiguous responses.
- Dealing with AI Hallucinations
  - Fact-check critical information provided by AI.

# Common mistakes to avoid when writing AI prompts

When writing AI prompts, avoiding common mistakes can significantly improve the quality and relevance of the responses you receive from AI models like ChatGPT. Here are some key mistakes to avoid, informed by insights from various sources:

# Common mistakes to avoid when writing AI prompts *(continued)*

- 1. Being Vague or Ambiguous:** AI models perform best with clear and specific prompts. Vague or ambiguous prompts can lead to irrelevant or broad responses
- 2. Overloading with Details:** While specificity is crucial, providing too much unnecessary detail can confuse the AI or lead it to focus on the wrong aspects of the prompt
- 3. Ignoring Context:** Failing to provide sufficient context can result in responses that don't align with your actual needs or intentions. Context helps the AI understand the framework within which to generate its response

# Common mistakes to avoid when writing AI prompts *(continued)*

- 4. Overlooking the AI's Capabilities and Limitations:** Expecting the AI to understand highly specialized knowledge without guidance or to perform tasks beyond its training can lead to frustration. It's important to align your prompts with the AI's known capabilities
- 5. Failing to Specify the Desired Output Format:** If you have a specific format in mind for the AI's response (e.g., a list, a detailed explanation, a summary), it's important to state this explicitly in your prompt



# Common mistakes to avoid when writing AI prompts *(continued)*

- 6. Neglecting to Iterate and Refine:** The first response from an AI might not always meet your expectations. Iteration, where you refine and adjust your prompts based on previous responses, is key to achieving better outcomes
- 7. Using Confusing or Ambiguous Language:** Clear and straightforward language helps the AI understand your prompt better. Avoid using jargon, idioms, or ambiguous phrases that could be misinterpreted

# Common mistakes to avoid when writing AI prompts *(continued)*

- 8. Not Leveraging Examples:** Including examples in your prompt can guide the AI more effectively, especially when you're seeking responses in a specific format or style
- 9. Assuming the AI Has Up-to-Date Knowledge:** AI models are trained on data available up to a certain point in time. Assuming the AI has knowledge of very recent events or trends can lead to inaccuracies

*By avoiding these common mistakes, you can craft more effective AI prompts that lead to more accurate, relevant, and useful responses.*

# Conclusion

- Effective AI chat prompting transforms AI chatbots from simple tools to powerful assistants in learning, creativity, and daily life management.
- Practice and experimentation are key to mastering the art of prompting, unlocking the full potential of AI for home users.