## Sun City Summerlin Computer Club Seminar

# Microsoft's Copilot Artificial Intelligence Chatbot

Tom Burt August 28, 2024

## Where to Find the Materials

- Sun City Summer Computer Club Website:
  - <u>https://www.scscc.club/smnr</u>
- Direct Hyperlink
  - <u>https://www.scscc.club/smnr/MSCopilotTour2024.pdf</u>

# **Seminar Agenda**

- Introduction to AI Chatbots
- Accessing Chatbots
- Write an Essay Example
- Recognize a Picture Example
- Write a Computer Program Example
- Produce a Recipe Example
- Recommend Stocks Example
- Write a Power of Attorney Example
- Rewrite a Section of a Document
- Write a Poem Example
- Generate a Picture Example
- Limitations of AI Chatbots
- Social Implications of AI Chatbots

## **Introduction to AI Chatbots**

- Google Gemini, MS CoPilot and Anthropic Claude are "Generative AI" chat-bots that interested users can access.
  - Gemini and Claude are web-based, so they work on Windows, MacOS, Linux any device with a web browser.
  - Microsoft CoPilot is incorporated into the Microsoft Edge web browser and the Office 365 Suite. There's also a stand-alone CoPilot website.
  - All three are similar to Open Al's ChatGPT. CoPilot is based on ChatGPT 4.
  - Each AI chatbot uses a different large language model.
  - Some can read answers to you and accept spoken input.
  - <u>https://www.techrepublic.com/article/google-bard-cheat-sheet/</u>
  - <u>https://docs.anthropic.com/en/docs/intro-to-claude</u>
  - <u>https://learn.microsoft.com/en-us/copilot/tutorials/learn-microsoft-copilot</u>
- The AI chatbots have been trained by reviewing and digesting billions of web documents.
  - The chatbots' "knowledge bases" and answers have been curated by large teams of humans. Because they have been trained on the public Internet, it has digested a lot of misinformation.
  - Chatbots generate answers by predictively merging words and phrases that fit the context of the question asked.
  - **BEWARE** of "hallucinations" answers that *sound* correct but are factually *wrong*.

## Where to Access the AI Chatbots

- Google Gemini
  - Go to the Gemini website: <u>https://gemini.google.com</u> .
  - You can click the Updates link to see what's new in Gemini.
  - You can click the Settings gear icon to customize Gemini's theme (Light or Dark). I use the Dark theme.
- Anthropic Claude
  - Go to the Claude website: <u>https://claude.ai/login</u> and login.



- Claude will send an email with a link to click.
- Microsoft Copilot
  - Start the Microsoft Edge browser. Then click the copilot icon at the top right or press Ctrl + Shift + .
  - Go to the Copilot website: <u>https://copilot.microsoft.com/</u> (Press Windows + C).
  - There's also a "Copilot for Microsoft 365" set of add-ins, but they cost \$360 / year.
- Today's demo tour will focus on MS Copilot
  - The Prompts should work in any of the Chatbots.

## The Microsoft CoPilot Main Web Screen

COPILOT REBOOK	Get the app	Sign in E Chats
Compose a Haiku about enjoying nature	Chat anytime. Anywhere. Al-powered chat, amazing on your phone. Learn more	
<ul> <li>Analyzing the image: Privacy blur hides faces from Co Here's a Haiku for you:</li> <li>Whispers of the breeze,</li> </ul>	pilot	
Sunset paints the sky with gold, Nature's calm embrace. 🖴 Do you enjoy spending time in nature?		
Learn more 1 ~ projecthalkulove.blogspot.com 2 2 99gg. 4 @ kawanabekaratedo.com 5 @ writingexplai		
Ask me anything	<b>0</b> : 2	S ↓ ►

## **Example: Write an Essay**

- Prompt: Write a 500-word biography of Leonardo DaVinci
- Response (First two paragraphs)

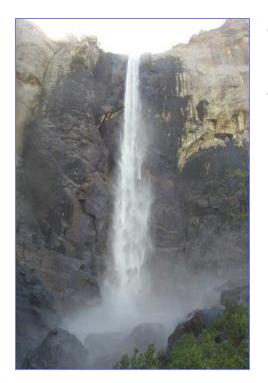
Leonardo da Vinci, born on April 15, 1452, in the small town of Vinci, Italy, was a polymath whose contributions spanned various fields, including art, science, engineering, and anatomy. His full name, Leonardo di ser Piero da Vinci, indicates his birthplace rather than a family name. Born out of wedlock to a notary, Piero da Vinci, and a peasant woman, Caterina, Leonardo's early life was marked by curiosity and a keen observational skill12.

Leonardo's formal education began in Florence, where he apprenticed under the renowned artist Andrea del Verrocchio. This period was crucial in shaping his artistic talents. By the age of 20, Leonardo qualified as a master in the Guild of Saint Luke, a professional association of artists and doctors of medicine1. His early works, such as the "Annunciation" and "Baptism of Christ," where he collaborated with Verrocchio, showcased his burgeoning talent.

<u>https://www.zdnet.com/article/how-to-use-chatgpt-to-write-an-essay/</u>



### **Example: Identify the Contents of a Picture**



- Select or drag and drop an image into the prompt window. Prompt: What and Where is this?
- Response:

The image you shared appears to be of Yosemite Falls, located in Yosemite National Park, California. Yosemite Falls is one of the tallest waterfalls in North America, with a total drop of 2,425 feet (739 meters). It consists of three sections: the Upper Falls, the Middle Cascades, and the Lower Falls1.

Yosemite Falls is a major attraction in the park, especially during late spring when the water flow is at its peak due to snowmelt. The falls can be viewed from various points in Yosemite Valley, and there are several trails that offer close-up views and different perspectives of the falls.

### **Example Write a Computer Function**

- Prompt: Write a Function in C# to sort an array of alpha-numeric strings
- Response:

A C# sort function and a Main program to call it. Also included is a brief explanation of how the program works.

- Prompt: Write a Function in VB.Net to sort an array of alpha-numeric strings
- Response:

A VB.Net sort function and a brief explanation of how the program works.

# **Example: Produce a Recipe for Two**

- Prompt: Give me a simple recipe for Indian lamb vindaloo for two.
- Response:

### For the Paste:

- 2 tablespoons red chili powder
- 1 teaspoon cumin seeds
- 1 tablespoon coriander seeds
- 1/4 teaspoon turmeric powder
- 5 garlic cloves
- 1-inch piece of ginger
- 1/4 cup white vinegar

### For the Curry:

- 300 grams boneless lamb, cut into bitesized pieces
- 1 large onion, finely chopped
- 1 large tomato, chopped
- 2 tablespoons oil
- 1/2 teaspoon sugar
- Salt to taste

### Instructions:

- Make the Paste:
  - Blend all paste ingredients into a smooth mixture.
- Marinate the Lamb:
  - Mix the lamb with the paste and let it sit in the fridge for at least 2 hours.
- Cook the Curry:
  - Heat oil in a pan and sauté the onions until golden.
  - Add tomatoes and cook until soft.
  - Add the marinated lamb and cook on high for 5-7 minutes.
  - Add 1 cup of water, sugar, and salt. Simmer on low heat for 45 minutes to 1 hour until the lamb is tender.
- Serving:
  - Serve with rice or naan. Enjoy!

## **Example: Recommend Stocks for Seniors**

- Prompt:. Recommend a portfolio of 5 large-cap stocks or ETFs that will produce a safe average annual dividend yield of 6% or better
- Response (Summarized):
  - 1. Invesco High Yield Equity Dividend Achievers ETF (PEY):
  - 2. Vanguard High Dividend Yield ETF (VYM)
  - 3. SPDR S&P 500 High Dividend ETF (SPYD)
  - 4. Schwab U.S. Dividend Equity ETF (SCHD)
  - 5. iShares Select Dividend ETF (DVY)

Current yield: 5.04% Current yield: 4.74% Current yield: 4.17% Current yield: 3.42% Current yield: 3.42%

These ETFs provide a mix of growth and income, helping to achieve a balanced portfolio. Remember to review each ETF's performance, expense ratios, and holdings to ensure they align with your investment goals and risk tolerance.

Prompt: Write a Nevada Healthcare Power of Attorney for a senior appointing his son as agent. Include advanced directives.

### Response (Advanced Directive Not Shown):

### Nevada Healthcare Power of Attorney

#### 1. Designation of Healthcare Agent

I, [Senior's Full Name], residing at [Senior's Address], hereby appoint my son, [Son's Full Name], residing at [Son's Address], as my healthcare agent (hereinafter referred to as "Agent") to make healthcare decisions on my behalf if I am unable to do so.

2. Agent's Authority

My Agent shall have the authority to make any and all healthcare decisions for me, including but not limited to:

- Consenting to or refusing medical treatment.
- Accessing my medical records.
- Admitting or discharging me from any hospital, nursing home, or other medical facility.
- Making decisions regarding life-sustaining treatment, including artificial nutrition and hydration.

#### 5. Duration

This Healthcare Power of Attorney shall become effective immediately and shall remain in effect until my death or until I revoke it in writing.

6. Revocation

I reserve the right to revoke this Healthcare Power of Attorney at any time by providing written notice to my Agent and my healthcare providers.

7. Signature and Witnesses

### **Example: Rewrite a Section of a Document**

- Prompt: Rewrite the following. <paste in a block of text>
- Response: Copilot's rewrite ...
- Let's look at my original and Copilot's rewrite side-by-side

### Tom's Original ...

### Why You Might Want to Lease a New Car

With a lease you are always driving a relatively new car that is under warranty and has new tires, brakes, battery, wiper blades and other consumables. There's little likelihood that the car will break down during the three years / 36000 miles of the lease.

With a lease, you are driving a new car with the latest in technology and safety features

At the end of the lease, you can turn in the car, lease a new one and continue for another 3 years. If the turn-in has low mileage and is in good condition (likely for most seniors), you may be able to get a trade-in allowance toward the new lease. Alternatively, you can turn in the car and walk away. Or ... especially if the car has very low mileage, you might decide to buy the car, paying the residual.

Often, the monthly payment on a lease is lower than the payment on a financed purchase. This is because you're not buying the entire usable operating life of the car – only the first 3 years / 36,000 miles worth. So,

when you turn it in it has a lot of remaining value.

### Copilot's Rewrite

### Why You Might Want to Lease a New Car

Leasing a car offers several advantages. Firstly, you get to drive a relatively new vehicle that is under warranty, with new tires, brakes, battery, wiper blades, and other consumables. This reduces the likelihood of the car breaking down during the three years or 36,000 miles of the lease.

Additionally, leasing allows you to drive a car equipped with the latest technology and safety features. At the end of the lease, you have several options: you can turn in the car and lease a new one, potentially receiving a trade-in allowance if the car has low mileage and is in good condition. Alternatively, you can simply return the car and walk away, or decide to buy it by paying the residual value, especially if it has very low mileage. Often, the monthly payment on a lease is lower than that of a financed purchase. This is because you are only paying for the first three years or 36,000 miles of the car's usable life, leaving it with significant remaining value when you turn it in.

### **Example: Generate a Picture**

- Prompt: Create a photorealistic image of a mallard duck swimming in a pond surrounded by trees and bullrushes
- Response: Copilot's rendering (at right) ...
- Additional Help ...
  - <u>https://www.microsoft.com/en-us/bing/do-more-with-ai/make-ai-photos?form=MA13KP</u>
  - <u>https://www.youtube.com/watch?v=7Gd</u>
     <u>RYHY5kDw</u>



## **Example: Write a Haiku Poem**

- Prompt: Compose a Haiku about enjoying nature
- Responses ...

Cherry blossoms bloom, Whispers of the stream below, Nature's calm embrace.

Golden sun sets low, Whispers of the breeze through trees, Nature's evening glow.

Morning dew glistens, Birds sing in the crisp, cool air, Daybreak's gentle kiss. • Tom's Variations ...

Nature's beauty found, A feast for senses all around, It's time to slow down.

Rustle of green leaves, Whispers of the wind through trees, Peaceful and serene.

Morning dew on leaves, Birds sing in the crisp, cool air, Daybreak's gentle kiss.

# **Limitations of AI Chatbots**

- They're "trained" by scanning billions of pages of web content.
  - Content may have various biases.
  - Content may be inaccurate.
  - Requires large numbers of human reviewers (with their own biases) to verify answers.
  - Be very careful using responses for medical, legal, military or law enforcement decisions / actions.
- Responses are sensitive to how questions/prompts are expressed.
  - The art is in deciding how specific or general to be.
  - Chatbots currently don't know much about people not publicly known.
- Caution about asking questions in which proprietary information is included.
  - Chatbot's "learn" from the questions posed and from ratings given to the answers.
- Because chatbots answers are digested from material the bots have scanned, the answers may infringe on copyrighted / patented intellectual property.
  - Be careful using the output of a chatbot without verifying whether that material is protected.

# **Social Impact of AI Chatbots**

- **Prompt: In 500 words, discuss how and where can AI replace humans?**
- Prompt: Discuss the social impact of AI technology
- Recent Articles:
  - <u>https://www.zdnet.com/article/ai-taking-on-more-work-doesnt-mean-it-replaces-you-here-are-12-reasons-to-worry-less/</u>
  - <u>https://www.techrepublic.com/article/top-ai-trends/</u>
  - <u>https://bernardmarr.com/what-is-the-impact-of-artificial-intelligence-ai-on-society/</u>
  - <u>https://www.zdnet.com/article/what-gartners-2024-hype-cycle-forecast-tells-us-about-the-future-of-ai-and-other-tech/</u>



Final Questions and Answers

MS Copilot Tour 2024