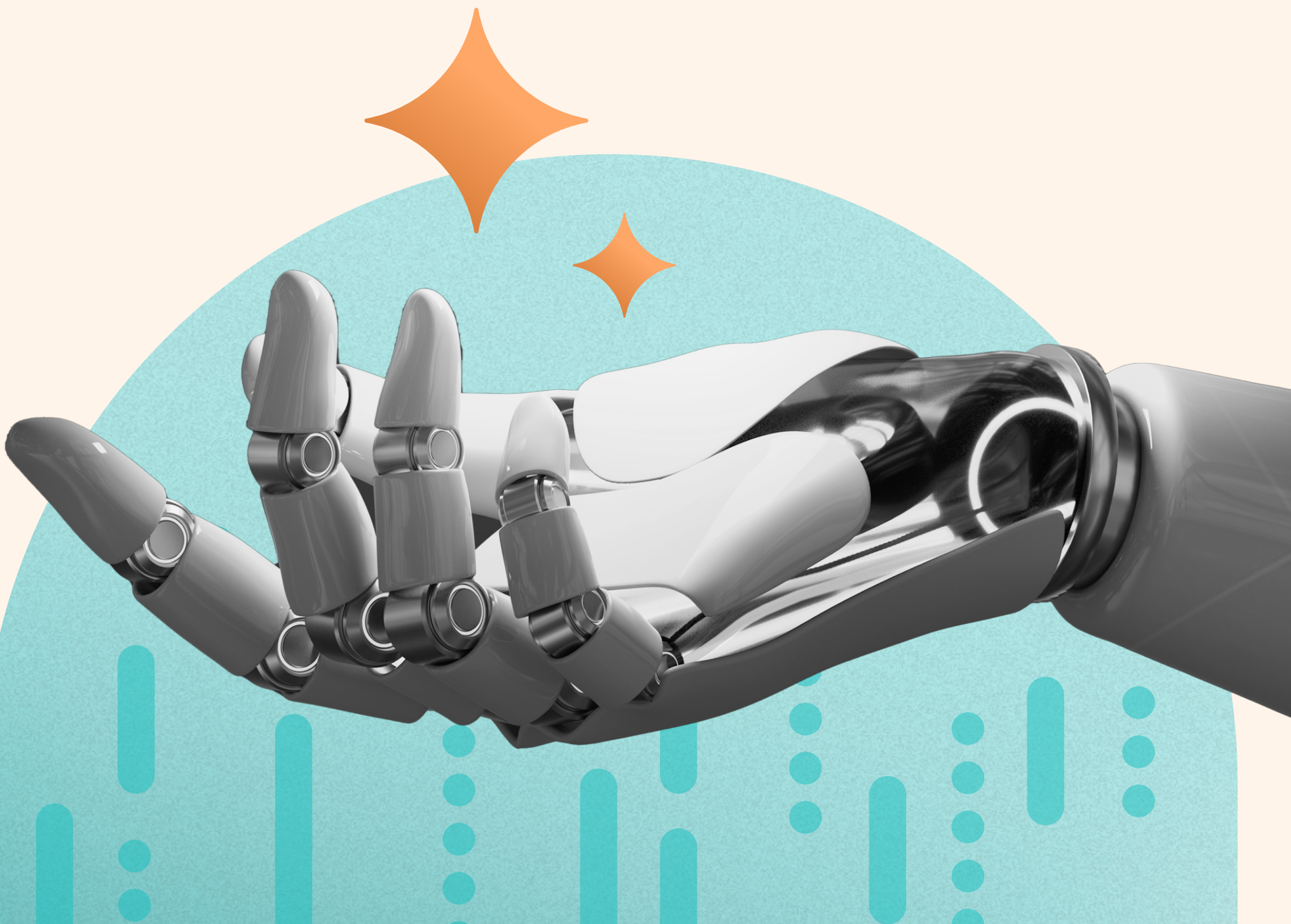


HubSpot

AI Prompt Engineering QuickStart Guide

with Tina Huang





Why This Matters

AI models like ChatGPT are incredibly powerful, but the quality of their output depends largely on the quality of your prompt. Just like a good teacher needs clear instructions to help students succeed, AI needs well-structured prompts to deliver its best work. This guide will help you master prompt engineering to get consistently great results.

Framework Breakdown



1. Set the Stage (Context)



Tell the AI who it's talking to



Define the expertise level needed



Specify any constraints or limitations

Bad Prompt



"Analyze this dataset"



Good Prompt



"Analyze sales trends in this CSV"



Excellent Prompt



"You're a data scientist analyzing our quarterly sales data. Identify key revenue patterns, create visualizations, and highlight anomalies. Focus on customer segments and regional variations."

2. Define the Task (Action)



State exactly what you want



Include specific requirements



Break complex tasks into steps

Bad Prompt



"Help me learn Python"



Good Prompt



"Teach me Python data structures"



Excellent Prompt



"You're a senior Python instructor. Create a step-by-step learning plan for data structures, including:

- Practice exercises for lists and dictionaries
- Real-world examples using pandas
- Common pitfalls to avoid"

3. Specify the Output (Format)



Define the structure



Set the length



Clarify the tone and style

Bad Prompt



"Make a content plan"



Good Prompt



"Create a formatted content plan with specific sections"



Excellent Prompt



"Present the plan in a table format with columns for platform, content type, and key message. Include engagement hooks for each piece. Keep individual posts under 200 characters."

Power Tips for Better Results



Tip 1

Use Role Assignment

When you assign a specific role to AI, you tap into specialized knowledge and perspectives. Think of it like hiring an expert consultant – the more specific you are about their expertise and experience, the more tailored their advice will be. This technique is particularly powerful when you need industry-specific insights or want to ensure the output matches a certain professional standard.

Bad Prompt



"Debug this code"



Good Prompt



"Debug this Python machine learning model"



Excellent Prompt



"As a senior ML engineer specializing in neural networks:

- Review this PyTorch implementation
- Identify performance bottlenecks
- Suggest optimization strategies for training speed"

Tip 2

Add Specific Constraints

Constraints aren't limitations – they're clarity boosters. By setting clear parameters, you help the AI understand exactly what success looks like. This is like giving a designer exact specifications instead of asking them to "make it look good." The more specific your constraints, the more targeted and useful the output will be.

Bad Prompt



"Analyze this dataset"



Good Prompt



"Analyze customer churn patterns"



Excellent Prompt



"Analyze our customer churn dataset with these parameters:

- Focus on users inactive > 30 days
- Compare behavioral patterns pre-churn
- Include statistical significance tests
- Output visualizations in seaborn"

Tip 3

Request Examples and Variations

Getting multiple versions of the same content helps you explore different approaches and find the perfect fit. This technique is particularly valuable when you're not sure which style will work best, or when you need to compare different approaches. It's like having a creative team pitch multiple concepts – you can mix and match the best elements from each version.

Bad Prompt

→

"How do I implement this?"

↓

Good Prompt

→

"Show different ways to implement this algorithm"

↓

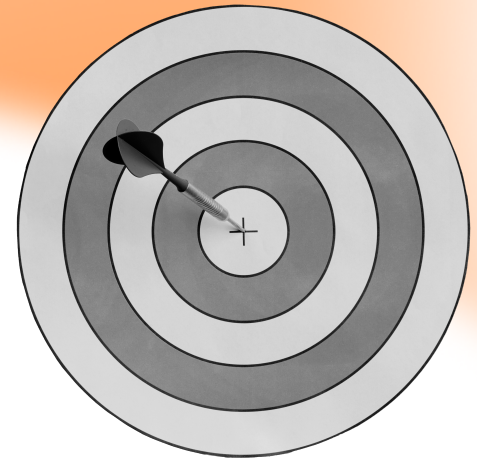
Excellent Prompt

→

"Provide 2 implementations of this sorting algorithm:

- Optimized for memory efficiency
- Optimized for processing speed Include time complexity analysis for each"

Troubleshooting Guide



If your AI response isn't quite right:

1

Add more specific context about your audience and goals

2

Break your request into smaller, clearer steps

3

Include examples of what good looks like

4

Ask for variations and iterate on the best one



Additional Resources

Breeze AI

Experience the transformative power of HubSpot's AI that powers the entire customer platform. Breeze AI delivers ease, speed, and unification across your business, giving customer-facing teams all the AI tools needed to boost productivity, scale growth, and unlock actionable insights.



Tina Huang

Learn more from data scientist Tina Huang. With over 680,000 YouTube subscribers, she decodes complex AI concepts into practical, efficient strategies that deliver real results. Her step-by-step tutorials and innovative approaches help professionals maximize AI's potential while minimizing effort. Discover how to transform your AI interactions from basic to brilliant.