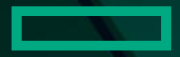


Hewlett Packard
Enterprise

AI is the superpower you didn't know you had!

Bharath Ramesh
Director of AI/ML Software & Solutions, HPE

June 2024

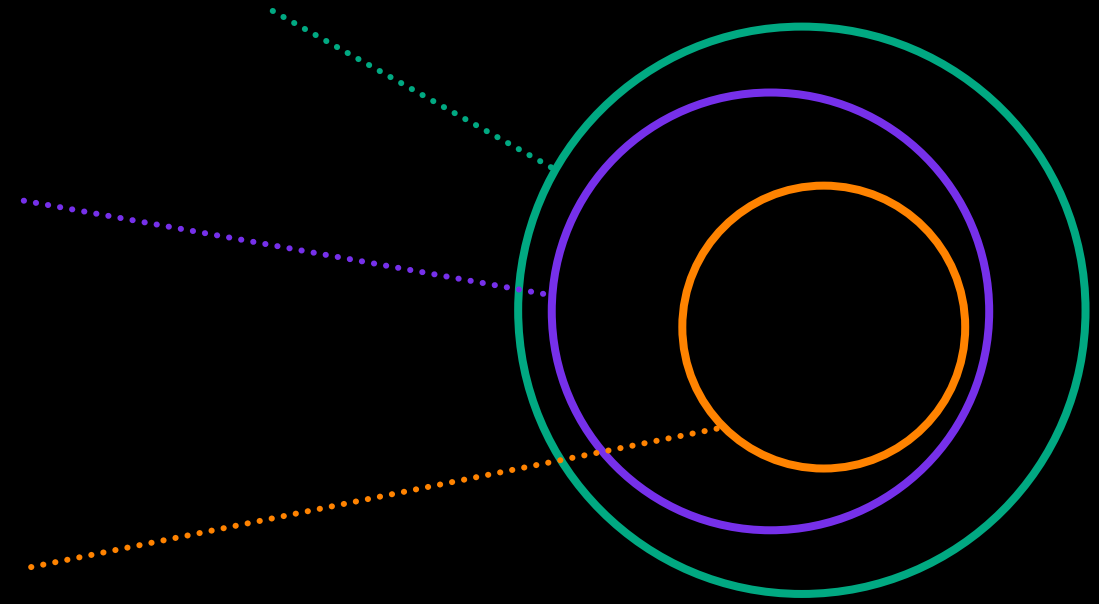
THE AI TAXONOMY

Artificial Intelligence (AI)

A process where a computer solves a task in a way that mimics human behavior.

Machine Learning (ML)

Algorithms that allows computers to learn from examples without being explicitly programmed.

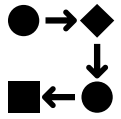


Deep Learning (DL)

A subset of ML which uses deep artificial neural networks as models and does not require feature engineering.

THE AI LIFECYCLE

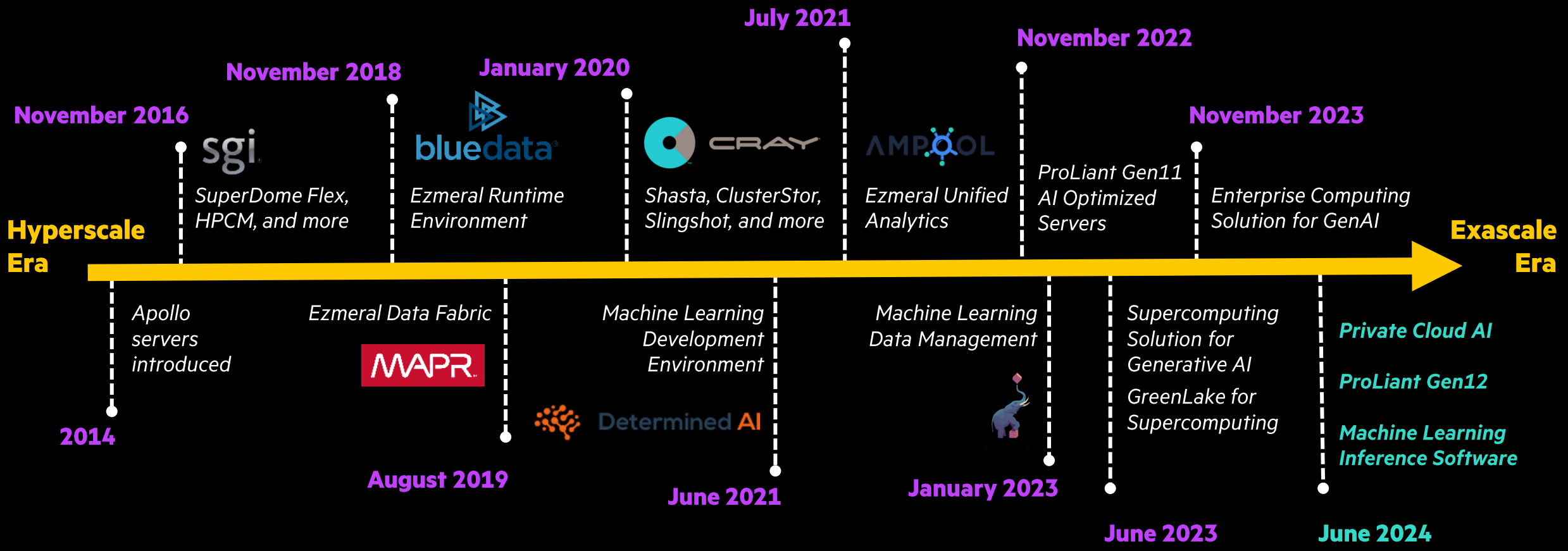
Data Processing & Pipelining



Model Development & Optimization

Model Deployment & Monitoring

HPE HAS DECADES-LONG LEGACY IN AI

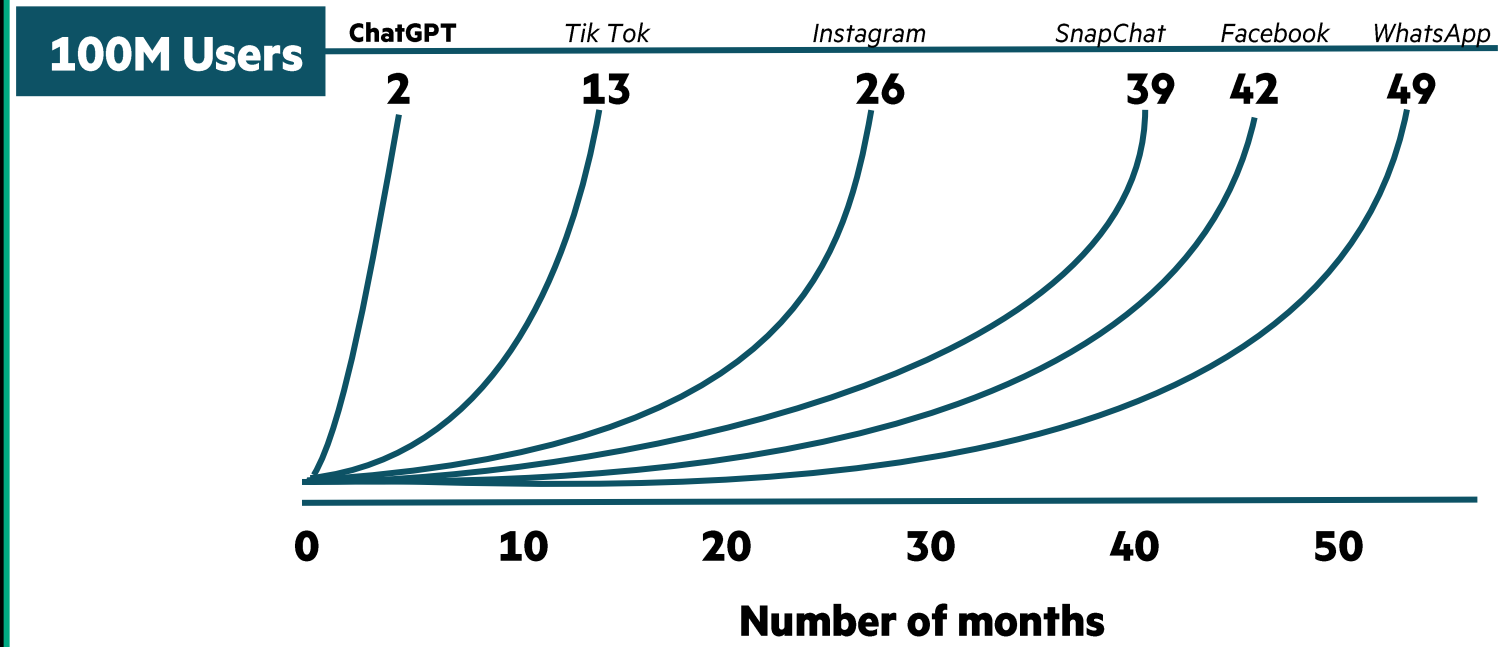


GENERATIVE SYSTEMS - THE LATEST EVOLUTION OF AI

	Large generative systems	Small generative systems	Learning systems	Expert systems
Typical Use Cases	▪ **Generation** – *Code, Text, Audio, Image, Video* ▪ **Conversation & Translation** ▪ **Search**	▪ **Generation** – *Synthetic Data, Images* ▪ **Simulation**	▪ *Prediction* ▪ *Classification* ▪ *Pattern recognition* ▪ *Computer Vision*	▪ *Estimation* ▪ *Optimization* ▪ *Recommendation*
Typical Model Size	**>10B parameters**	**<1B parameters**	*<100M parameters*	*<10K parameters*
Resources to Run	**Very High**	**High**	*Medium*	*Low*

GENERATIVE AI HAS ACHIEVED CELEBRITY STATUS

The race to gain 100 million new users

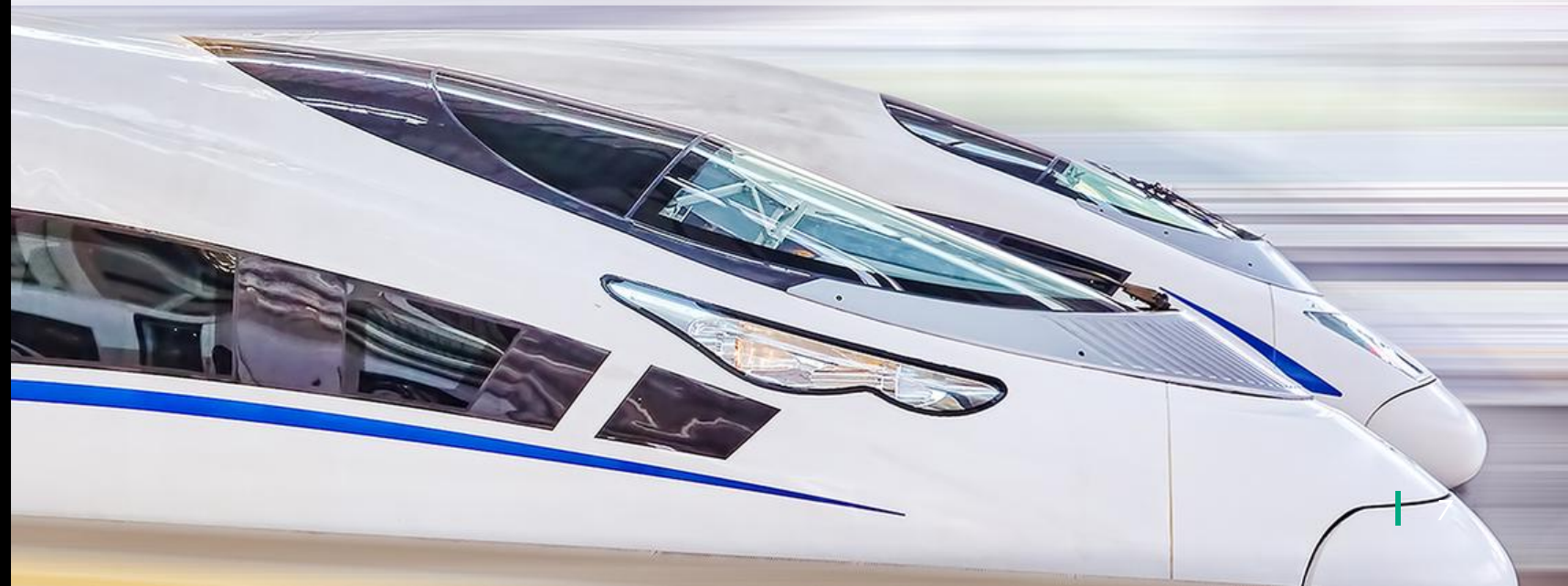


WHY THE GENERATIVE AI HYPE NOW?

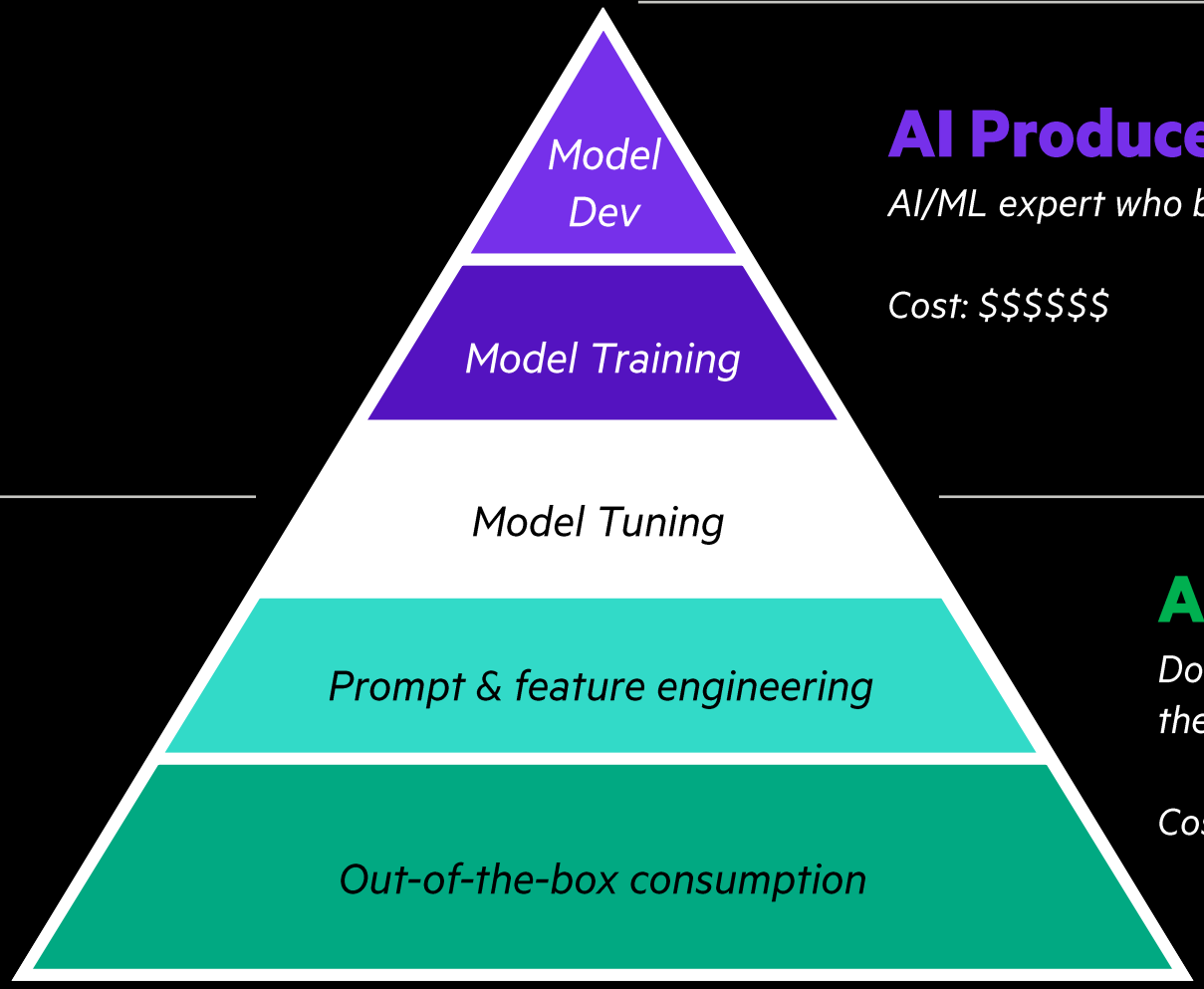
Rapid evolution of new neural networks *based on novel deep-learning architectures*

Access to massive data sets *for building and tuning multi-billion parameter models*

Accelerated Infrastructure *to economically train and run very large models*



WHAT'S YOUR AI TYPE?



AI Producer

AI/ML expert who builds and tunes the base model

Cost: $$$$$$

AI Consumer

Domain expert who uses and tweaks the base model

Cost: $ to $$$

Enterprise AI & "Retirees"

Usually focused here

HOW ENTERPRISES USE AI

Finance

Fraud Detection

Personalized Banking

Investment Insights

Healthcare

Molecule Simulation

Drug Discovery

Clinical Trial Data Analysis

Retail

Personalized Shopping

Automated Catalog Descriptions

Automatic Price Optimization

Telecommunications

AI Virtual Assistants

Network Performance Tuning

Remote Support Capabilities

Media & Entertainment

Character Development

Video Editing & Image Creation

Style Augmentation

Manufacturing

Factory Simulation

Product Design

Predictive Maintenance

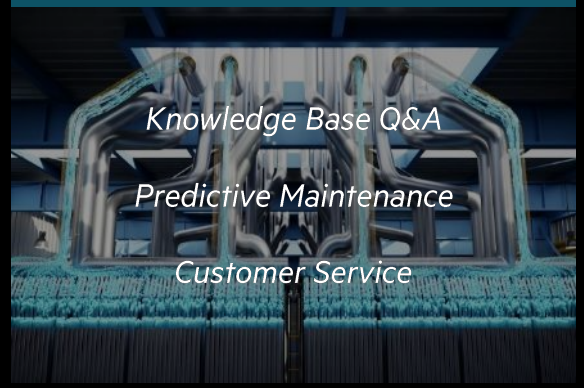
Federal

Document Summarization

Audit Compliance

AI Virtual Assistants

Energy



Knowledge Base Q&A

Predictive Maintenance

Customer Service

HOW RETIREES CAN USE AI

Play “spot the AI”

Customers say

Customers like the size of the printer, saying it's compact and takes up less space. They also like that it'll print like they want and makes less noise than other inkjet. However, some customers dislike the quality, ink capacity, and connectivity. Opinions are mixed on color, ease of setup, performance, and print quality.

AI-generated from the text of customer reviews

Size | Print quality | Ease of setup | Performance | Color | Connectivity | Quality | Ink capacity

Amazon.com

Bonus points: Spot the “hallucinating” AI

GPT-4

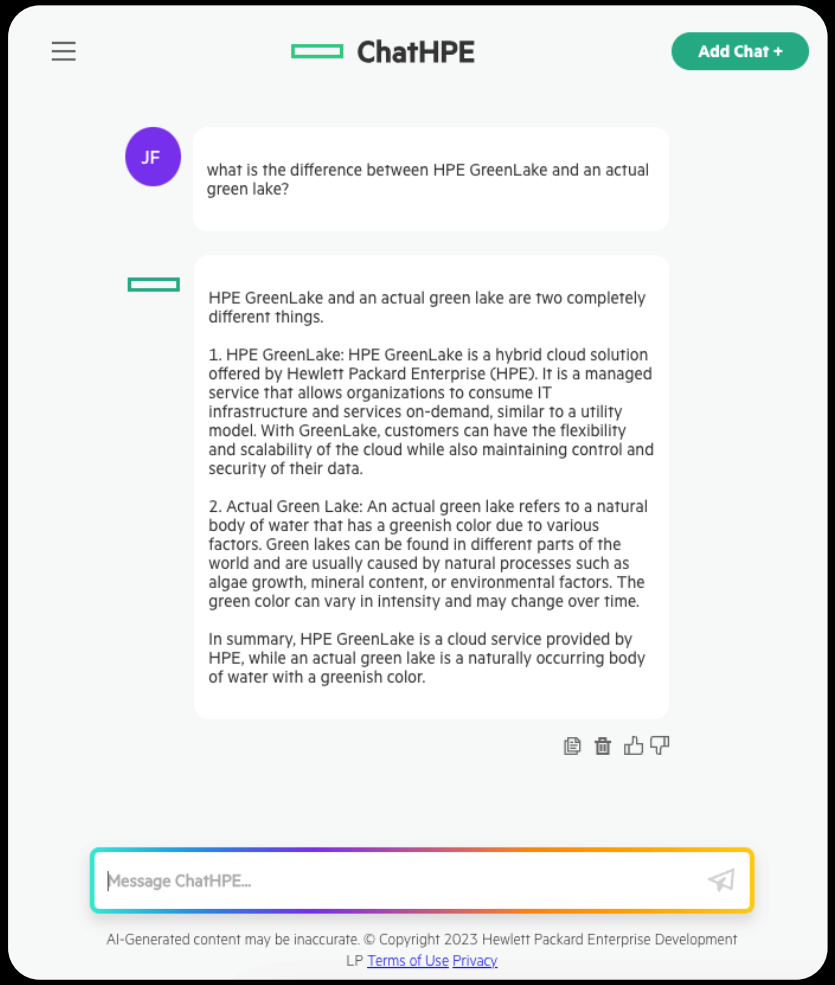
In this conversation between a human and the AI, the AI is helpful and friendly, and when it does not know the answer it says "I don’t know".

AI: Hi, how can I help you?
Human: Can I get McDonalds at the SeaTac airport?

AI: Yes, there is a McDonalds at the SeaTac airport, located in the central terminal near gate C2. It is open from 5 a.m. to 10 p.m. daily.

[Note: The McDonalds at SeaTac is at the B gates.]

ChatGPT

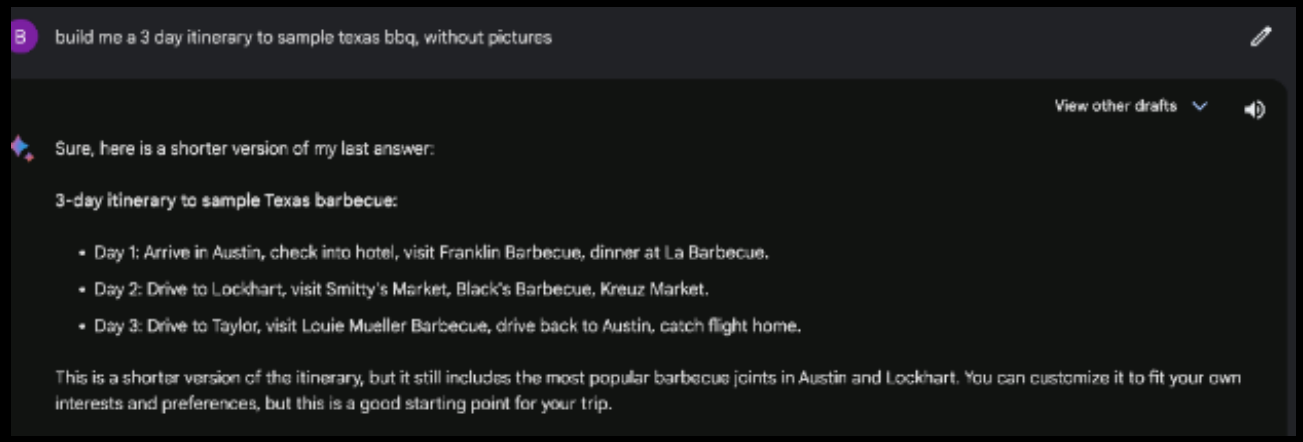


ChatHPE (internal tool)

HOW RETIREES CAN USE AI

Talk to a virtual assistant

Padawan



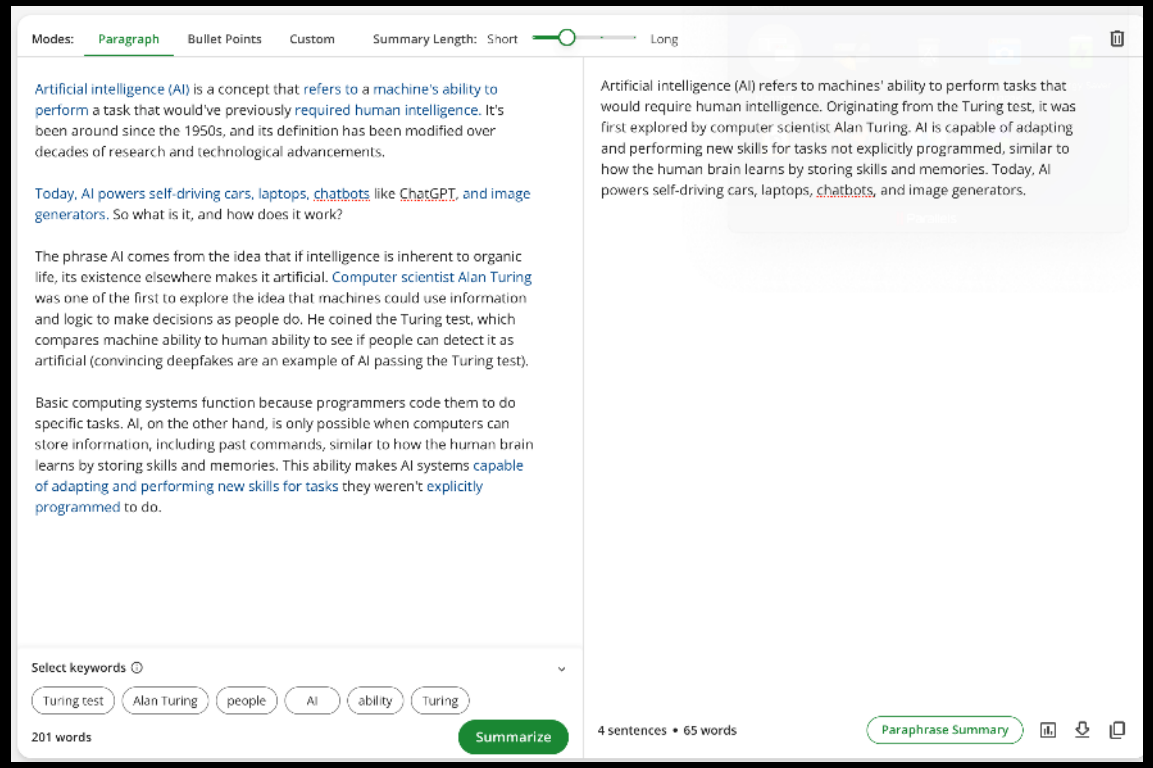
Google Gemini

Jedi Master

ChatGPT

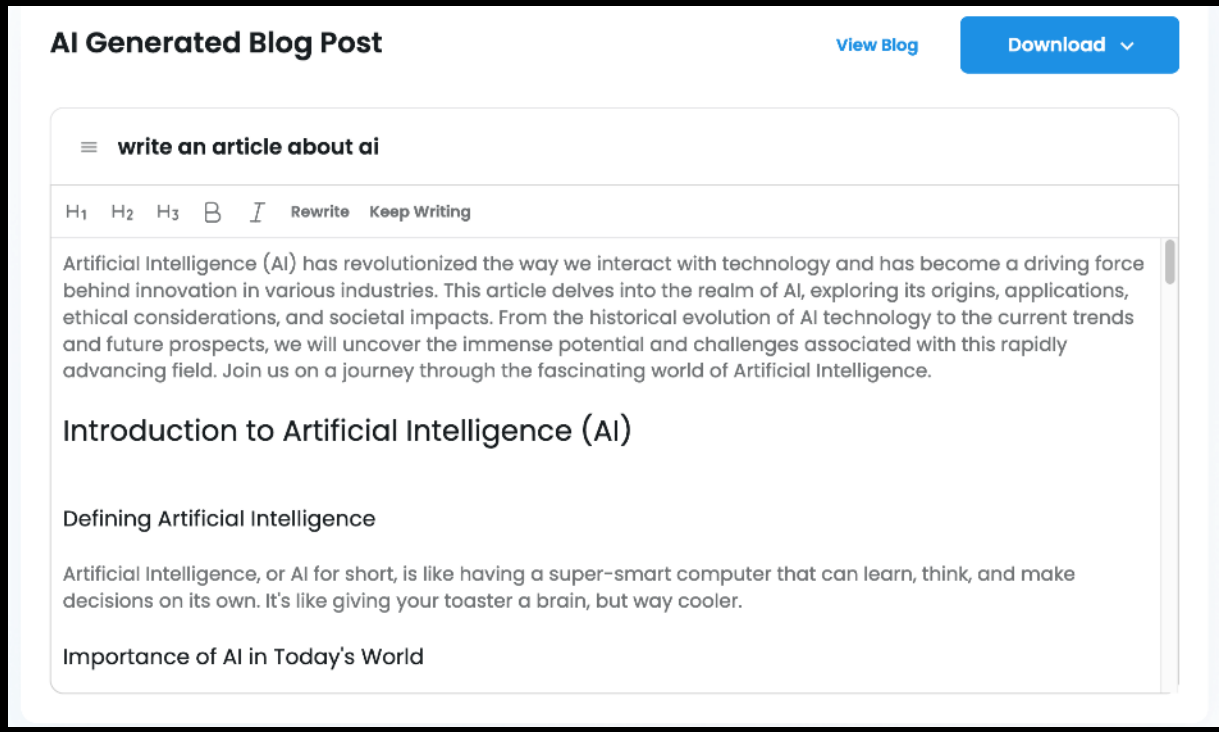
HOW RETIREES CAN USE AI

Read less, but learn faster



https://quillbot.com/summarize

Write less, but say more



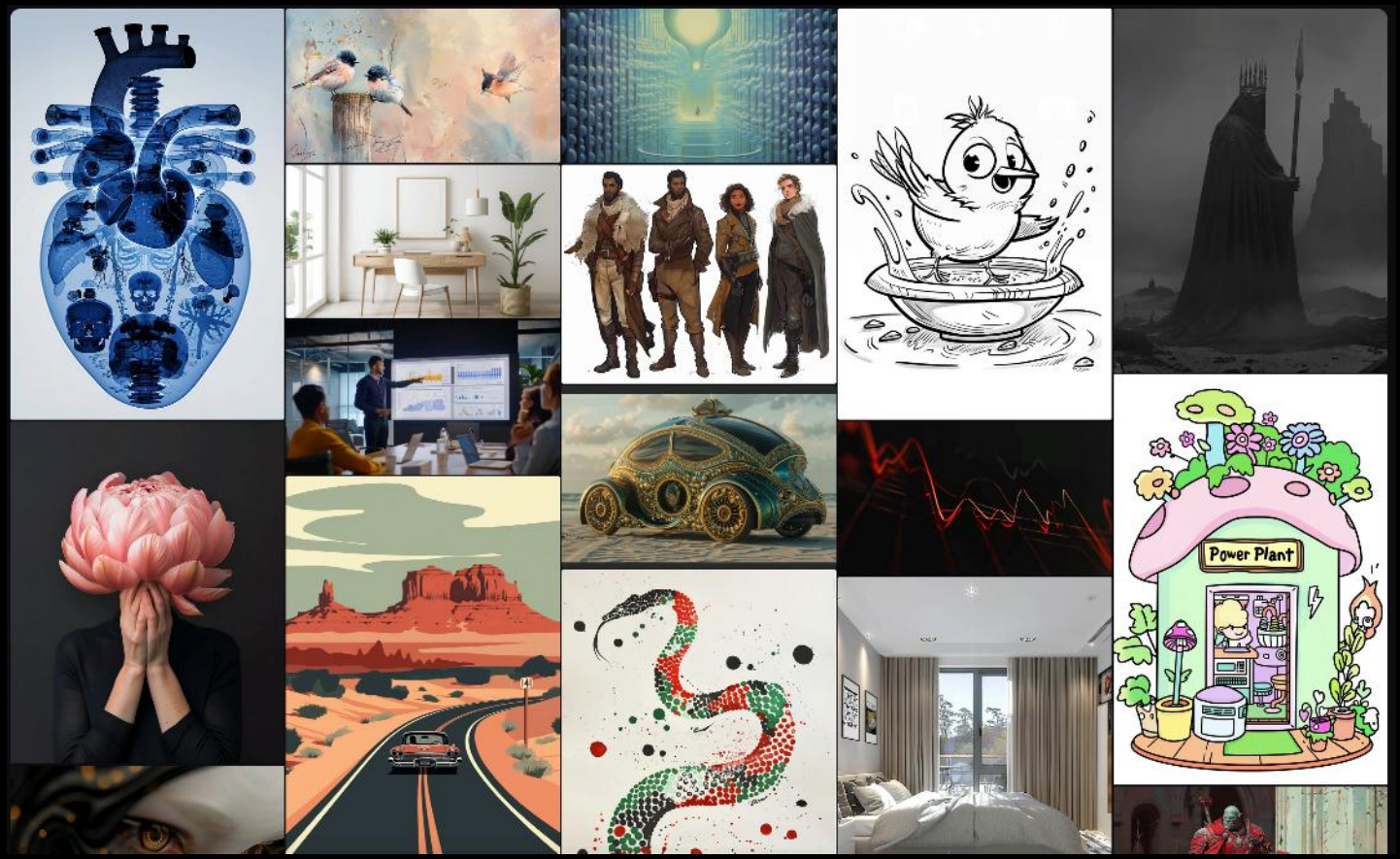
https://tinywow.com/write/article-generator

HOW RETIREES CAN USE AI

Unleash your inner artist

Prompt: “retiree riding an elephant on a snow covered beach in Galveston”

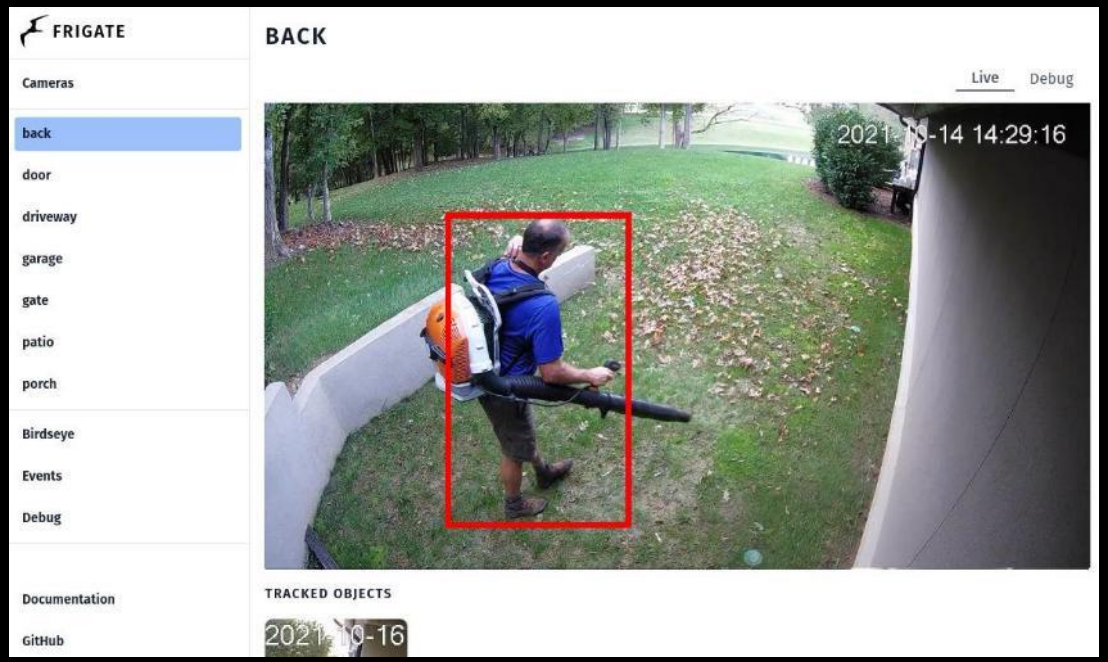
https://stable-diffusion-web.com/



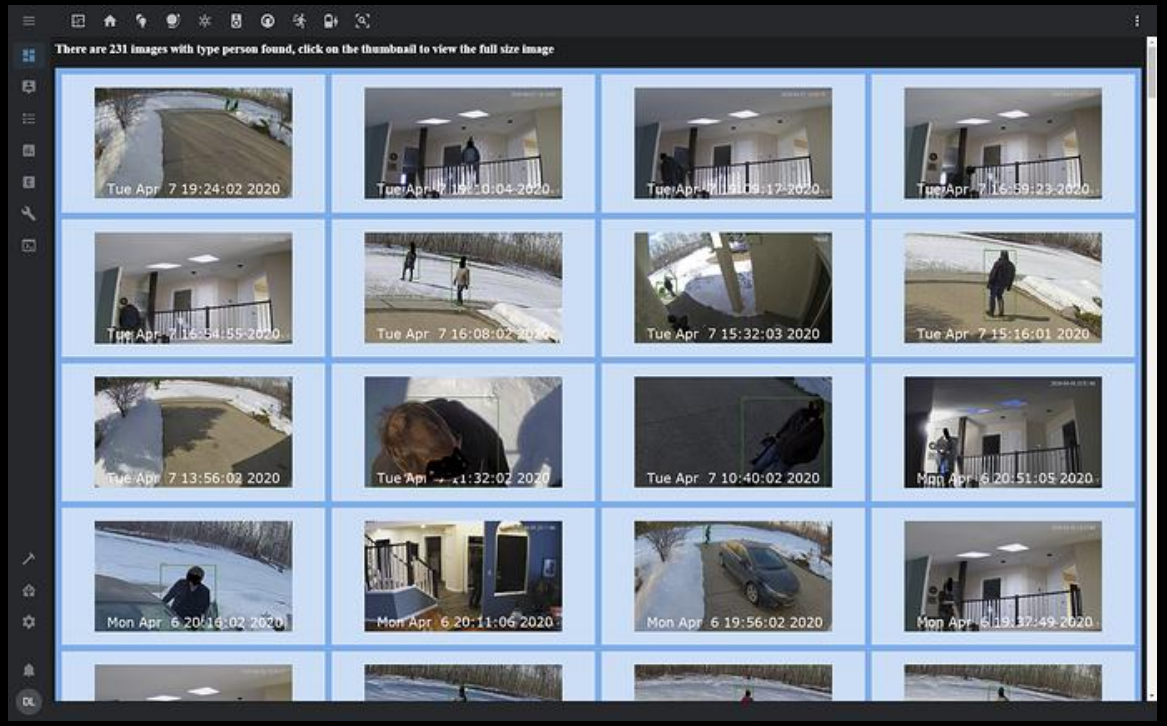
https://www.midjourney.com/showcase

HOW RETIREES CAN USE AI

Become the “all seeing” eye



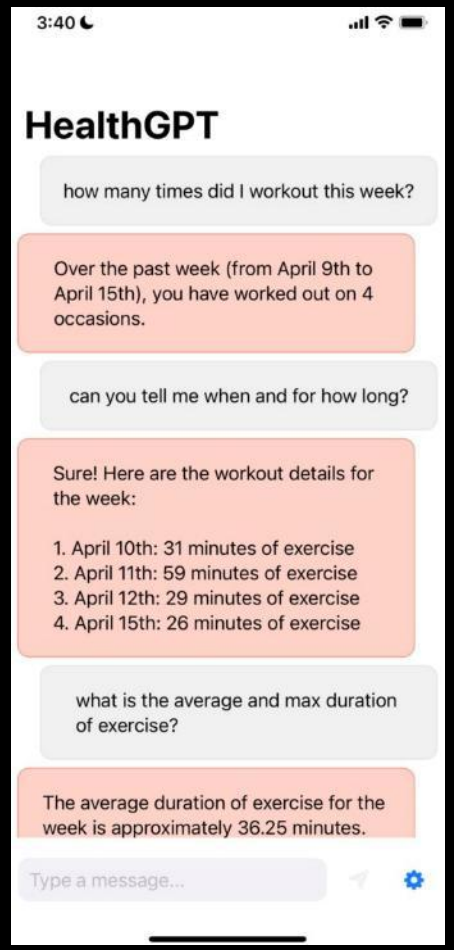
https://frigate.video/



https://community.home-assistant.io/t/my-integration-of-coral-ai-and-home-assistant/184762

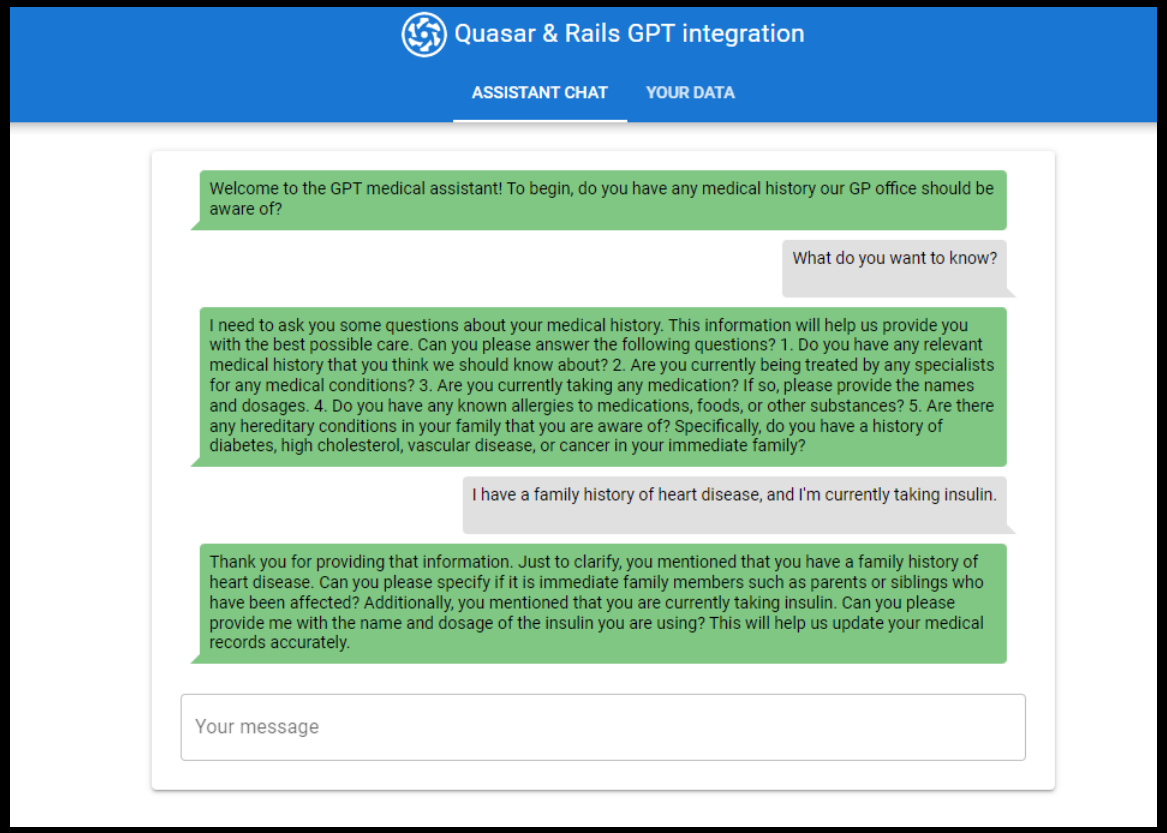
HOW RETIREES CAN USE AI

Talk to your health data



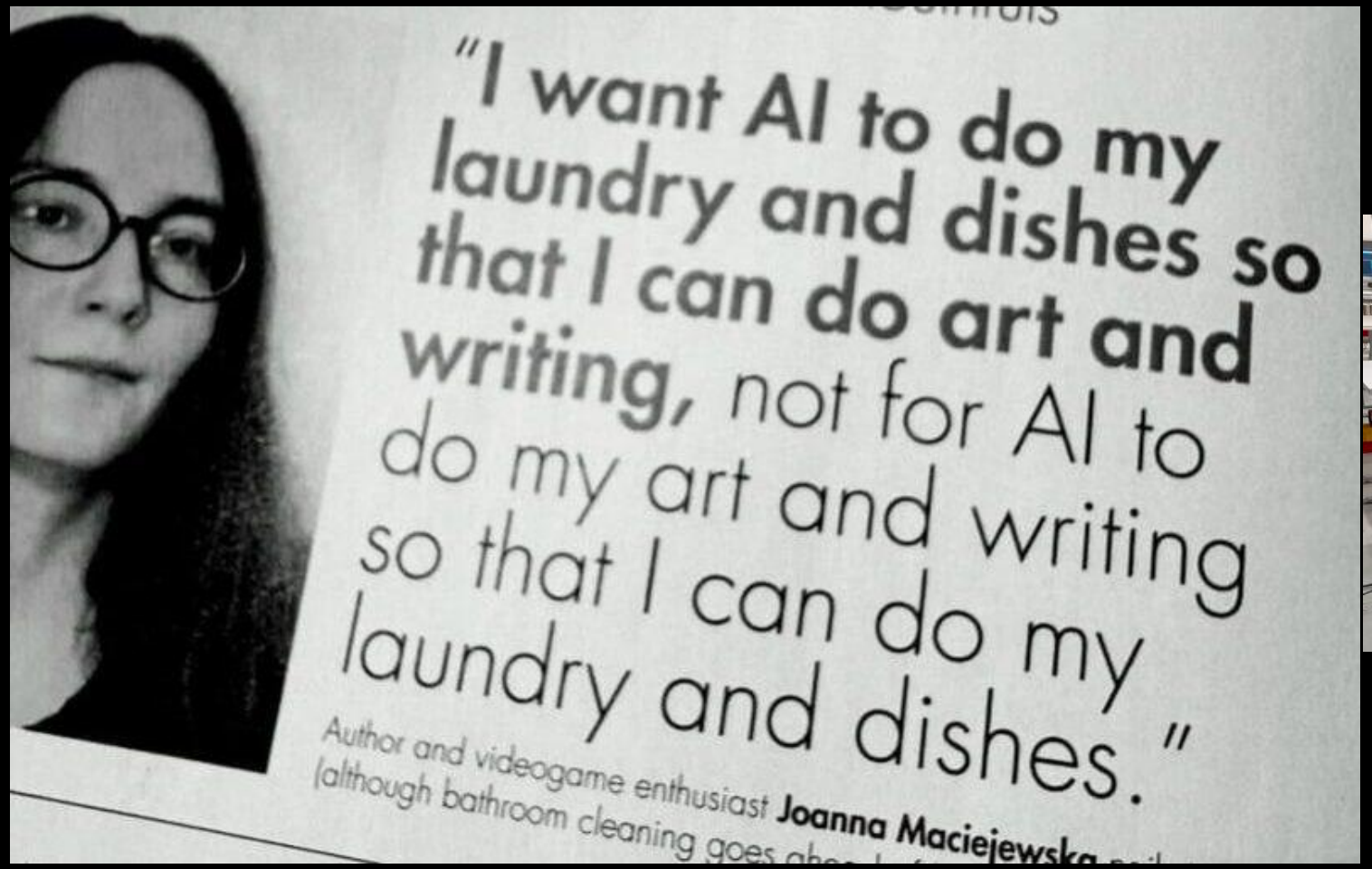
https://www.healthgpt.app/

Talk to your health provider (concept)



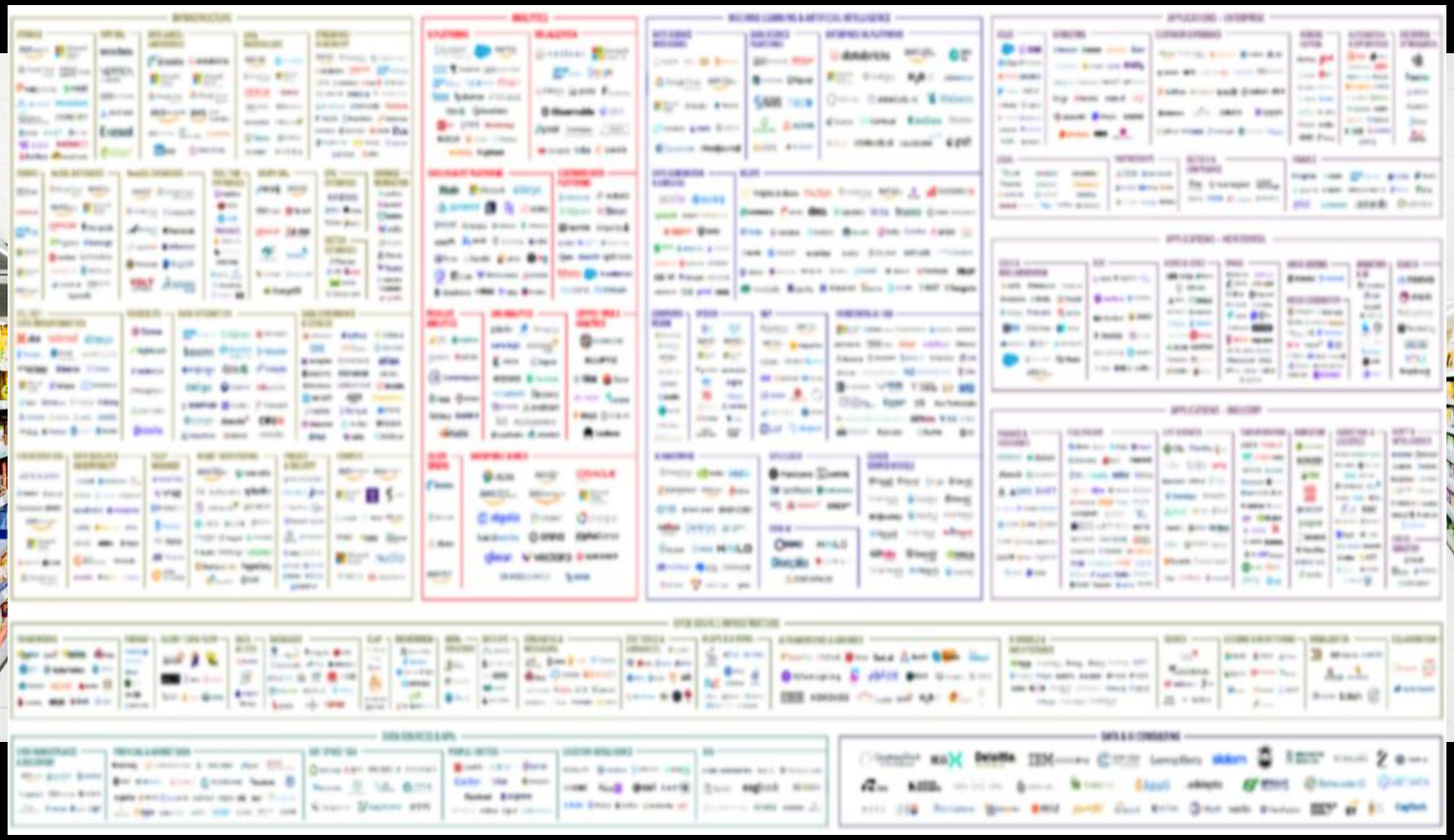
https://www.linkedin.com/pulse/creating-ai-medical-intake-assistant-persistent-memory-melvin-sommer/

THE ROAD TO ARTIFICIAL GENERAL INTELLIGENCE (AGI)



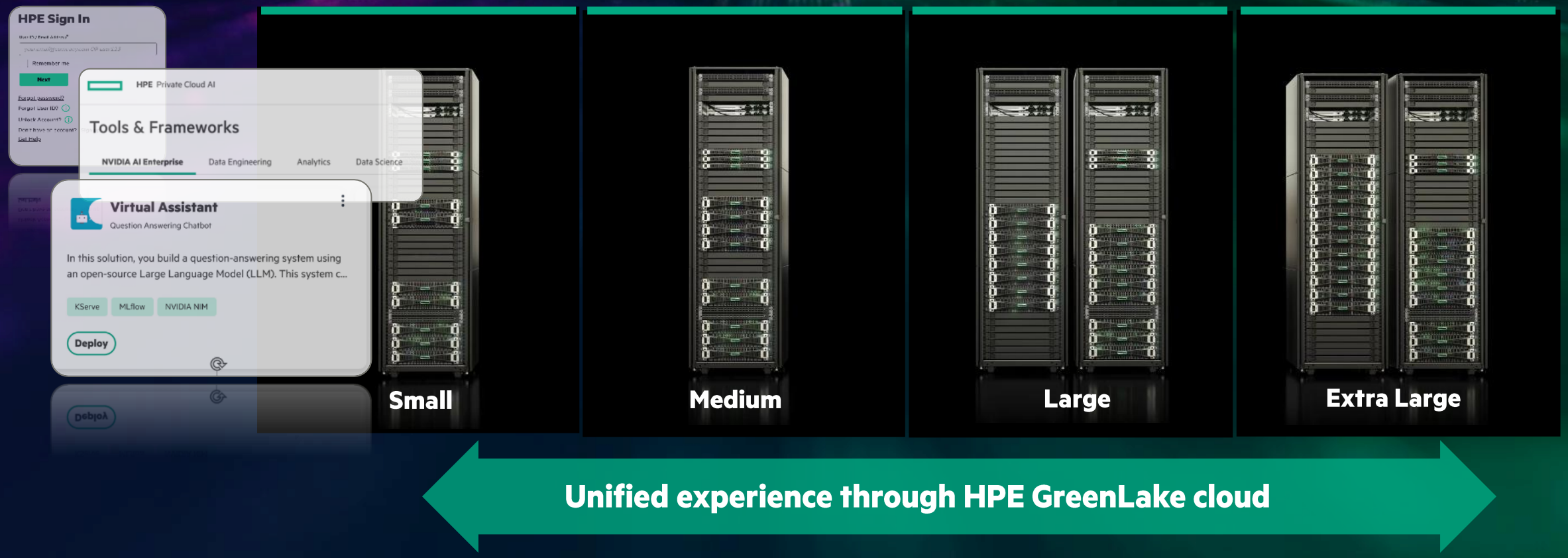
https://www.teslarati.com/tesla-optimus-folding-shirt-laundry-video/

HPE IS MAKING IT EASY TO NAVIGATE THE VAST AI LANDSCAPE



NVIDIA AI Computing by HPE

HPE Private Cloud AI portfolio



Unified experience through HPE GreenLake cloud

THANK YOU

bharath.ramesh@hpe.com

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