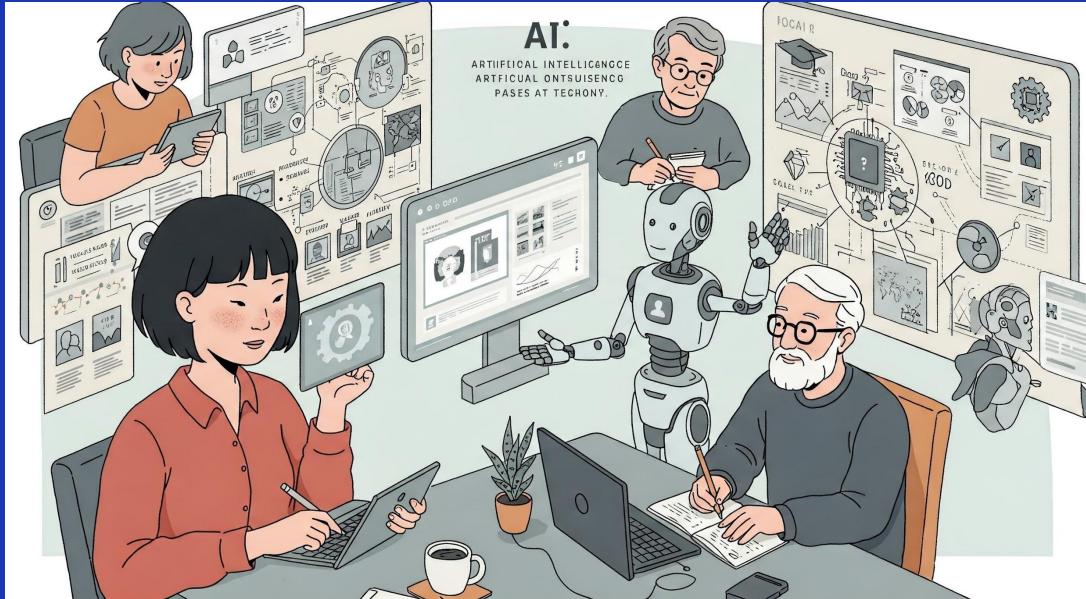


# Decoding AI: Today & Tomorrow



2/23/2025

# Bob Hong

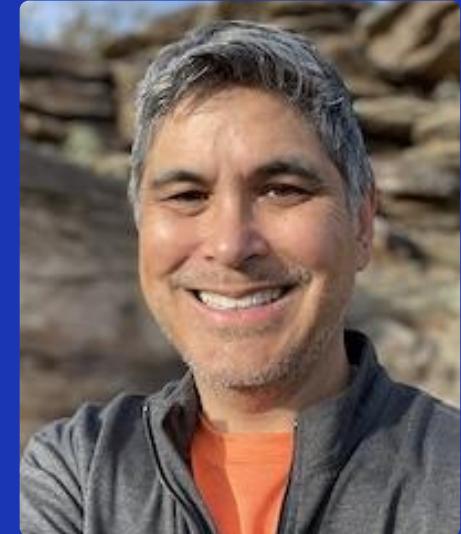
Cloud Platform Software Architect at  
Rockwell Automation

30+ years developing and operating mission-critical software for major corporations in Financial and Manufacturing Sectors

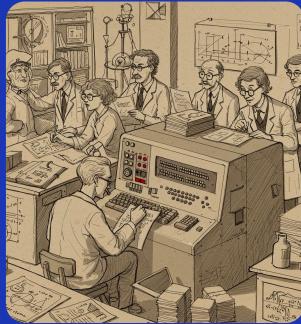
Leading engineering for an internal container platform running 1000s of services in Azure, AWS, and private data centers across the globe

Works from  and lives in Williamston, Mi

Married to Melissa, with 3 children, 3 grandkids, and 1  Sunny.



# A brief History of AI



1950s-1970s

The Dawn of  
AI



1980s-1990

AI Winter  
and Expert  
Systems



2000s-2020s

Machine  
Learning and  
Deep Learning  
Revolution



2025-2035

The Age of  
AI  
Integration

AI in Healthcare  
Revolutionizes Diagnostics  
and Patient Care

### AI Deepfakes Threaten Elections and Truth

Trust in AI Varies Across Countries  
and Economies

Digital Democracy Faces Challenges  
from AI Manipulation Tools

Americans Struggle to Identify Everyday Uses of AI

**AI-Enhanced Manufacturing Boosts Productivity** Education Tops List of Areas Where AI Will Improve Lives Globally

# AI in the News



### Job Disruption from AI Automation Sparks Upskilling Efforts

Global Public Expects  
Profound AI Changes in  
Next 3-5 Years

Public Concern Grows Over AI's Role in Daily Life  
AI's Growing Role in Environmental Sustainability  
Efforts Highlighted

AI's Role in Climate Change  
Mitigation Gains Traction

# **AI Won't Replace Humans – But Humans With AI Will Replace Humans Without AI**

600,000+ PROMPT ENGINEERING JOBS  
PREDICTED BY 2030



<https://hbr.org/2023/08/ai-wont-replace-humans-but-humans-with-ai-will-replace-humans-without-ai>

# So, what exactly do you do?





You must *unlearn* what you have learned.

# Chatbot 101

What can I help with?

Message ChatGPT



Search



Reason



Create image



Summarize text



Brainstorm



Analyze data

More



# How about?

## Writing and Communication

- Compose emails
- Proofread and suggest
- Rewrite for tone or style

## Creativity & Fun

- Write a story or poem
- Make music
- Create artwork
- Make and play an Adventure Game

## Personal Productivity

- Search and edit photos
- Plan a trip and suggest activities
- Plan meals

## Learning and Research

- Explain how to solve a complex math problem
- Analyze research papers, literature, history, and simplify complex topics
- Data analysis & presentation
- Suggest books to read

# Intelligent Writing Tools

Ideas for Presentation ➔ Inbox ⭐

 **Bob Hong** 6:36 PM  
to me ▾

Hi, I was just thinking we should pre-record some demos using Loom as a mitigation for possible connectivity issues.



I think that's a great idea! I think that's a good idea.

Reply Forward ⚡

Apple Intelligence

Overview iOS 18 iPad

Describe your change

Proofread Rewrite

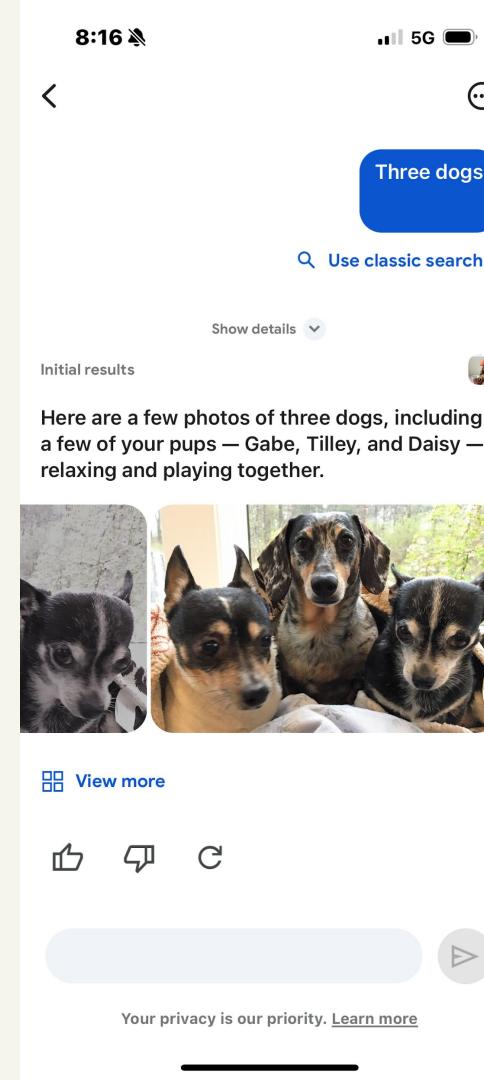
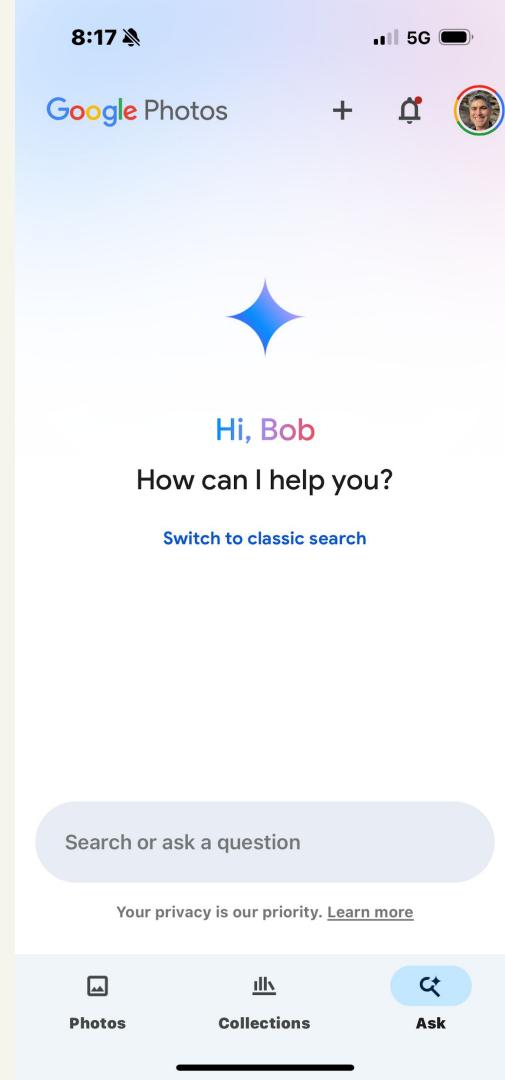
Friendly Professional Concise

Summary Key Points Table List

Compose...

Transform how you communicate using intelligent **Writing Tools** that can proofread your text, rewrite different versions until the tone and wording are just right, and summarize selected text with a tap. Writing Tools are available nearly everywhere you write, including third-party apps.

# Smart Photo Search



# What should I eat for a healthy snack?



You have a lot of great healthy snack options in your fridge! Here are a few ideas:

1. **Greek Yogurt with Fruit** – You have Chobani yogurt, which is a great source of protein. Pair it with some apples or berries for added fiber and vitamins.
2. **Vegetables with Hummus** – If you have some hummus, you can dip the cucumbers or other veggies from the drawer for a refreshing and nutritious snack.
3. **Avocado Toast** – You have an avocado, which you can mash and spread on whole grain toast for a filling, healthy snack.
4. **Almond Milk Smoothie** – Blend some almond milk with fruit for a quick and delicious smoothie.
5. **Hard-Boiled Eggs** – If you have eggs in the fridge, they make for a protein-packed snack.
6. **Cheese and Crackers** – If you have cheese, you can pair it with some whole grain crackers for a balanced snack.

Would you like a specific recipe or snack idea based on what you're craving?

Create a set of Dungeons and Dragons themed achievement badge images for elementary school kids.



# Create your own chat-based Adventure Game



D

Dungeon Quest • Custom Gem

Elara pulls out her small guidebook, flipping through the pages to the section on Shriekers. The guidebook describes Shriekers as territorial creatures, prone to attack if their territory is invaded or if they sense a threat. It also mentions their sensitivity to bright light and loud noises.<sup>1</sup> Sneaking by is possible, but risky, as Shriekers have keen hearing. Scaring it off might work, but could also provoke it to attack. ^

1. Shrieker - Monsters - D&D Beyond



[www.dndbeyond.com](http://www.dndbeyond.com)

consult the guidebook to see if the Shrieker is likely to attack, if we can sneak by, or scare it off

What do you do?

↶ ↷ C ↲ :



Enter a prompt for Gemini



# New discoveries ahead

About Experiments Sessions Community

Google Labs

All Create Learn Develop Play

Career Dreamer

A new experimental tool that uses AI to make it easy to explore career possibilities personalized to your skills & interests.

Try It Now

Daily Listen

A short, experimental audio show from Discover, made just for you with AI.

Learn More

Whisk

A new experimental tool that lets you use images as prompts to visualize your ideas and tell your story.

Try it now

Project Mariner

A research prototype exploring the future of human-agent interaction, starting with your browser.

Learn more

# Generate realistic images

ImageFX

4 / 4

FJ40 white with oversized tires off roading in muddy terrain

Create

More 35mm film minimal sketchy

handmade abstract chiaroscuro

Edit history Settings

The ImageFX interface features a dark theme with orange highlights. On the left, a sidebar contains text input, a preview area, and various editing buttons like 'Create' and 'Edit history'. Below the sidebar are several style selection buttons: 'More', '35mm film', 'minimal', 'sketchy', 'handmade', 'abstract', and 'chiaroscuro'. At the bottom, there are 'Edit history' and 'Settings' buttons. The main area displays four generated images of a white Toyota FJ40 driving through a muddy forest trail. The images show different angles and lighting effects applied to the original photo.

# Let your imagination free



<https://labs.google/fx/library?type=whisk>

# Deep Research unlocked

perplexity

New Thread 3K

Home Discover Spaces Library

How does Grok 3 handle et... Assess nutritional content... How to check dns provider... Explain the delta plane cras... What are the effects of this...

Try Pro

Upgrade for image upload, smarter AI, and more Pro Search.

Learn More

syntego92997

Download X



## Brain Decoder Reads Thoughts

Curated by dailym 3 min read

4 minutes ago 108 2

According to researchers at The University of Texas at Austin, an innovative AI-driven brain decoder can now translate a person's thoughts into coherent text with just a quick brain scan and minimal training, offering new hope for enhanced communication in individuals with language disorders such as aphasia.

Introduction

- Brain-to-Text Breakthrough
- Cross-Participant Semantic Decoding
- Applications for Communication Disorders
- fMRI and Transformer Integration

Ask follow-up

# Personal Research - Notebook LM

Briefing for Alien Visitors: Understanding Earth

Share Settings

Sources

- Innovation and culture | Artificial In... ✓
- Introducing the Anthropic Economi... ✓
- Public interest AI | Artificial Intellige... ✓
- Sample AI Prompts ✓
- Statement from Dario Amodei on t... ✓
- Trust in AI | Artificial Intelligence A... ✓
- future-catastrophic-risks.md ✓
- global-catastrophes-analysis.md ✓
- <https://assets.anthropic.com/m/2e2...> ✓
- <https://stvp.stanford.edu/wp-conten...> ✓
- risk-mitigation-strategies.md ✓

Chat



## Briefing for Alien Visitors: Understanding Earth

13 sources

These sources provide insight into the advancements, governance, and economic implications of artificial intelligence. They discuss the transformative potential of AI in reshaping labor markets and underscore the importance of responsible AI development. The documents highlight global efforts to establish AI governance frameworks, promote innovation, and ensure public trust in AI technologies. One paper analyzes AI usage across various economic tasks and occupations, revealing patterns of automation and augmentation in the workforce. A conversation with Sam Altman explores the opportunities, risks, and deployment strategies related to artificial general intelligence (AGI).

Save to note

Add note Audio Overview

Start typing... 13 sources

What impact might AI have on the nature of work, now and futuristically

Studio

Audio Overview

Briefing for Alien Visitors: Und...

01:41 / 21:19

Interactive mode (BETA)

Notes

+ Add note

Timeline of Global Events and Key AI Figures  
Okay, here is a detailed timeline of the main events covered in the provided sources, followed by a cast...

AI and Global Challenges: Study Guide  
AI and Global Challenges: A Study Guide Quiz Answer the following questions in 2-3 sentences each....

AI, Global Risks, and Societal Impact: A Briefing...  
Okay, here's a briefing document summarizing the key themes and ideas from the provided sources....

---

# Demo Time

# MusicFX DJ



MusicFX DJ

glitchy effects

blues rock

precision bass

Add a prompt ...

more hyperpop vaporwave alternative country lyre indie folk synthpop 60s soul

Density Brightness Chaos Drums Bass Other

II ⏪ 🔊 ⏹ BPM KEY ⏹

This screenshot shows the MusicFX DJ interface. At the top, it says "MusicFX DJ" with a dropdown arrow and a question mark icon. Below that is a large dark area containing several sliders and buttons. Three sliders are shown with their current values: "glitchy effects" (green), "blues rock" (blue), and "precision bass" (orange). Below these are three rows of buttons: "more", "hyperpop", "vaporwave", "alternative country", "lyre", "indie folk", "synthpop", and "60s soul". Further down are four rows of circular icons labeled "Density", "Brightness", "Chaos", "Drums", "Bass", and "Other". At the bottom is a control bar with a play/pause button, a refresh button, a volume icon, a waveform visualization, and buttons for "BPM", "KEY", and a share icon.

# 4 Big Ideas

## Give AI a Try

Forget preconceptions about computers being hard to use. Leveraging AI will make your life easier.

## Think first, ask, repeat

Organize your thoughts before asking an AI. The more clearly you state your goals and expected output, the better the response will be. Asking follow up questions is normal and encouraged.

## LLMs are imperfect

Hallucinations and biases are possible. LLMs may not have recent information depending on their training date. Always fact check responses and cross check sources for accuracy.

## Discover, Learn and Play

Explore the vast resources on YouTube about AI or ask a ChatBot to teach you. Once you start using AI, keep track of what works well. Share your experiences with a friend. Have fun!

# Thank You!

bobmhong@gmail.com



# Bonus Content



<https://bit.ly/4hPbqCE>