



AI for Everyone

How Everyday People Can Benefit

Your Session Leader



Reginald Cobb

Senior Program Manager, Microsoft

30 year technology professional with background in delivering technology-driven products and operational solutions across various companies and industries

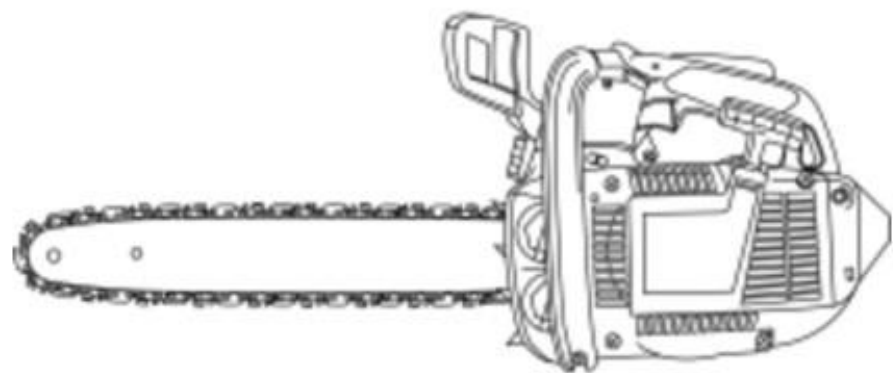
Holds an MBA in Management from the University of Texas at Austin and a Bachelor of Science in Systems Science from the University of West Florida.

Certifications: ITIL 4 Foundation Certification, Professional Scrum Master, and is a PMI-certified Project Management Professional

Reggie is married and has two children. His son is a software developer at Google, while his daughter is a graduating senior who will be attending Texas A&M University

Creator and publisher of Puzzle books at Braintease Books –
brainteasebooks.com

I AM NOT AN
EXPERT



BUT I HAVE WATCHED
LOTS AND LOTS OF
YOUTUBE VIDEOS

Agenda



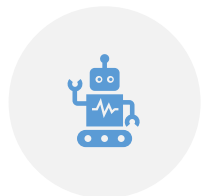
What is AI?



What is
Generative AI?



Prompting



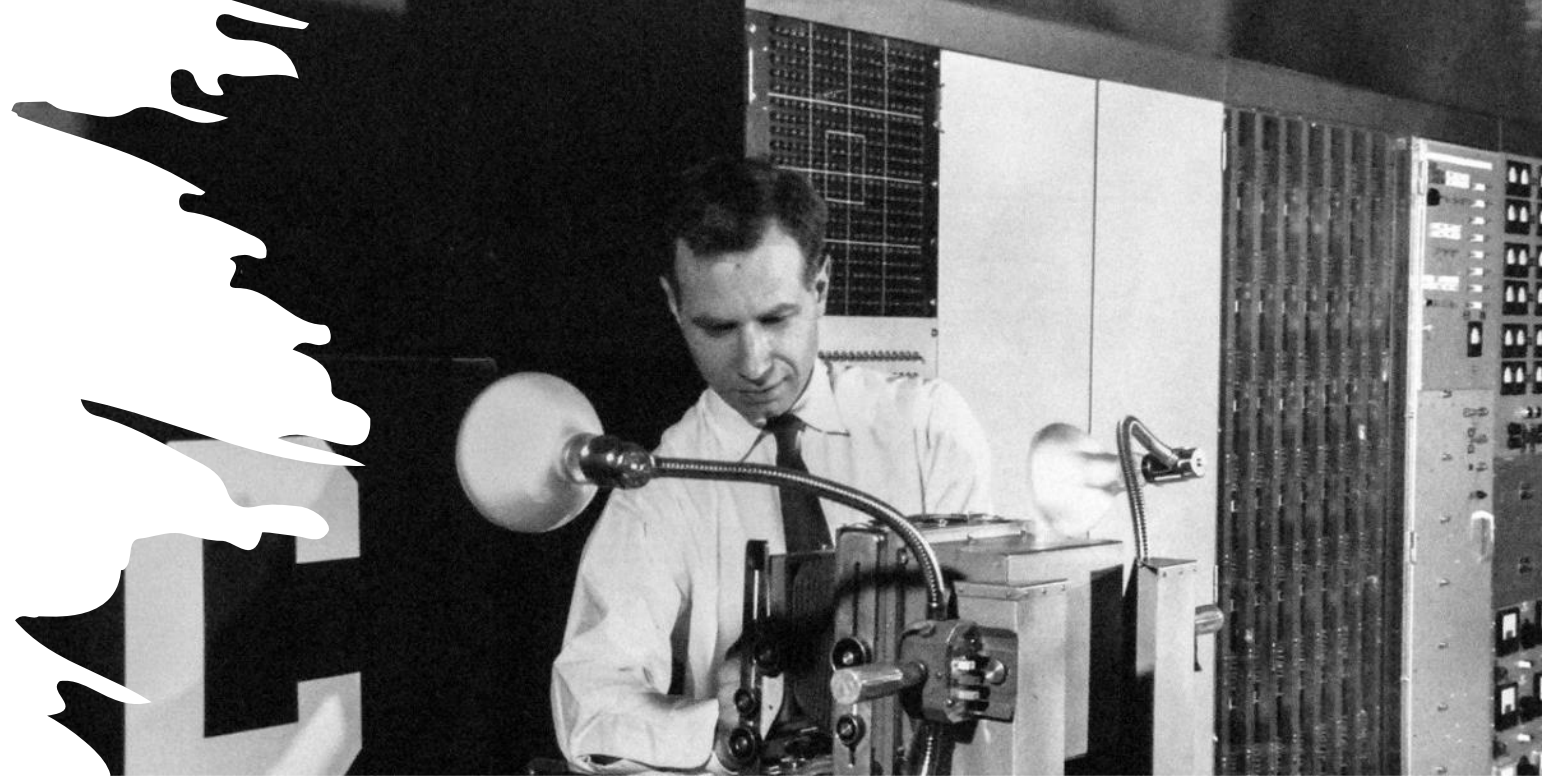
How can AI Help?



Resources

What is AI?

- Artificial intelligence (AI) refers to technology that enables computers and machines to simulate human intelligence and problem-solving capabilities
- AI allows these systems to perform tasks that would typically require human intervention or intelligence
- AI has been around since the 1950's



In July 1958, the U.S. Office of Naval Research unveiled a remarkable invention, a machine capable of learning by a Trial and Error method. It was called Perceptron

|

What is Generative AI?

- Generative AI is artificial intelligence (AI) that can create original content—such as text, images, video, audio or software code—in response to a user’s prompt or request.
- Generative AI can be thought of as a machine-learning model that is trained to create new data, rather than making a prediction about a specific dataset





Prompting in Generative AI

What is Prompting?

Prompting is the process of giving specific instructions or input to a generative AI model to produce desired outputs.

What is Purpose of Prompting?

To guide the AI model towards generating text, images, or other forms of content that meet the user's needs.

Types of Prompts

Text Prompts: Natural language instructions or questions.

Example: "Write a story about a dragon."

Structured Prompts: Pre-defined formats or templates.

Example: "Translate the following sentence: 'Hello, how are you?'"

Conditional Prompts: Inputs that condition the output based on certain criteria.

Example: "Generate an image of a futuristic city at night."

Examples of Effective Prompting

For Text Generation:

Ineffective: "Tell me something."

Effective: "Write a motivational quote about perseverance."

For Image Generation:

Ineffective: "Draw a picture."

Effective: "Generate an image of a cozy cabin in the mountains during winter."

Best Practices

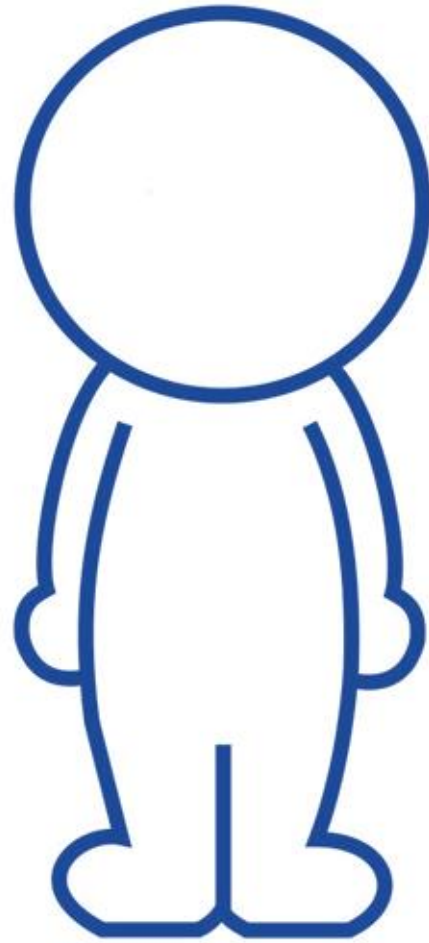
Be Specific: Clearly define what you want the AI to generate.

Use Constraints: Set boundaries or criteria to guide the output.

Iterate and Refine: Continuously improve your prompts based on the generated outputs.

Contextual Prompts: Provide background information or context to help the AI understand the request better.

How can AI help me?





- Rewrite and edit the following text, "text here"
- I want you to edit this email. Keep the tone informal, but make it more persuasive, so that it's impactful
- *I want you to act as a technical writer. You will need to research the topic I provide and formulate a 3-sentence summary statement of the topic. My topic is "Everyday uses for AI".*



You

I want you to act as a technical writer. You will need to research the topic I provide and formulate a 3-sentence summary statement of the topic. My topic is "Everyday uses for AI"



ChatGPT

Artificial Intelligence (AI) enhances daily life through personalized virtual assistants like Siri and Alexa, which help manage tasks and control smart home devices. AI also powers recommendation systems on platforms like Netflix and Amazon, offering tailored suggestions based on user preferences. Additionally, AI is integral in health and fitness through wearable devices that monitor vital signs and apps that provide medical advice and appointment scheduling.



Teacher



- I am interested in mastering {Subject} with a focus on {Topic}. I would like to create a {Number of Weeks/Months} study plan that will help me achieve this goal.
- *I am interested in mastering **AI** with a focus on topics relevant to **data science and machine learning**. I would like to create a **1-week** study plan that will help me achieve this goal.*

You
I am interested in mastering AI with a focus on topics relevant to data science and machine learning. I would like to create a 1-week study plan that will help me achieve this goal.

ChatGPT
Here's a 1-week study plan to help you master AI with a focus on data science and machine learning:

Day 1: Introduction to AI, Data Science, and Machine Learning

- **Morning:**
 - **Read:** Overview of AI, data science, and machine learning concepts.
 - Recommended materials: "Artificial Intelligence: A Modern Approach" by Stuart Russell and Peter Norvig (Chapters 1-2)
 - **Watch:** Introductory lectures or tutorials on YouTube or online courses like Coursera's "Introduction to AI".
- **Afternoon:**
 - **Practical:** Set up your development environment (Python, Jupyter Notebook, essential libraries like NumPy, pandas, scikit-learn).
 - **Exercise:** Simple exercises in Python to familiarize yourself with the libraries.

Day 2: Data Handling and Preprocessing

- **Morning:**
 - **Read:** Basics of data handling and preprocessing in data science.
 - Recommended materials: "Python for Data Analysis" by Wes McKinney (Chapters 1-3)
 - **Watch:** Tutorials on data preprocessing techniques.
- **Afternoon:**
 - **Practical:** Hands-on practice with data cleaning and preprocessing.
 - **Exercise:** Work with a sample dataset (e.g., cleaning, handling missing values, normalization).

Day 3: Exploratory Data Analysis (EDA)

- **Morning:**
 - **Read:** Techniques and importance of exploratory data analysis.
 - Recommended materials: Articles and tutorials on EDA (Kaggle or Towards Data Science).

Day 4: Machine Learning Fundamentals

- **Morning:**
 - **Read:** Fundamentals of machine learning concepts and types of algorithms.
 - Recommended materials: "Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow" by Aurélien Géron (Chapters 1-2)
- **Afternoon:**
 - **Watch:** Tutorial videos on supervised and unsupervised learning.

Day 5: Hands-On Machine Learning

- **Morning:**
 - **Practical:** Implement basic machine learning algorithms (e.g., linear regression, k-means clustering) using scikit-learn to build and evaluate these models on a dataset.
- **Afternoon:**
 - **Read:** Machine Learning Techniques
 - Topics in machine learning, including model evaluation and hyperparameter tuning.
 - Recommended materials: "Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow" (Chapters 3-4)

Day 6: Deep Learning Basics

- **Morning:**
 - **Read:** Introduction to neural networks and deep learning.
 - Recommended materials: "Deep Learning" by Ian Goodfellow, Yoshua Bengio, and Aaron Courville (Chapters 1-3)
- **Afternoon:**
 - **Practical:** Build and train a simple neural network using TensorFlow or Keras.
 - **Exercise:** Use a dataset (e.g., MNIST) to practice building a neural network model.

Project and Review

- **Morning:**
 - **Practical:** Start a small capstone project that incorporates data preprocessing, EDA, and machine learning.
- **Afternoon:**
 - **Project Idea:** Predict house prices using a dataset like the Ames Housing dataset.

Conclusion

Throughout the week's learnings, revisit complex topics, and refine your capstone project. Document your project, including your methodology, code, and insights.

Resources

- "Machine Learning" by Andrew Ng
- "Data Science Essentials" by Microsoft
- "Deep Learning" Nanodegree


Participate in competitions and use the kernels for learning. Explore repositories related to data science and machine learning projects.

This is a structured approach to mastering AI with a focus on data science and machine learning. Adjust the plan based on your prior knowledge and learning pace.




Fitness
Advisor

- What are some stretches I can try for a sore knee? I have foam rollers and resistance bands.
- I'd like to get stronger for swimming. Can you create a weightlifting routine for me?
- *What should I eat the night before a big swim?*

 You

What should I eat the night before a big swim?

 Copilot

The night before your swim, focus on fueling your body with the right nutrients for optimal energy and performance. Here are some key tips:

1. **Complex Carbohydrates:** Consume whole grains, peas, beans, and vegetables. These should make up around 50-60% of your diet ¹.
2. **Lean Proteins:** Include foods like lean meats, poultry, fish, and dairy products. These help repair and rebuild muscle tissue ².
3. **Healthy Fats:** Incorporate nuts and fruits for a wholesome array of nutrients.

Remember to stay hydrated and avoid fried or sugary fare. Stick to foods you know your body can easily digest.

Swim like a certified boss! 🏊‍♂️👏 ³.

Learn more [1](#) [openwaterhq.com](#) [2](#) [bestscubapro.com](#) [3](#) [yourswimlog.com](#) [+1 more](#)

Chef



- Give me some recipes for healthy meals before I go for a long swim?



You

Give me some recipes for healthy meals before I go for a long swim?



Copilot

Certainly! 🍴 Here are some nutritious meal ideas to fuel your swim:

1. Pre-Swim Meals:

- **Instant Oatmeal with Nut Butter:** A quick and energy-boosting choice. Pair it with whole grain toast or a waffle.
- **Scrambled Eggs or Tofu:** Rich in protein for muscle repair and development.
- **Chicken or Fish with Brown Rice or Pasta:** Balanced and satisfying.
- **Cottage Cheese with Fruit:** A protein-packed option.

2. Snacks (Before or After Swimming):

- **Hummus and Pita:** A tasty combo.
- **Tuna Salad and Crackers:** Portable and protein-rich.
- **Beef Jerky, String Cheese, or Goldfish:** Convenient and satisfying.
- **DIY Trail Mix:** Mix dry cereal, dried fruits, and nuts.
- **Dates with Nut Butter:** Natural sweetness and healthy fats.

Remember to stay hydrated and enjoy your swim! 🗨️ 👍 1 2 3 4 .

Learn more

1

[eatswimwin.com](#)

2

[eatswimwin.com](#)

3

[swimswam.com](#)

[+2 more](#)



- I have a machine learning final tomorrow, what topics should I be familiar with?
- *Solve this problem for (x): [$2x^2 - 5x + 3 = 0$]*

You
Solve this problem for (x): [$2x^2 - 5x + 3 = 0$]

Meta AI
A quadratic equation!

Let's factor it:

$$2x^2 - 5x + 3 = (2x - 1)(x - 3) = 0$$

This tells us that either $(2x - 1) = 0$ or $(x - 3) = 0$

Solving for x, we get:

$$2x - 1 = 0 \rightarrow 2x = 1 \rightarrow x = 1/2$$

$$x - 3 = 0 \rightarrow x = 3$$

Therefore, the solutions are:

$$x = 1/2 \text{ and } x = 3$$

Let me know if you'd like me to explain any step in more detail!



You
explain the solution

Meta AI
Let's break down the solution step by step:

Step 1: Factoring

We start with the quadratic equation: $2x^2 - 5x + 3 = 0$

We try to express the left-hand side as a product of two binomials. In this case, we can factor it as:

$$(2x - 1)(x - 3) = 0$$

This is called factoring, and it's a crucial step in solving quadratic equations.

Step 2: Setting each factor equal to 0

When we multiply two numbers together and get 0, at least one of them must be 0. So, we set each factor equal to 0 and solve for x:

$$2x - 1 = 0 \text{ (first factor)}$$

$$x - 3 = 0 \text{ (second factor)}$$

Step 3: Solving for x

Now, we solve each equation separately:

1. $2x - 1 = 0 \rightarrow$ add 1 to both sides $\rightarrow 2x = 1 \rightarrow$ divide both sides by 2 $\rightarrow x = 1/2$

2. $x - 3 = 0 \rightarrow$ add 3 to both sides $\rightarrow x = 3$

Step 4: Writing the final solutions

So, we have two solutions for x:

$$x = 1/2 \text{ and } x = 3$$

These are the values of x that make the original equation true.

Does this explanation help? Or would you like me to elaborate on any specific step?





- How do i say where is the train station in French?
- *Give me a 1-hour lesson plan to understand nouns in Spanish*

You
how do i say where is the train station in French?

Meta AI
To say "Where is the train station" in French, you can say:
"Où est la gare?"

Here's a breakdown of the sentence:

- "Où" means "where"
- "est" is the verb "to be" in the present tense, meaning "is"
- "la gare" means "the train station"

So, "Où est la gare?" literally means "Where is the train station?"

If you want to be more specific, you can also say:
"Où est la gare ferroviaire?"
This means "Where is the railway station?"

Or:
"Où est la gare SNCF?"
This means "Where is the SNCF train station?" (SNCF is the French national railway company)

Note: "Gare" is a feminine noun in French, so the article "la" is used instead of "le".

I hope that helps! Let me know if you have any other questions.

You
give me a 1-hour lesson plan to understand nouns in Spanish

Meta AI
Here is a 1-hour lesson plan to understand nouns in Spanish:

Time: 1 hour

Objectives:

- Understand the gender of nouns in Spanish (masculine/feminine)
- Learn the rules for noun pluralization
- Identify and use nouns correctly in sentences

Materials:

- Whiteboard and markers
- Handout with noun examples (see below)

Lesson Plan:

Minutes 1-5: Introduction and Gender

- Introduce the concept of gender in Spanish nouns
- Explain that nouns are either masculine (el) or feminine (la)
- Provide examples:
 - Masculine: el libro (book), el hombre (man)
 - Feminine: la mesa (table), la mujer (woman)

Minutes 6-15: Pluralization

- Explain the rules for pluralization:
 - Most nouns add -s or -es to form the plural
 - Some nouns have irregular plurals
- Provide examples:
 - Libro (book) -> Libros (books)
 - Mesa (table) -> Mesas (tables)

Minutes 16-25: Practice

- Distribute the handout with noun examples

and plural form of each noun
complete the exercise

es
rm of the noun (singular or plural, masculine or
The book is interesting.)
(The tables are pretty.)

uestions
ent
er and pluralization in Spanish nouns

me available, you can adjust the time allocated to

Questions?



[Link to this Presentation](https://1drv.ms/p/s!AiqMMe1teRdtgeDNeECIBX2YFgUDOWw)

<https://1drv.ms/p/s!AiqMMe1teRdtgeDNeECIBX2YFgUDOWw>

Tools and Resources



Index



Top Tools



Cheat Sheets



Resources



**AI Benefits for Small
Businesses**

The Reheat with Keith Lee



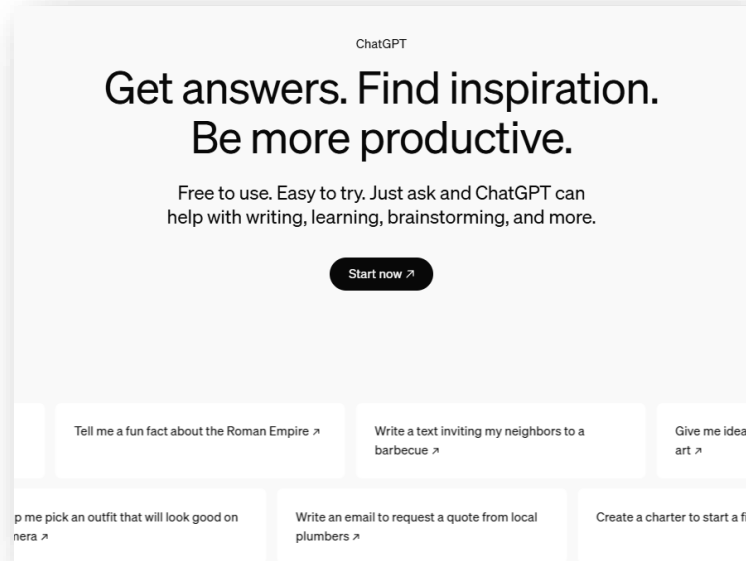
Learning AI



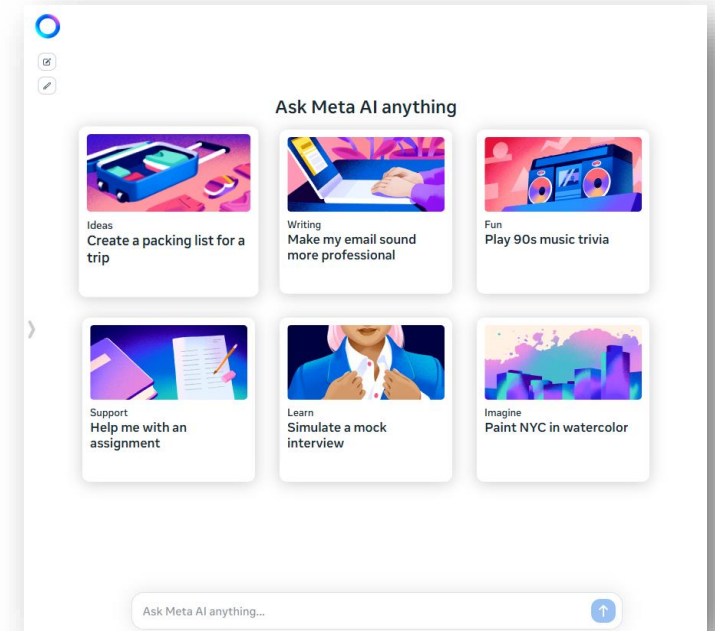
How to Contact Me...

Top Tools

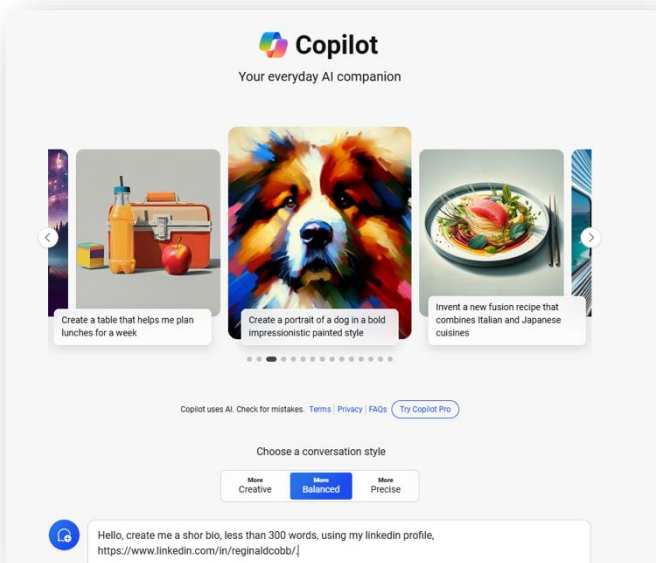
ChatGPT



Meta AI



Microsoft Copilot



Claude



7 Best ChatGPT Cheat Sheets

ChatGPT: Zero to Power User Cheat Sheet

KEY TERMS

OpenAI: parent company of ChatGPT
Generative AI: category of AI that can "produce" content like text/images vs. specific tasks like predicting things
AI models: think of these as big, big math equations
Large language models: very big math equations that are very good at predicting the next word
Prompt: messages you send to ChatGPT
Prompt engineering: the "science" of sending the exact right messages to ChatGPT to get the output you want

KEY USE CASES

- Summarizing long text, transcripts, articles, reports
- Brainstorming ideas, outlines, how concepts
- Synthesizing insights and takeaways from text
- Writing blog posts, articles, press releases, standard operating procedures, pretty much any type of text
- Coding scripts and small programs
- Extracting data and patterns from messy text
- Reformatting/validating from messy text to table/database

PROMPT FRAMEWORKS

Get better output by structuring your prompts:

- RTF (Role, Task, Format)**
- CIF (Context, Task, Format)**
- RACEEF (Role, Action, Steps, Context, Examples, Format)**

Two methods to prompting:

- Meagroprompt:** Write one big message that contains all of the above. E.g., ask for a full press release.
- Prompt chaining:** Break down the task into smaller steps. E.g., start by asking for a blog post idea, then an outline, then the content.

COMMANDS

Use different tones can make the AI adapt to various scenarios, enhancing its versatility.

PROFESSIONAL

Great for technical information, important updates where you may appreciate directness and clarity.

FRIENDLY

Helps users feel more comfortable and encourages engagement.

EMOTIONAL

Useful for creative projects, brainstorming, and generating ideas.

CONCISE

Useful for quick answers, summaries, and getting straight to the point.

DETAILED

Useful for in-depth explanations, tutorials, and providing comprehensive information.

ADAPTIVE

Useful for adjusting to different user needs and preferences.

PERSONALIZED

Useful for tailoring responses to individual users and their specific interests.

INTERACTIVE

Useful for creating engaging conversations and encouraging user participation.

HELPFUL

Useful for providing practical advice, solutions, and assistance.

EMPOWERING

Useful for inspiring users, providing encouragement, and promoting self-reliance.

EMPATHETIC

Useful for understanding and responding to users' emotions and needs.

PROACTIVE

Useful for anticipating user needs and offering suggestions or assistance before they ask.

ADAPTIVE

Useful for adjusting to different user needs and preferences.

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ChatGPT for Designers Cheat Sheet

Terminology

Prompt Structures

Commands

Professional

Friendly

Emotional

Concise

Detailed

Adaptive

Personalized

Interactive

Helpful

Empowering

Empathetic

Proactive

ChatGPT Cheat Sheet by Max Rascher

Best ChatGPT Prompts (Fr. Auto)

CLEANING DOWN TO PROMPT

REWRITING TECHNIQUES (ADVANCED)

RELEASING

Make ChatGPT Write Like You

Prompts for LinkedIn Use

MIDJOURNEY PROMPTS

AVOIDING PLAGIARISM with CHATGPT

FOLLOW ME!

MAX RASCHER

ChatGPT Mastery Cheat Sheet Beginner to Pro

KEY TERMS

KEY FEATURES

KEY USE CASES AND PROMPTS

TONES

FORMAT

Modes and Roles

10 BEST PLUGINS

ALTERNATIVE CHATBOTS

PROMPT GENERATION APPS

CREATED BY

The ChatGPT Cheat Sheet



Act as a [ROLE]

- Analyst
- Teacher
- Marketer
- Advertiser
- Mindset Coach
- Therapist
- Journalist
- Inventor
- Lawyer
- Ghostwriter
- Website Designer
- Best Selling Author
- Chief Financial Officer
- Expert Copywriter
- Prompt Engineer
- Accountant
- Project Manager
- Sports Coach
- Financial Analyst
- Full Stack Developer
- Linux Terminal
- "Position" Interviewer
- Excel Sheet
- Plagiarism Checker
- Relationship Coach
- Recruiter
- JavaScript Console

Create a [TASK]

- Headline
- Article
- Essay
- Book Outline
- Email Sequence
- Social Media Post
- Product Description
- Cover Letter
- Blog Post
- SEO Keywords
- Summary
- Video Script
- Recipe
- Sales Copy
- Analysis
- Ad Copy
- Web Page

Show as [FORMAT]

- A Table
- A List
- Summary
- HTML
- Code
- Spreadsheet
- Graphs
- CSV file
- Plain Text file
- JSON
- Rich Text
- PDF
- XML
- Markdown
- Gantt Chart
- Word Cloud
- Emojis
- An Analogy
- Bullet Points

Set restrictions

- Use poetic language
- Adopt a formal tone
- Write short sentences
- Code only in HTML/CSS
- Use Shakespearean style
- Write using basic English
- Use only scientific sources
- Add pop culture references

Prompts For Biz Owners

- Give me a list of inexpensive ideas on how to promote my business better.
- Acting as a Business Consultant, What is the best way to solve this problem of [Problem]?
- Create a 30-Day Social Media Content Strategy based on [Topic 1] & [Topic 2].

Prompts for Developers

- Develop an architecture and code for a <description> website with JavaScript.
- Help me find mistakes in the following code <paste code below>
- I want to implement a sticky header on my website. Can you provide an example using CSS and JavaScript?
- Please continue writing this code for JavaScript <paste code below>

Prompts for Marketers

- Can you provide me with some ideas for blog posts about [topic]?
- Write a product description for my [product or service or company].
- Suggest inexpensive ways I can promote my [company] without using social media.
- How can I obtain high-quality backlinks to improve the SEO of [website name]?

Prompt Priming

- ZERO** - "Write me 5 Headlines about [Topic]"
- SINGLE** - "Write me 5 Headlines about [Topic]. Here is an example of one headline: 5 Ways to Lose Weight"
- MULTIPLE** - "Write me 5 Headlines about [Topic]. Here is an example of some headlines: 5 Ways to Lose Weight, How to Lose More Fat in 4 Weeks, Say Goodbye to Stubborn Fat, Find a faster way to Lose Weight Fast"

Prompts for Designers

- Generate examples of UI design requirements for a [mobile app].
- How can I design a [law firm website] in a way that conveys trust and authority?
- What are some micro-interactions to consider when designing a Fintech app?
- Create a text-based Excel sheet to input your copy suggestions. Assume you have 3 members in your UX writing team.

C.R.E.A.T.E Formula for Prompt Engineering

- C: Character** - Define the AI's role. E.g., "You are a seasoned copywriter with 20 years of experience in successful sales copy."
- R: Request** - Be specific with what you need. Instead of "Write a sales email for a sports car," specify, "Write a compelling email for the Cougar Hyper Sport, an electric car with top-tier acceleration."
- E: Examples** - Optionally, provide samples for more precise results. Headlines or tone examples can guide the AI's style.
- A: Adjustments** - Refine the prompt if it's not perfect. Use instructions like, "Avoid bullet points; use subheads."
- T: Type of Output** - Describe the desired format. E.g., "Produce a 500-word article with a title and conclusion."
- E: Extras** - Incorporate unique instructions.
 - Ex: "Ignore previous conversations."
 - Ex: "Ask questions before answering."
 - Ex: "Explain your thinking."
 - Ex: "Summarize what you know about me in the first person."
 - Ex: "Use data up to 2023."
 - Ex: "Only use reliable sources and cite them."
 - Ex: "Use CAPS LOCK for emphasis."

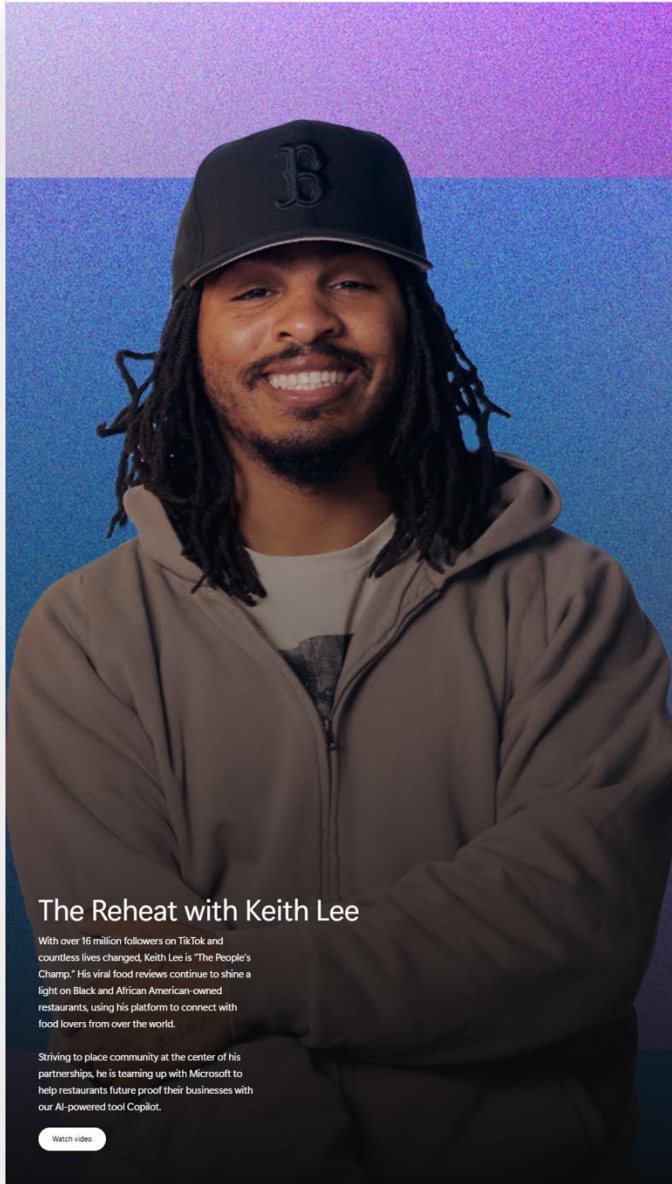
Using the C.R.E.A.T.E formula ensures better results, although it may require more time for prompt creation.

The ChatGPT Cheat Sheet

Resources

- [Bing Copilot](#)
- [ChatGPT](#)
- [Meta.ai](#)
- [ChatGPT 4o Demo](#)
- [Automate any workflow with AI](#)
- [Weekly Meal Planner](#)
- [AI Fire](#)
 - Master AI with practical guides - your daily hub for AI-powered productivity
- [DALL-E 2](#) - Image Generation
- [Synthia](#) - Video Creation

[The Reheat with Keith Lee](#)



<https://youtu.be/orCxtN-KnYA>

AI Benefits for Small Businesses*

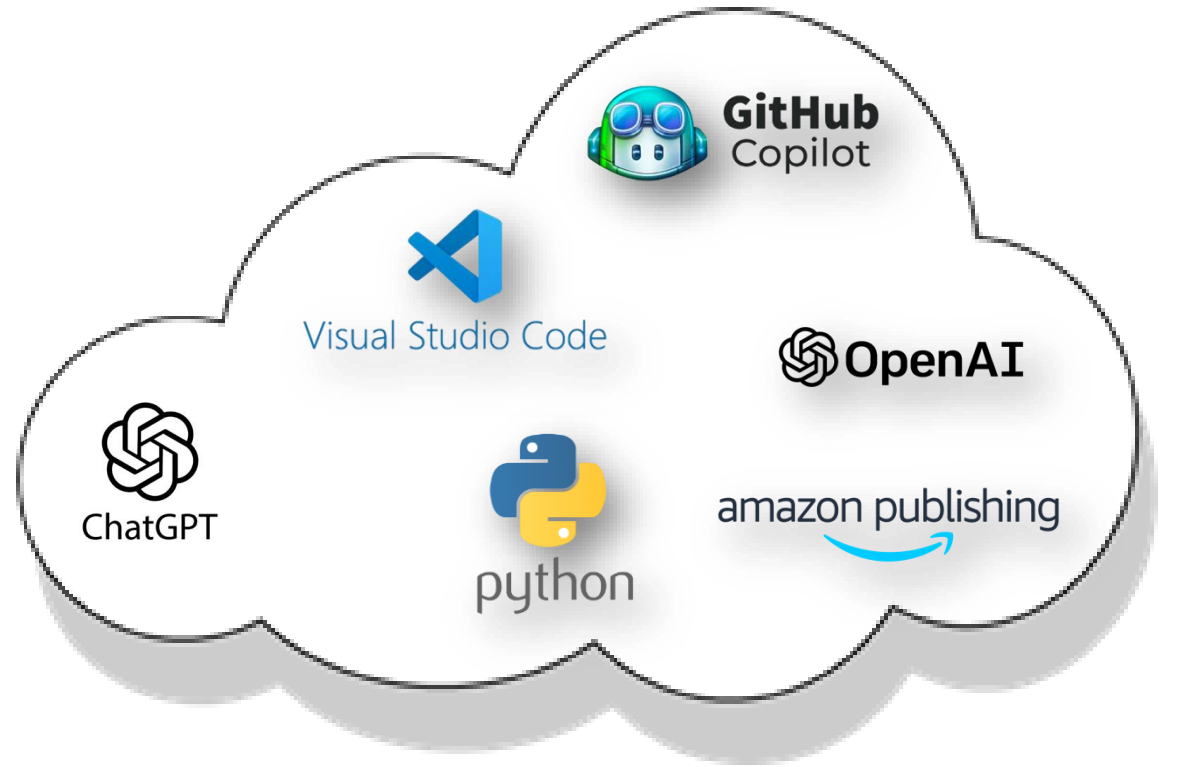
- Increased productivity
- Enhanced creativity
- Faster decision-making
- Cost savings
- Scalability
- Improved customer service

*https://www.microsoft.com/en-us/microsoft-365/business-insights-ideas/resources/generative-ai-benefits-for-small-businesses?icid=keithlee_campaign

Learning AI

Using AI to create puzzle books

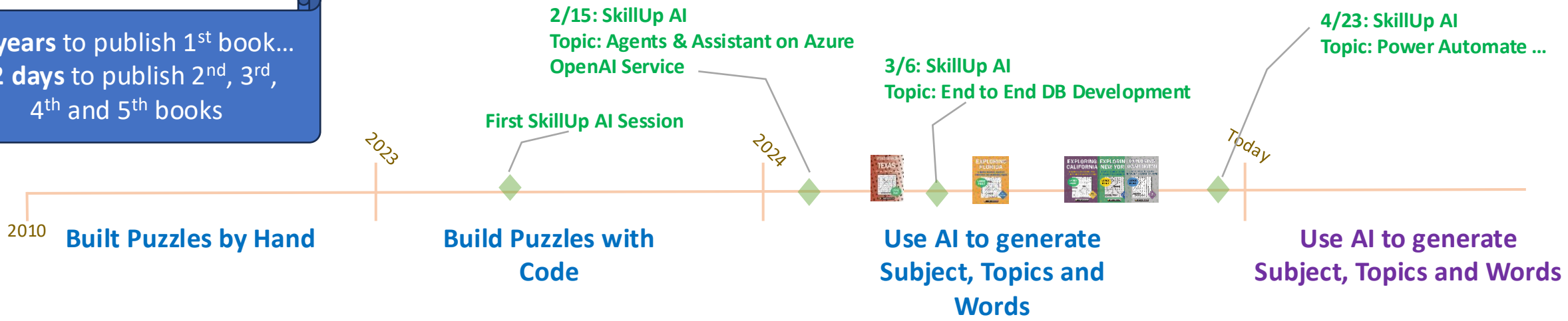
I used...



...to create



14 years to publish 1st book...
22 days to publish 2nd, 3rd,
4th and 5th books



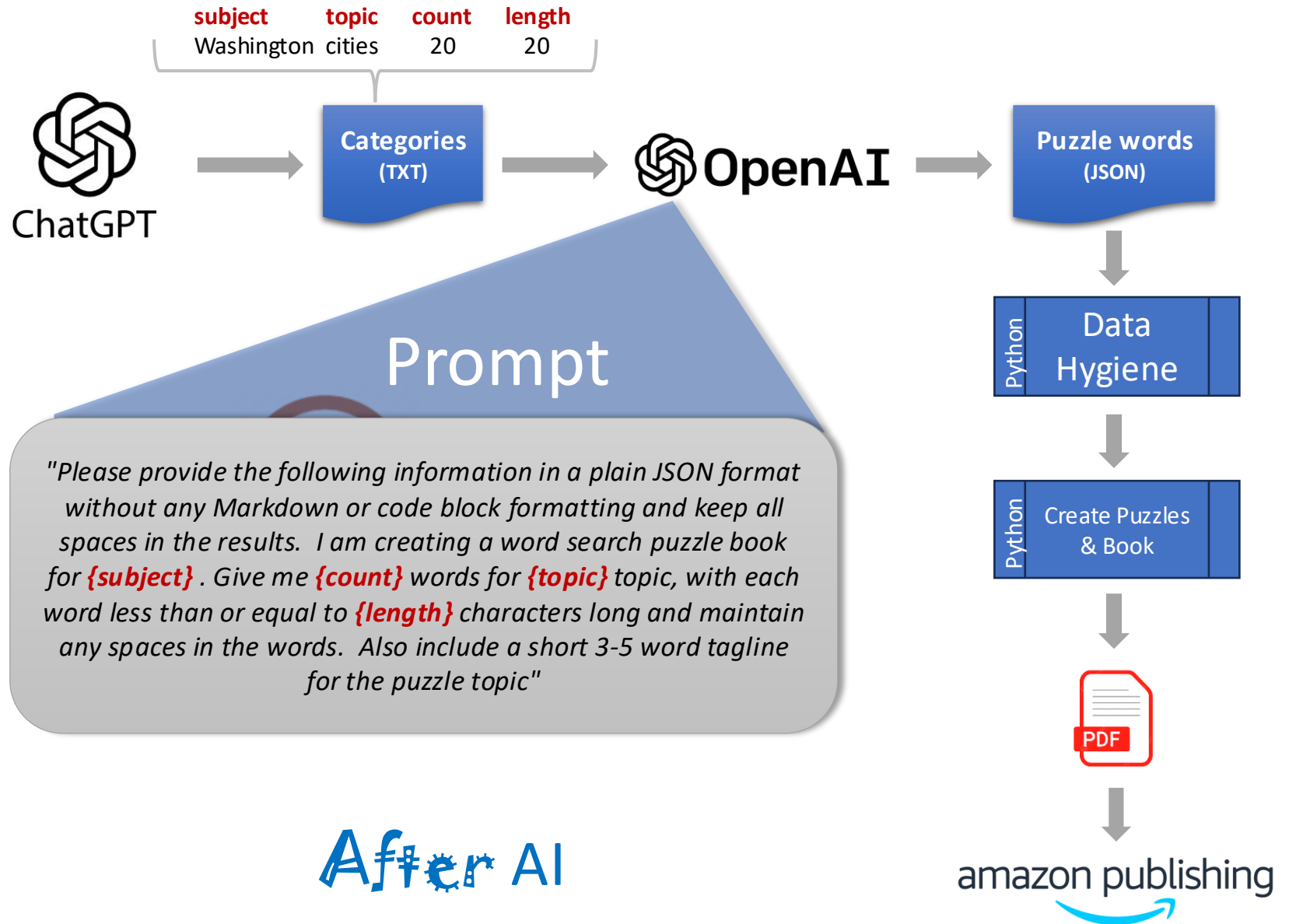
	2010	2023	2024	Today
Effort	Time intensive and low quality	Still challenged identifying subject, topics and words for book	Hallucination cleanup, manual reformatting, and Manual Cover design	Minimize hallucination thru prompting, automate manual steps and cover design
Tools	Word and Excel	Python & Open Source	Python, ChatGPT, OpenAI APIs and GitHub Copilot	Prompt Engineering, AI image Generation and Power Automate
Time	1 puzzle = Days	1 puzzle = Hours	1 puzzle = Minutes	1 puzzle = Seconds
Result	☹️	😐	😊	😄

Before AI



BOOK

Under the Hood



After AI

How to Contact Me?



[Reginald D. Cobb](#)



[Braintease Books](#)

