

### **Mastering Al Prompting** Tips, Tricks, and Techniques

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Data & Al Azure



Infrastructure Azure



Digital & App Innovation Azure

## **Initial Thoughts**

What is prompting?

Can I break anything?

Do I always get the same answer to the same question?

Is this for business or for personal use?

Are we going to discuss legal or ethical uses of Al?

Finally: MAGIC TIMES!



### **Common AI Tools**

```
ChatGPT (and DALL-E)

Gemini

Microsoft Copilot

Grok

Meta Al

Perplexity

Claude
```

(Dozens if not hundreds or thousands of others)



### **ChatGPT Overview**

#### **Pricing:**

Free Tier
Plus = \$20/User/Month
Pro = \$200/User Month

Access:

Browser
Desktop
Mobile (including full speech/video interactions)

Access to various OpenAl Models, DALL-E (Images), Sora (Video)



### Microsoft Copilot Overview

## "Copilot is the UI for AI"

Microsoft 365 Copilot Chat Free to M365 Business and Enterprise Customers

Microsoft 365 Copilot
\$30/User/month if billed yearly\*
Unlocks AI in Word, Excel, PowerPoint, Outlook, Teams + Copilot Studio and enterprisegrade data protection

\*Prerequisites apply



### Al on the Go

ChatGPT\*
Grok
Gemini
M365 Copilot

Meta Sunglasses

\*voice/video mode is great







## Terminology and Concepts

LLM Generative Models Context Grounding History/Memory **Autonomous/Agents Training External Tools** System/User/Assistant/Tool Copilot **Model Context Protocol** Deep Research/Reasoning Orchestration Hallucination

# Al Inputs/Outputs

Text

**Images** 

Video

Audio

Data

Code/Scripts



## Context and Actions (Tools)

#### **Access to Data**

-Files

-Emails

-Databases

### **Access to Tools/Actions**

-Send Emails

-Schedule Meetings

-Send Notifications

-Write Data

-Execute Code/Call APIs



# **Prompting Best Practices**

Describe the role you are asking the Al to play in your conversation or interaction

The more descriptive you are the better the results

Treat the entire chat as a discussion or working session and keep asking for refinements

Review results, ask for questions, ask to display sources or work product

Iterate over Al content, human tweaks, Al adjustments, etc

Order matters in how information is presented, and questions are asked

Be specific on the format of the output you want

Share images, files, and other documents as part of your conversation

Double down on what you want. If you don't like the response, give feedback and ask for its try

Try different tools and prompts

Give the tool an "Out"

Ask the tool to show it's work or cite its sources



# Prompting Best Practices (2)

Task - Context - Reference - Evaluate - Iterate

Treat Al like talking to a human
Be specific
Use short sentences
Give examples

"How can I best put together a prompt to achieve this output?"

"How can I improve the above prompt?"

"What information do you need to be more specific?"

Heck...use AI to learn in general



## Common Prompts

Tell me what you know about [X]

You are a...

Act as a...

Try again but...

Show your work.

Explain why this answer was given

Provide a response as if I was a [level of education]

Cite your sources

Explain your thought process

Give me X options to choose from...

Return your results in [x] format

I'm going camping this weekend. I've packed a tent, sleeping bag, flashlight, bug spray and \_\_\_\_



# Additional Thoughts

Al doesn't have to be all or nothing

Some tools and models have access to the internet and some do not

It's not perfect and at times it's frustrating

Be creative and think outside the box on prompts and use cases

Share what you know with your friends and peers and get ideas from them

Use Al appropriately like any other tool or technology

Copilot Autonomous Agents



# Crazy Personal Examples

Christmas gift ideas Understanding game rules and strategy Scoring board games Generating art for custom RPG games and sessions Vacation planning Stripping text out of images (especially from my phone) Band set list organization and optimization Generate recipes Learn a bit of history Generate outlines of chalk images to learn chalk drawing Ask for instructions or advice Translate text or audio to or from other languages Tell stories Write a story based on the vibe of a piece of music Find content in a video or audio file

# Crazy Work Examples

Generate entire applications or features in any language

Code reviews

**Customer Research** 

**Application documentation** 

**Document analysis** 

Meeting summarization and note taking

Write content

Plans (Business, Marketing, etc)

Market Research and Analysis

Automate key business processes with Al logic

Generating sample data

Understanding scripts and code

Custom application integration to provide integrated documentation and functionality Generating initial UI screens for application from scratchpad prototypes

Summarize books or complex documents

Customer support and knowledge management



# **Deep Thoughts**

Share Prompt Ideas
Share Tips/Tricks
Understand Context
The more you share your own company info, context, data, tooling the more valuable AI is to you
Try, Try, Again

#### **Advanced Concepts:**

Training Al models with your data
Integrating Al into your applications
Using Al to schedule and orchestrate long running processes



Prompt Engineering Guide

**Prompt Engineering Techniques** 

**Copilot Prompt Gallery** 

Microsoft Learn: Creating Effective Prompts

OpenAl Cookbook

<u>Awesome ChatGPT Prompts</u>

Art of ChatGPT Prompting (eBook)

What is the best way to think about prompt engineering





### **Final Thoughts and Discussion**

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Next Webinar: July 17, 2025 12pm CST

Integrating Internal Systems with AI Agents: Real-World Applications of MCP and Microsoft Copilot











