



Driving Draper's AI Infrastructure Transformation

Troy Lau Ph.D.

Director – Digital Technologies and Sciences

Head of AI

Cloud Connect Summitt

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Humanity's greatest technical achievement?



Mastering Flight



Integrated Circuits



Submarine-launched Missiles



Vaccines

Draper's National Footprint



ALABAMA

Huntsville

COLORADO

Aurora

FLORIDA

St. Petersburg | Port Canaveral | Titusville

INDIANA

Odon

MASSACHUSETTS

Cambridge | Bedford | Lowell | Pittsfield | Wilmington

TEXAS

Houston

UTAH

Clearfield | Hill AFB

VIRGINIA

Reston

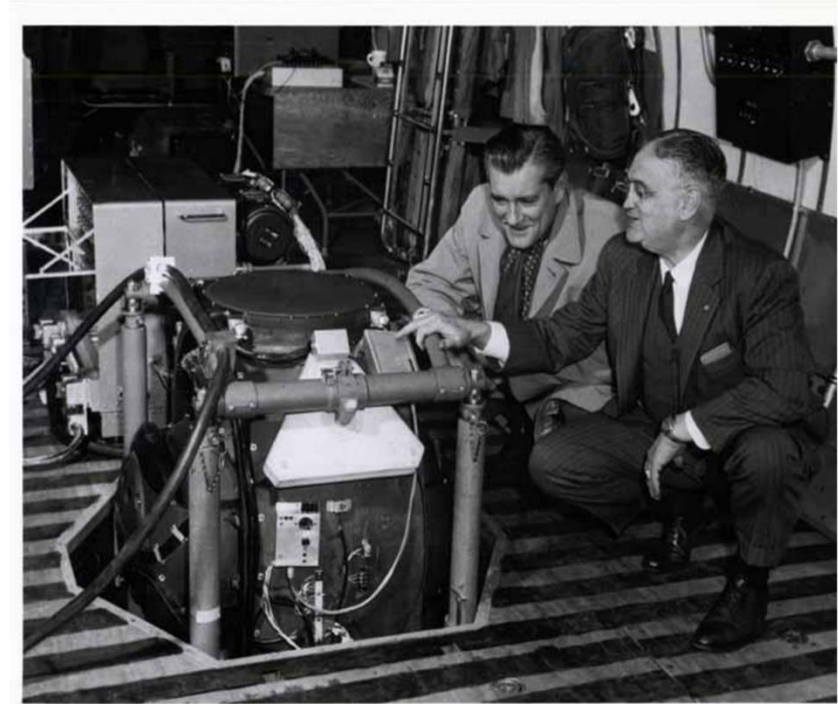
WASHINGTON, D.C.

A Historic Culture

- A 60 + year old organization
- Nearly 3000 employees
- Builds critical advanced hardware and software technology for national security

Draper has navigated

- Personal Computing Revolution
- Internet Revolution
- Microelectronics Revolution
- AI...



U.S. Defense Contractor AI Cybersecurity & Information Risks



**Conceptual visualization of high-level cyber risks.

The Tradeoffs of On-Premises vs. Cloud AI/LLM Services

	Pros	Cons
On-Prem 	• Data Security • Control and Customizability • Usage Costs	• Upfront Initial Investment • Scaling Costs • Network Integration Complexity
Cloud 	• On-demand scalability • Start-up costs • Maintenance costs	• Data Security • Token Costs • Provider Dependence

It Starts with DraperGPT

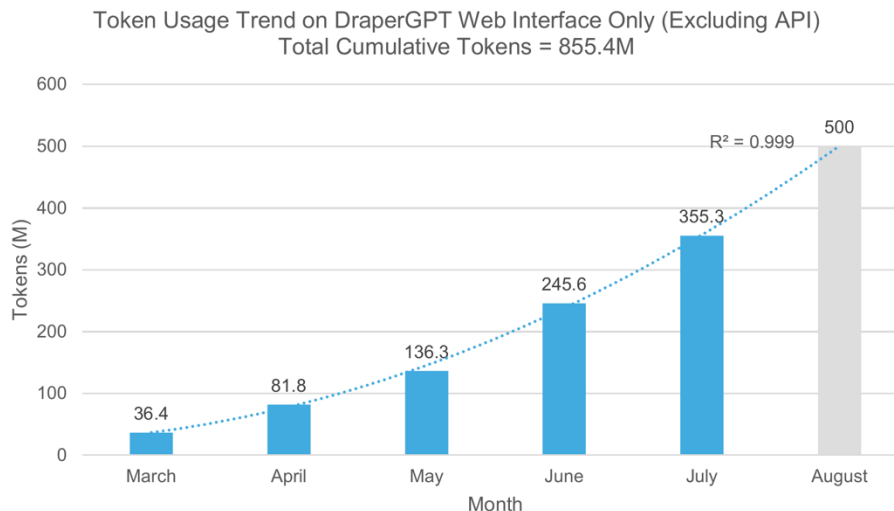
- **On-Premises (bare-metal) Server**
 - Draper-wide, on-network, LLM offering like ChatGPT
 - Draper-wide, on-network, API offering for Project and Tool usage
- **Benefits**
 - Data security and control
 - More flexibility on build-out of (knowledge management) tools
 - More flexibility on program specific uses / APIs
 - Upgradable as LLM/GPT capabilities upgrade
- **Tradeoffs**
 - Harder to implement, but we've done it already with use cases
 - Less performant open-sourced models
 - Maintenance on Draper
 - Eventual replacement of server



Six Months in - Strong Development, Growth, and Adoption

- DraperGPT Service Desk
- DraperGPT Resource Center
- Active Mattermost Channel
- 30 Team members
 - AI
 - Devops
 - HCDE – UI/UX
 - Web Front-end
 - Product Management
 - Forward-Looking Research:

Discovering new tools to achieve goals in unexpected ways
 - Interdisciplinary Engineers: *Ensuring engineers effectively adopt and use what we build.*



	April 26'	July 26'
Monthly Tokens (API)	40 Million	2.27 Billion

The Tokenomics Problem (That We Don't Have)

Conservative estimate : Draper will/would have spent \$300k-\$500k in 2026 Token usage, paying for HW and associated costs, in year 1 and early in adoption curve

- FFRDC Government labs blowing through cloud token budgets (Monthly FFRDC Meetings)
- Unable to plan or grow due to uncertain token usage
- Not our problem...

05-29-2026 | NEWS

One company spent half a billion dollars on Claude in a single month: Report comes as AI costs climb

An AI consultant told Axios their client didn't set limits on employees' Claude license usage, resulting in a \$500 million bill.

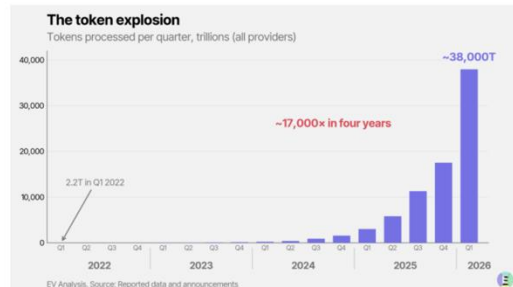
 moneywise

Uber blew its entire 2026 AI budget in 4 months — and one 2-hour coding session alone cost \$1,200

TECHNOLOGY

AI Was Supposed to Save Companies Money. Instead, It's Blowing Up Budgets in a Big Way

A new report from KPMG finds that executives are aghast at their AI bills. It's a warning for any business leader planning to go all-in on the tech.





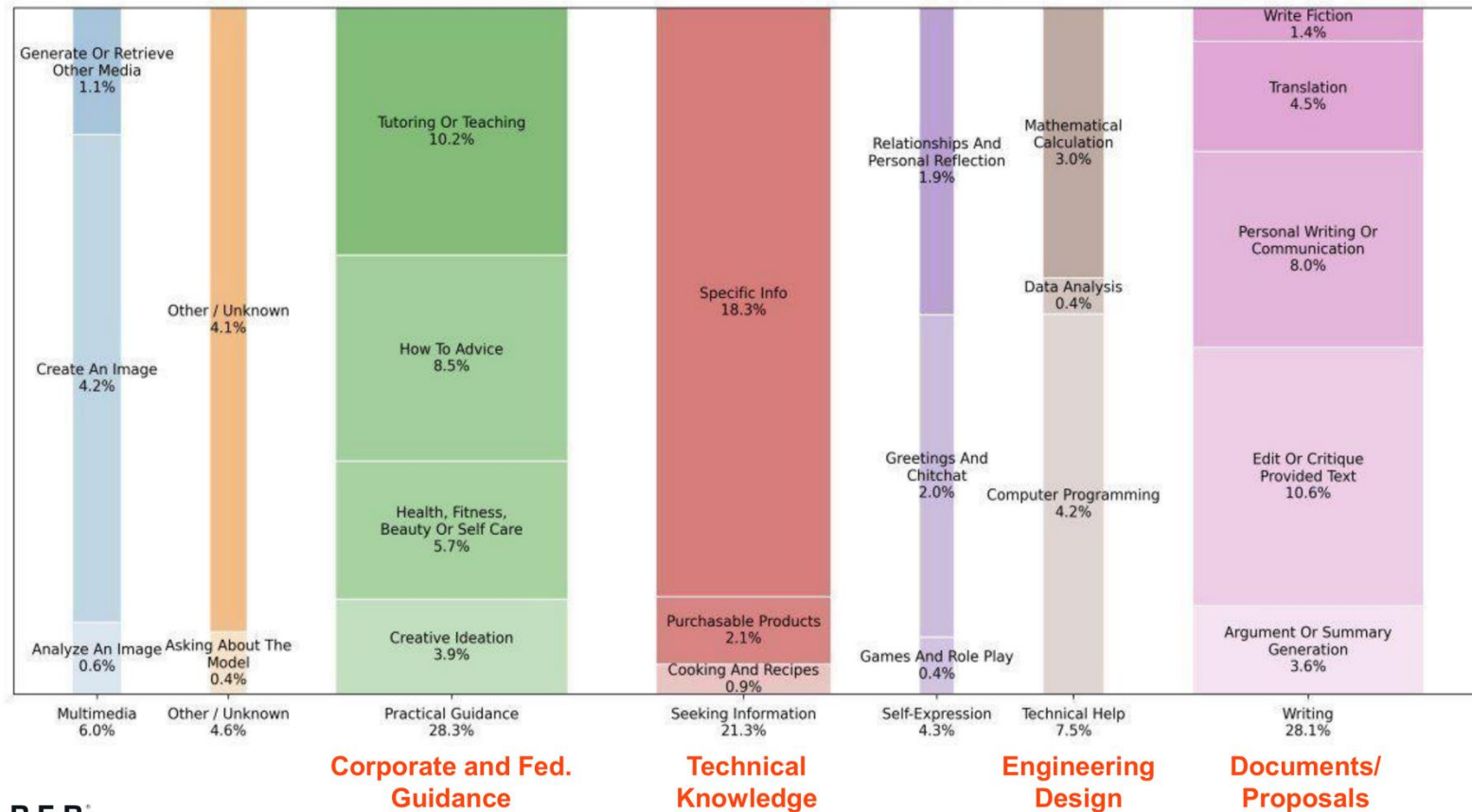
Not Beholde

Anthropic Says It Blocked Possible Efforts to Build Biological Weapons

In a new report, the A.I. start-up added that it could not determine if the research was legitimate or nefarious, leading the company to shut down the work.

The 'Everyday' Uses of LLMs/AI

Chatterji, Aaron, et al. *How people use chatgpt*. No. w34255. National Bureau of Economic Research, 2025.



Draper's AI Pillars

- **Knowledge Management** - Make Draper's 50+ year knowledge base accessible to the staff with proper data organization and governance
 - Engineering knowledge & data
 - Supply chain
- **Productivity** – Enable staff to be more efficient in executing their responsibilities.
 - Proposal Writing
 - Legal
 - Manufacturing
 - Government compliance
 - Information and technology security
- **Design and Development** – Provide a suite of AI agents specifically designed to aid/enhance engineers in executing complex design and development
 - Hardware
 - Electronic systems
 - Software
- **Product Offerings** - Incorporate AI enhanced capabilities as part of our solutions and product offerings

AI & Draper in 2033

Across every stage of the product/project lifecycle

Proposal Writer

Expert & Technology
Historian

Generative
Design

Automated Simulation &
Prototyping

Autonomous
Production

Predictive and
Pervasive Maintenance

Powering all functions

- Proposal writing and knowledge management
- Cyber and information security agents
- Legal and contract assistants
- Open internet, on-network, and classified pipes

Within a safe, secure, legal, and enabling framework

Data
Governance

Information
Security

Legally
Compliant
Frameworks

Government
Compliance

National
Security

Contractual

AI: The engine for collaborative intelligence, accelerating idea generation, technology development, and advanced production.