Sun City Summerlin Computer Club Seminar

A Tour of Google Bard

Tom Burt July 27, 2023

Where to Find the Materials

- Sun City Summer Computer Club Website:
 - https://www.scscc.club/smnr
- Direct Hyperlink
 - https://www.scscc.club/smnr/GoogleBardTour.pdf

Seminar Agenda

- Introduction
- Accessing Google Bard
- Write an Essay Example
- Pictures Example
- Write a Program Example
- Produce a Recipe Example
- Recommend Stocks Example
- Write a Power of Attorney Example
- Write a Poem Example
- Limitations of Al Chatbots
- Your Questions / Prompts

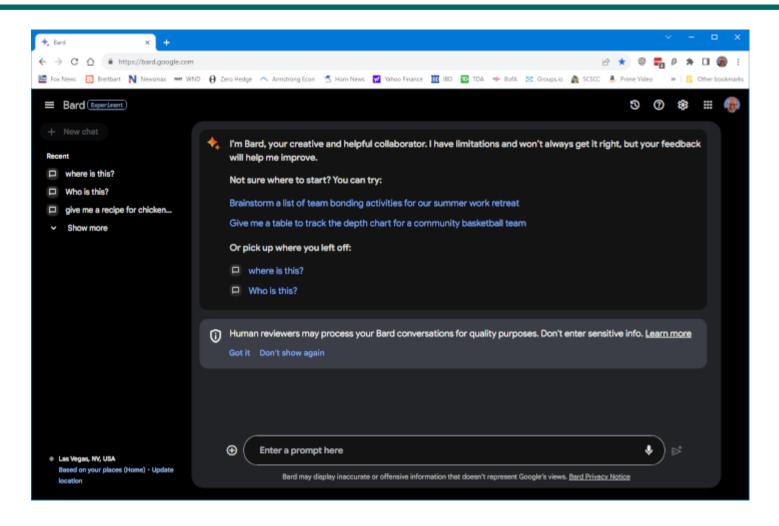
Introduction

- Google Bard is one of several "Generative Al"chat-bots.
 - Entirely web-based, so works on Windows, MacOS, Linux any device with a web browser.
 - Similar to Open Al's ChatGPT.
 - Recently updated to read its answers to you and accept spoken input.
 - https://www.techrepublic.com/article/google-bard-new-features/
- Bard has been trained by reviewing and digesting billions of web documents.
 - Bard's "knowledge base" and answers have been curated by large teams of humans.
 - Because it was trained on the public Internet, it has digested a lot of misinformation.
 - Bard generates 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.
- This seminar will demonstrate Bard by posing a series of questions to see what answers it will produce. We can try your own questions as well.

Accessing Google Bard

- Go to the Bard website: https://bard.google.com
- You can click the Updates link to see what's new in Bard.
- You can click the Settings gear icon to customize Bard's theme
 (Light or Dark). I use the Dark theme.

The Google Bard Main Page

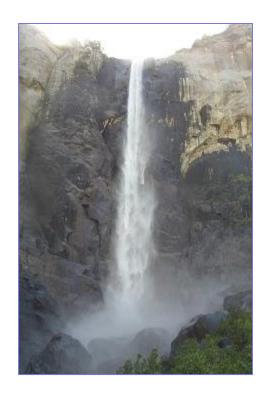


Example: Write an Essay

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

Leonardo da Vinci was an Italian polymath of the High Renaissance who was active as a painter, draughtsman, engineer, scientist, theorist, sculptor, and architect. While his fame initially rested on his achievements as a painter, he also became known for his notebooks, in which he made drawings and notes on a variety of subjects, including anatomy, astronomy, botany, cartography, painting, and paleontology. Leonardo's genius epitomized the Renaissance humanist ideal, and his collective works compose a contribution to later generations of artists and scientists rivaled only by that of his younger contemporary, Michelangelo.

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 sent me shows Yosemite Falls, the tallest waterfall in North America. It is located in Yosemite National Park in California. The falls are 2,425 feet (739 m) tall and consist of three major drops: Upper Yosemite Fall (1,430 feet (436 m)), Middle Cascade (675 feet (206 m)), and Lower Yosemite Fall (320 feet (97 m)). Yosemite Falls is a popular tourist destination and can be reached by hiking or driving to the top of Yosemite Valley.

Here are some additional facts about Yosemite Falls:

- The falls are at their fullest in the spring, when the snowmelt from the Sierra Nevada Mountains is flowing.
- The falls can be seen from many different viewpoints in Yosemite Valley, including Yosemite Falls Viewpoint, Yosemite Point, and Glacier Point.
- Yosemite Falls is a popular destination for photographers and hikers.
- The falls are a sacred place for the Ahwahneechee people, who have lived in the Yosemite Valley for centuries.

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. Three variations were offered by Bard.

- 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. Three variations were offered by Bard.

Example: Produce a Recipe for Two

- Prompt: Give me a recipe for Indian curried chicken breast for two.
- Response:

Ingredients:

- 1 tablespoon vegetable oil
- 1 onion, chopped
- 2 cloves garlic, minced
- 1 tablespoon ginger, minced
- 1 teaspoon turmeric powder
- 1 teaspoon coriander powder
- 1 teaspoon cumin powder
- 1 teaspoon garam masala
- 1/2 teaspoon cayenne pepper
- 1/2 teaspoon salt
- 1/4 teaspoon black pepper
- 1 pound boneless, skinless chicken breasts, cut into 1-inch pieces
- 1 cup low-sodium chicken broth
- 1/2 cup coconut milk
- 1/4 cup chopped cilantro

Instructions:

- Heat the oil in a large skillet over medium heat. Add the onion and cook until softened, about 5 minutes. Add the garlic and ginger and cook for 1 minute more.
- Add the turmeric powder, coriander powder, cumin powder, garam masala, cayenne pepper, salt, and black pepper to the skillet. Cook for 1 minute, stirring constantly.
- Add the chicken to the skillet and cook until browned on all sides.
- Add the chicken broth and coconut milk to the skillet. Bring to a simmer, then reduce heat to low and cover. Simmer for 20 minutes, or until the chicken is cooked through.
- Stir in the cilantro and serve immediately.
- Serve with rice or naan bread for a complete meal.

Example: Recommend Stocks for Seniors

- Prompt: Recommend a portfolio of 5 large-cap stocks or ETFs that will produce a safe average annual yield of 6% or better.
- Response (Summarized):

1.	Verizon Communications (VZ)	Current yield: 6.1%
2.	Pfizer (PFE)	Current yield: 5.8%
3.	Comcast (CMCSA)	Current yield: 5.6%
4.	Wells Fargo (WFC)	Current yield: 6.0%
5.	Medtronic (MDT)	Current yield: 4.6%

These stocks are all large-cap, well-established companies with a long history of paying and growing their dividends. They are also in industries that are expected to continue to grow in the future. As a result, they are all considered to be relatively safe investments.

Example: Write a Healthcare Power of Attorney

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

Response (Advanced Directive Not Shown):

Durable Power of Attorney for Health Care

I, [your name], of [your address], hereby appoint [name of your agent] as my agent to make health care decisions for me if I become unable to make my own health care decisions.

This power of attorney is durable, which means that it will remain in effect even if I become incapacitated.

My agent has the following powers:

- To consent to or refuse any medical care, treatment, service, or procedure.
- To make decisions about my hospitalization, transfer to another health care facility, or discharge from a health care facility.
- To request, review, and receive any information about my medical condition, including medical records.
- To appoint a substitute agent if my original agent is unable or unwilling to serve.

I understand that I have the right to revoke this power of attorney at any time.

I have signed this power of attorney on [date] in the presence of two witnesses who have also signed below.

[Your signature]

[Date]

[Witness signature]

[Witness signature]

Example: Write a Haiku Poem

Prompt: Compose a Haiku about enjoying nature

Bard's Responses ...

Nature's beauty abounds,
A feast for the senses all around,
Time to slow down.

Green leaves rustle by,
The wind whispers through the trees,
Peaceful and serene.

Sunlight on my skin,
The wind in my hair, the trees
A symphony of green.

Tom's Edits ...

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

A rustle of green leaves, The wind whispers through the trees, Peaceful and serene.

Golden sun on skin, My hair blown by wind, the trees A symphony of green.

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 bot has 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.

Final Q and A

Final Questions and Answers