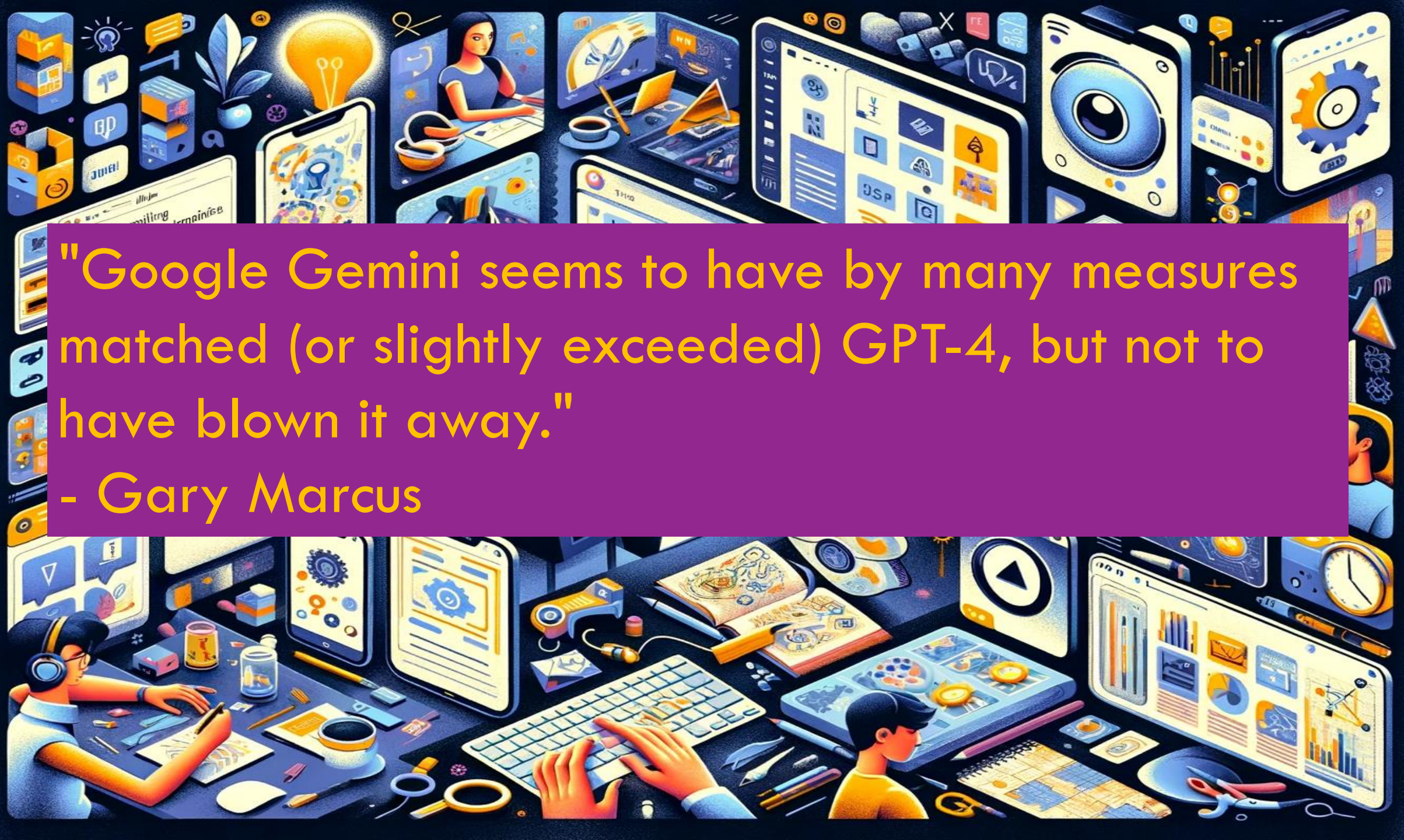
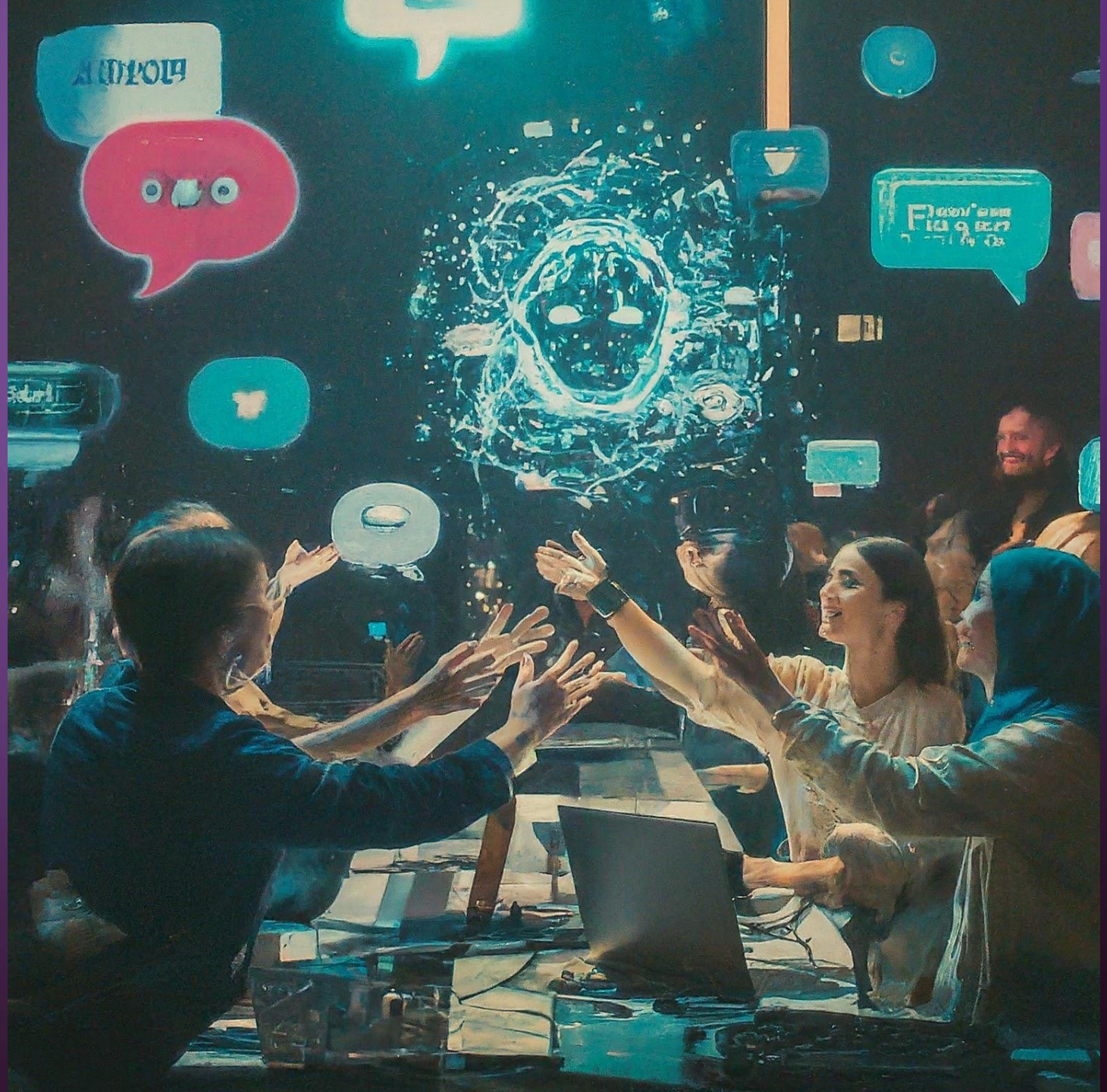
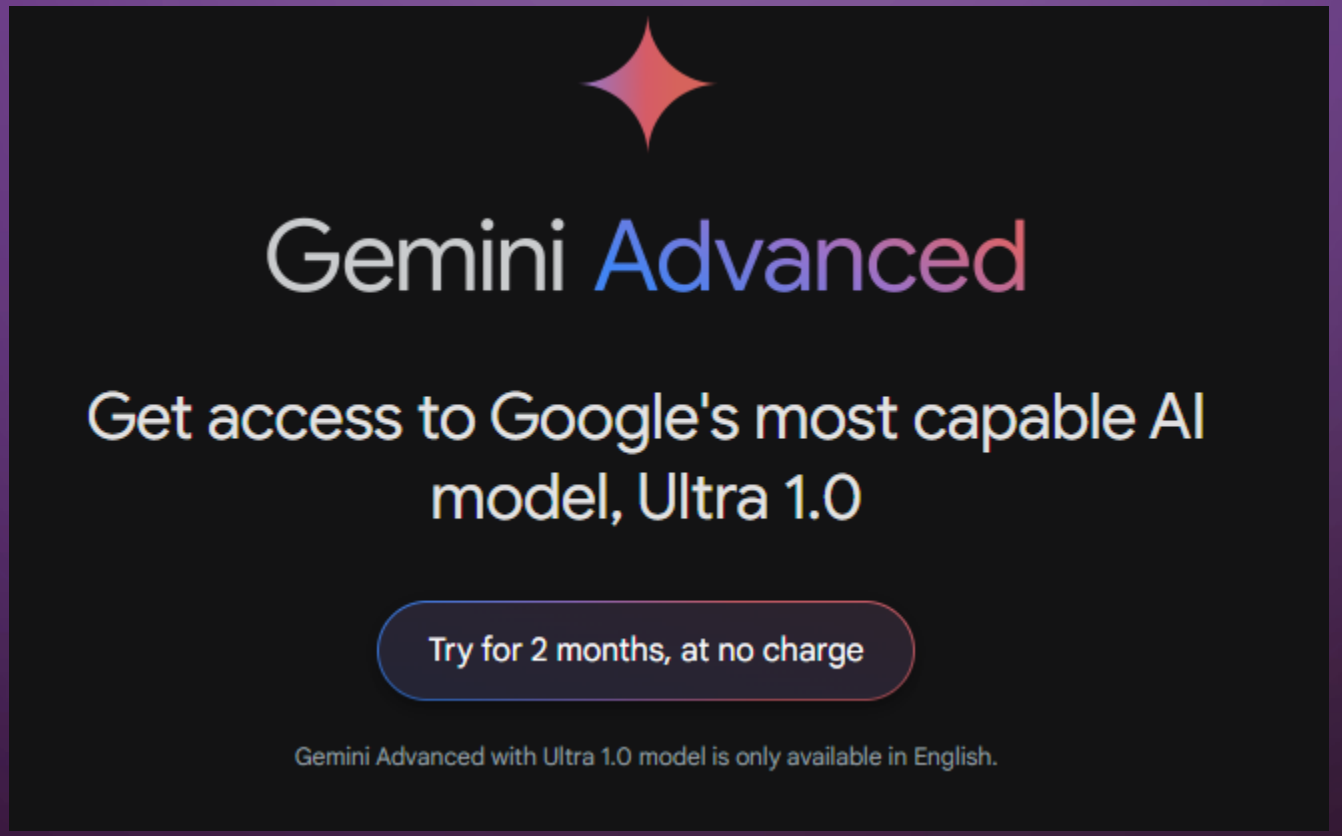
# HOW TO REALLY USE GOOGLE GEMINI ADVANCED


"Google Gemini seems to have by many measures matched (or slightly exceeded) GPT-4, but not to have blown it away."
- Gary Marcus

# GETTING GOOGLE GEMINI ADVANCED



# GEMINI ULTRA 1.0



# GOOGLE ONE AI PREMIUM

## Gemini Advanced

Get Gemini Advanced and more with a Google One AI Premium pla

~~$19.99~~ $0 for 2 months,
$19.99/month after

Gemini Advanced

- With our most capable AI model, Ultra 1.0
- State-of-the-art performance
- Designed for highly complex tasks

Also included in this Google One subscription

- 2 TB of storage
- Available soon: Gemini in Gmail, Docs, and more
- Other Google One Premium benefits

# PRICING

Monthly | Annual Save 16%

## AI Premium
## 2 TB
$19.99 / month
Billed monthly
Current plan

Includes
- 2 TB of storage
- Gemini Advanced
- Available soon: Gemini in Gmail, Docs, and more
- All other benefits in the Premium plan

## Premium
## 5 TB
$24.99 / month
Billed monthly
Upgrade

Get 10% back in Store credit on Google Store purchases

Google One includes
- 5 TB of storage
- Access to Google experts
- Share with up to 5 others
- More Google Photos editing features
- Extra member benefits
- 10% back in the Google Store
- Google Workspace premium features
- VPN for multiple devices
- Monitor the dark web

## Premium
## 10 TB
$49.99 / month
Billed monthly
Upgrade

Get 10% back in Store credit on Google Store purchases

Google One includes
- 10 TB of storage
- Access to Google experts
- Share with up to 5 others
- More Google Photos editing features
- Extra member benefits
- 10% back in the Google Store
- Google Workspace premium features
- VPN for multiple devices
- Monitor the dark web

## Premium
## 20 TB
$99.99 / month
Billed monthly
Upgrade

Get 10% back in Store credit on Google Store purchases

Google One includes
- 20 TB of storage
- Access to Google experts
- Share with up to 5 others
- More Google Photos editing features
- Extra member benefits
- 10% back in the Google Store
- Google Workspace premium features
- VPN for multiple devices
- Monitor the dark web

# You're getting more out of Google

As a Google One member, you can enjoy special offers and advanced features across Google.

## Your current benefits

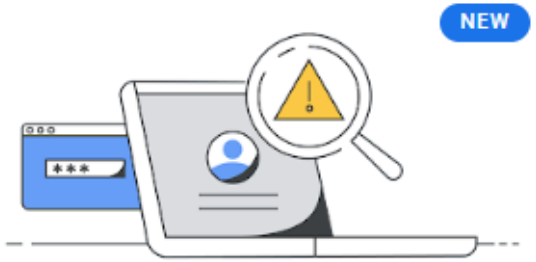
6 available


AVAILABLE NOW

### Get more features in Google Photos

Bring your favorite moments to life with more Google Photos editing tools for Android and iOS, including Magic Eraser.

View details




AVAILABLE NOW

### Monitor the dark web

Get alerts anytime a data breach exposes info like your SSN (US only), date of birth, and phone number on the dark web.

View details


AVAILABLE NOW

### Premium video calling features

Stay connected with longer group video calls and even more features in Google Meet.

View details

# You've got 2 TB of storage

Storage in Google Drive, Gmail, & Google Photos

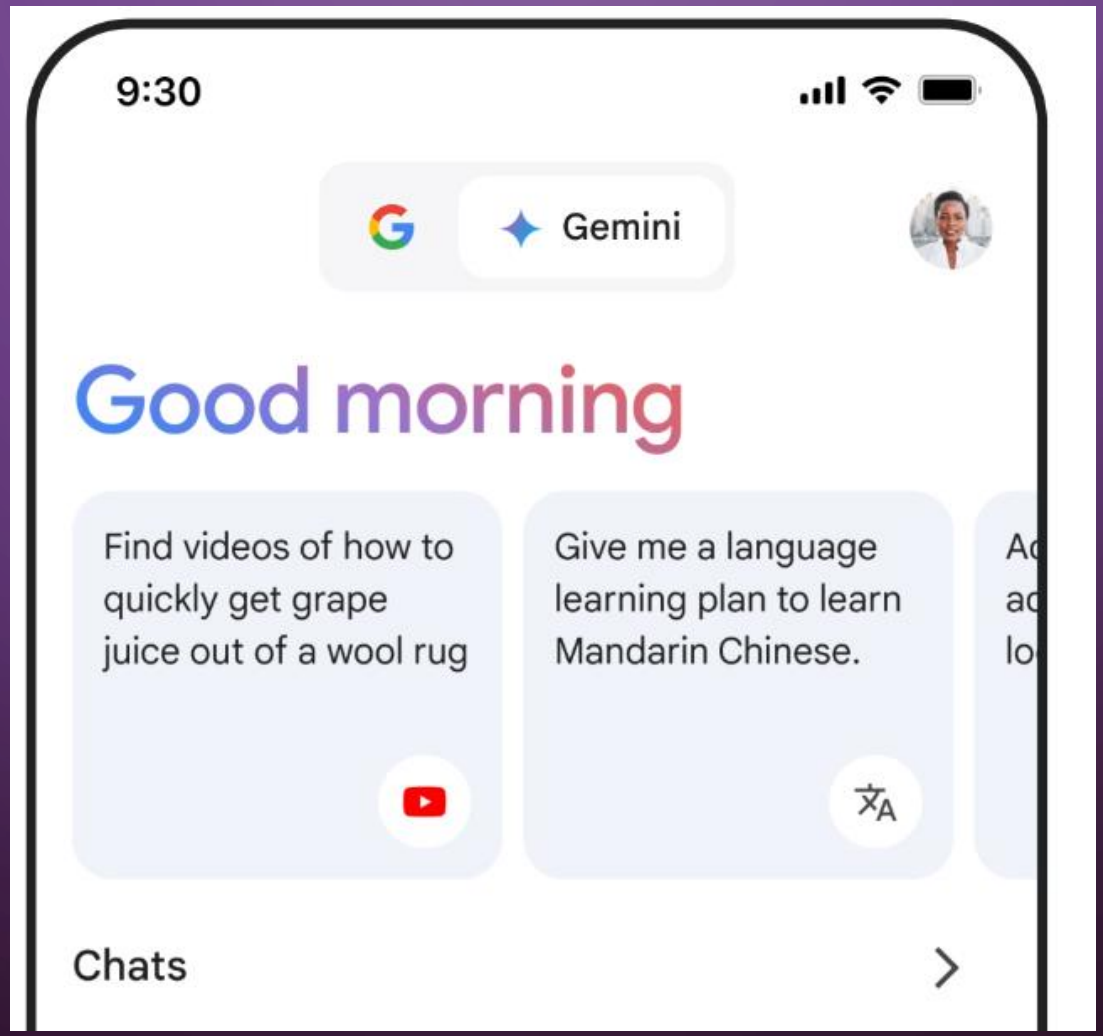
Get more storage

0 GB of 2 TB used

STORAGE DETAILS

| | |
|---|---|
| Google Drive | 0 GB |
| Gmail | 0 GB |
| Google Photos | 0 GB |

# USE THE WEBSITE, GET THE MOBILE APP



# WHY GOOGLE GEMINI ADVANCED?

# BETTER THAN CHATGPT?

Gemini: A Family of Highly Capable Multimodal Models

| | Gemini Ultra | Gemini Pro | GPT-4 | GPT-3.5 | PaLM 2-L | Claude 2 | Inflect-ion-2 | Grok 1 | LLAMA-2 |
|---|---|---|---|---|---|---|---|---|---|
| **MMLU** Multiple-choice questions in 57 subjects (professional & academic) (Hendrycks et al., 2021a) | **90.04%** CoT@32* <br> 83.7% 5-shot | 79.13% CoT@8* <br> 71.8% 5-shot | 87.29% CoT@32 (via API**) <br> 86.4% 5-shot (reported) | 70% 5-shot | 78.4% 5-shot | 78.5% 5-shot CoT | 79.6% 5-shot | 73.0% 5-shot | 68.0%*** |
| **GSM8K** Grade-school math (Cobbe et al., 2021) | **94.4%** Maj1@32 | 86.5% Maj1@32 | 92.0% SFT & 5-shot CoT | 57.1% 5-shot | 80.0% 5-shot | 88.0% 0-shot | 81.4% 8-shot | 62.9% 8-shot | 56.8% 5-shot |
| **MATH** Math problems across 5 difficulty levels & 7 subdisciplines (Hendrycks et al., 2021b) | **53.2%** 4-shot | 32.6% 4-shot | 52.9% 4-shot (via API**) <br> 50.3% (Zheng et al., 2023) | 34.1% 4-shot (via API**) | 34.4% 4-shot | — | 34.8% | 23.9% 4-shot | 13.5% 4-shot |
| **BIG-Bench-Hard** Subset of hard BIG-bench tasks written as CoT problems (Srivastava et al., 2022) | **83.6%** 3-shot | 75.0% 3-shot | 83.1% 3-shot (via API**) | 66.6% 3-shot (via API**) | 77.7% 3-shot | — | — | — | 51.2% 3-shot |
| **HumanEval** Python coding tasks (Chen et al., 2021) | **74.4%** 0-shot (PT****) | 67.7% 0-shot (PT****) | 67.0% 0-shot (reported) | 48.1% 0-shot | — | 70.0% 0-shot | 44.5% 0-shot | 63.2% 0-shot | 29.9% 0-shot |
| **Natural2Code** Python code generation. (New held-out set with no leakage on web) | **74.9%** 0-shot | 69.6% 0-shot | 73.9% 0-shot (via API**) | 62.3% 0-shot (via API**) | — | — | — | — | — |
| **DROP** Reading comprehension & arithmetic. (metric: F1-score) (Dua et al., 2019) | **82.4** Variable shots | 74.1 Variable shots | 80.9 3-shot (reported) | 64.1 3-shot | 82.0 Variable shots | — | — | — | — |
| **HellaSwag** (validation set) Common-sense multiple choice questions (Zellers et al., 2019) | 87.8% 10-shot | 84.7% 10-shot | **95.3%** 10-shot (reported) | 85.5% 10-shot | 86.8% 10-shot | — | 89.0% 10-shot | — | 80.0%*** |
| **WMT23** Machine translation (metric: BLEURT) (Tom et al., 2023) | **74.4** 1-shot (PT****) | 71.7 1-shot | 73.8 1-shot (via API**) | — | 72.7 1-shot | — | — | — | — |

# THE JURY IS STILL OUT

| Benchmark | GPT-4 Prompt | GPT-4 Results | Gemini Ultra Results |
|---|---|---|---|
| MMLU | Medprompt+ | 90.10% | 90.04% |
| GSM8K | Zero-shot | 95.3% | 94.4% |
| MATH | Zero-shot | 68.4% | 53.2% |
| HumanEval | Zero-shot | 87.8% | 74.4% |
| BIG-Bench-Hard | Few-shot + CoT | 89.0% | 83.6% |
| DROP | Zero-shot + CoT | 83.7% | 82.4% |
| HellaSwag | 10-shot | 95.3% | 87.8% |

# EXPLORING THE INTERFACE

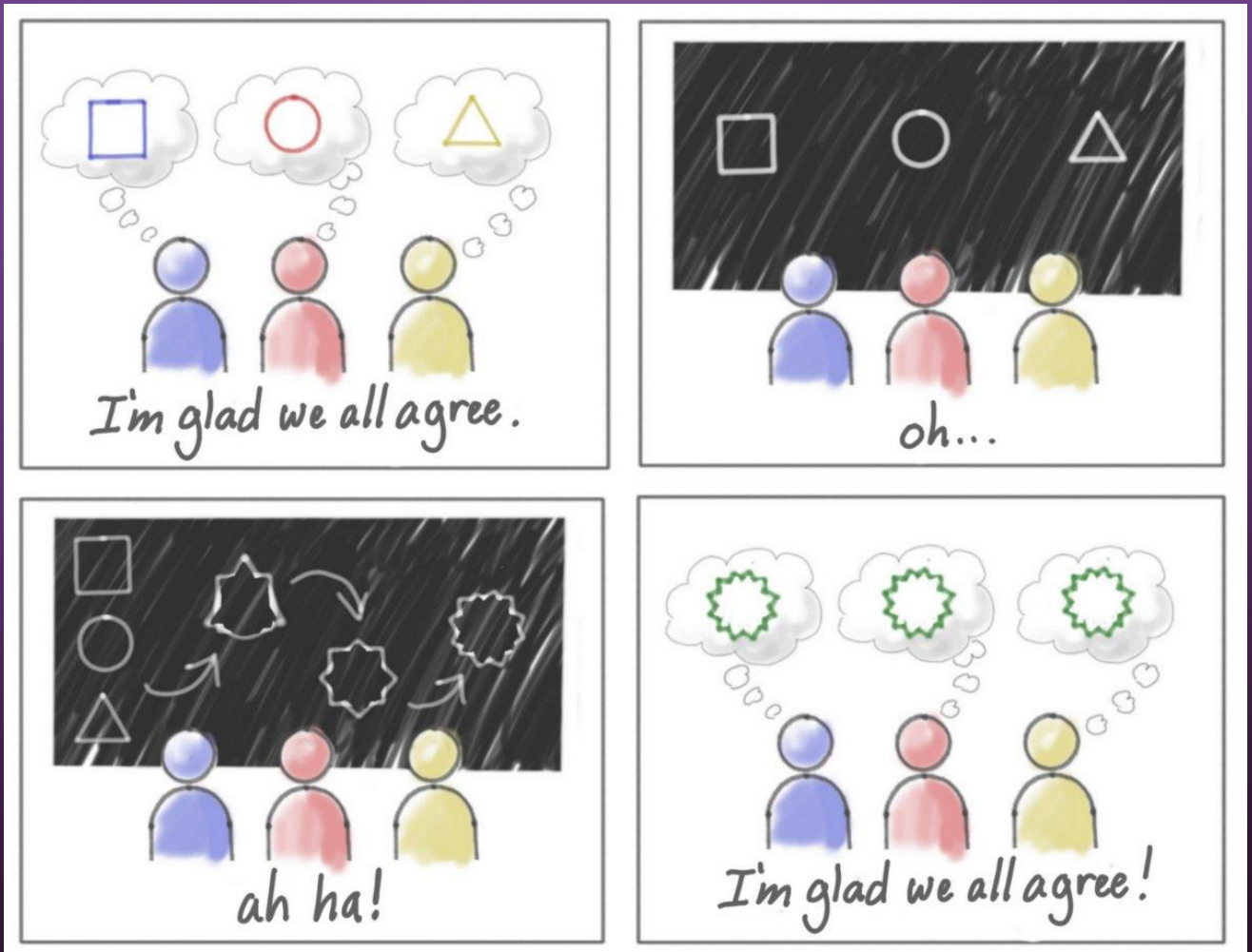
# SPEED

# TEXT

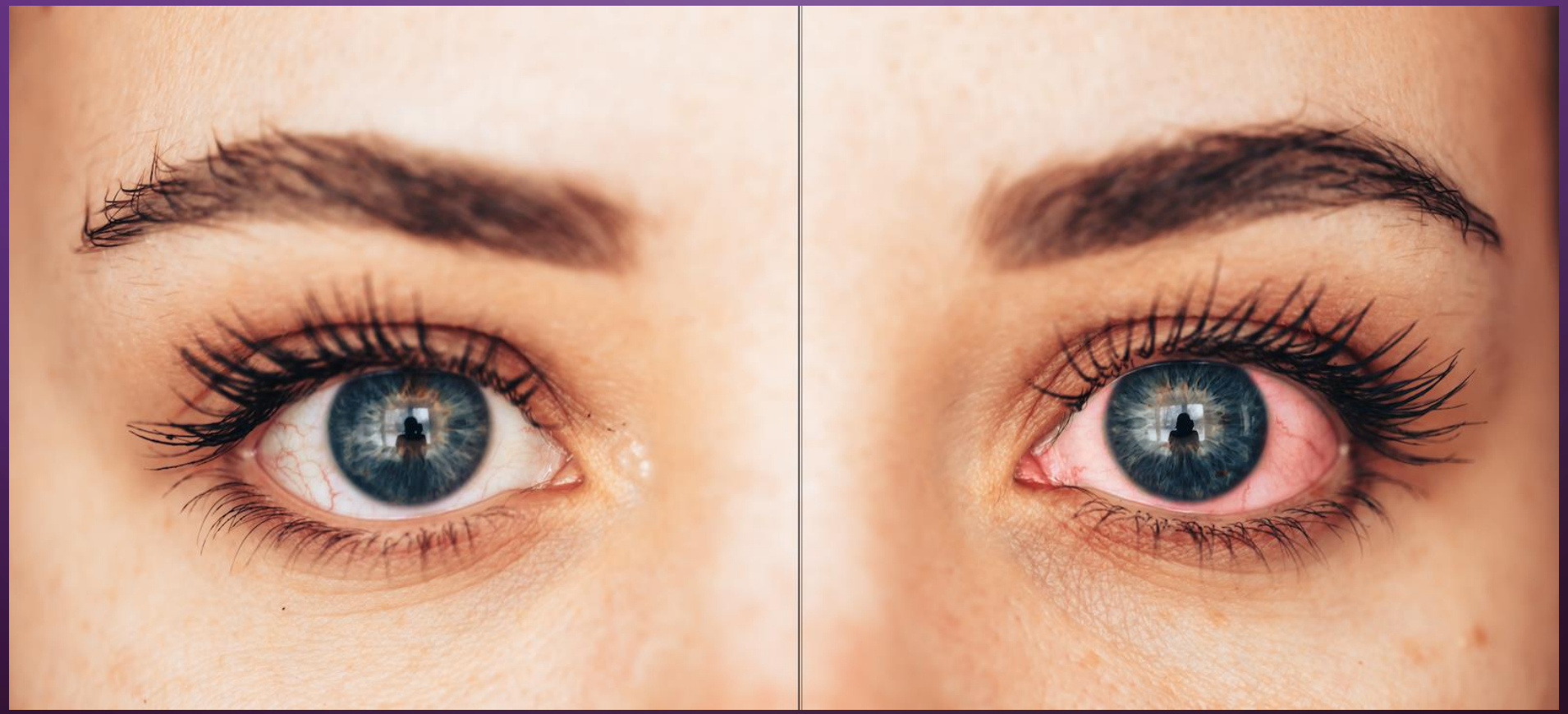
# VISION

# IDENTIFICATION

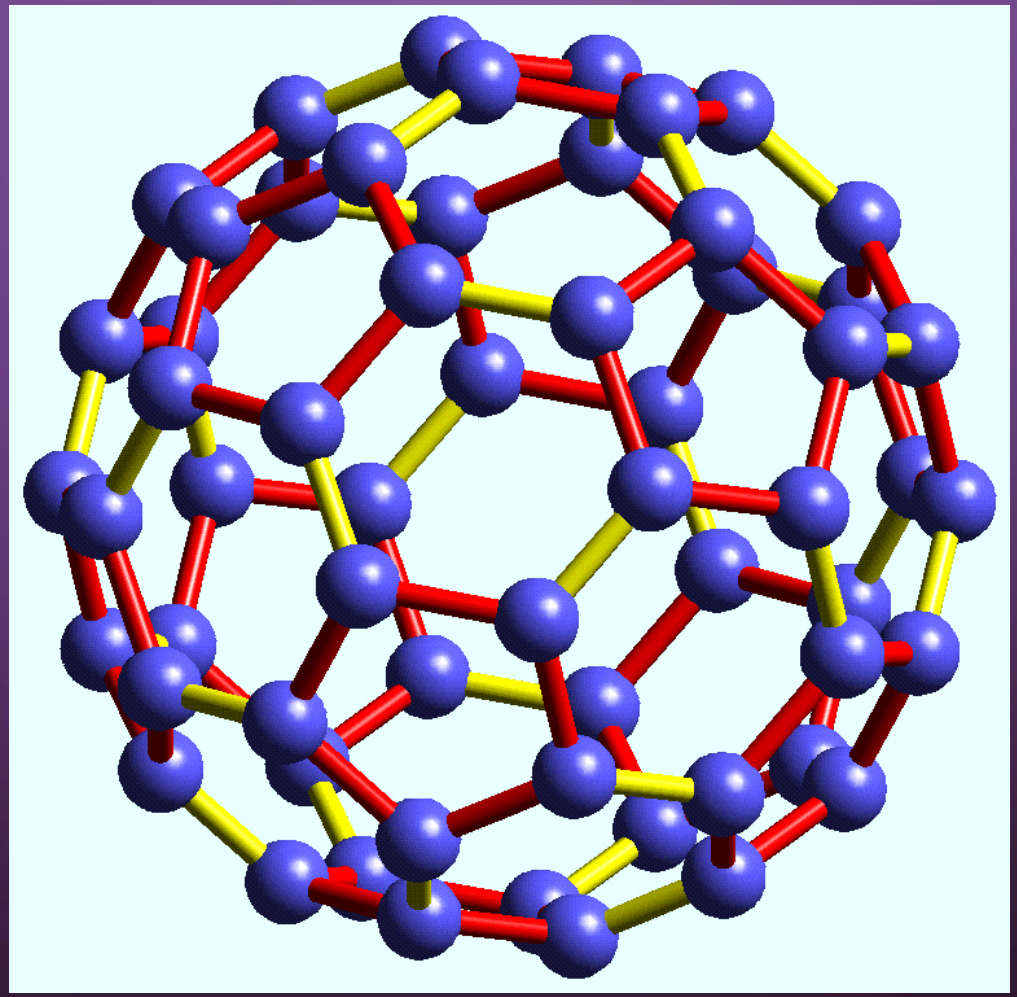
# ABSTRACT IDEAS



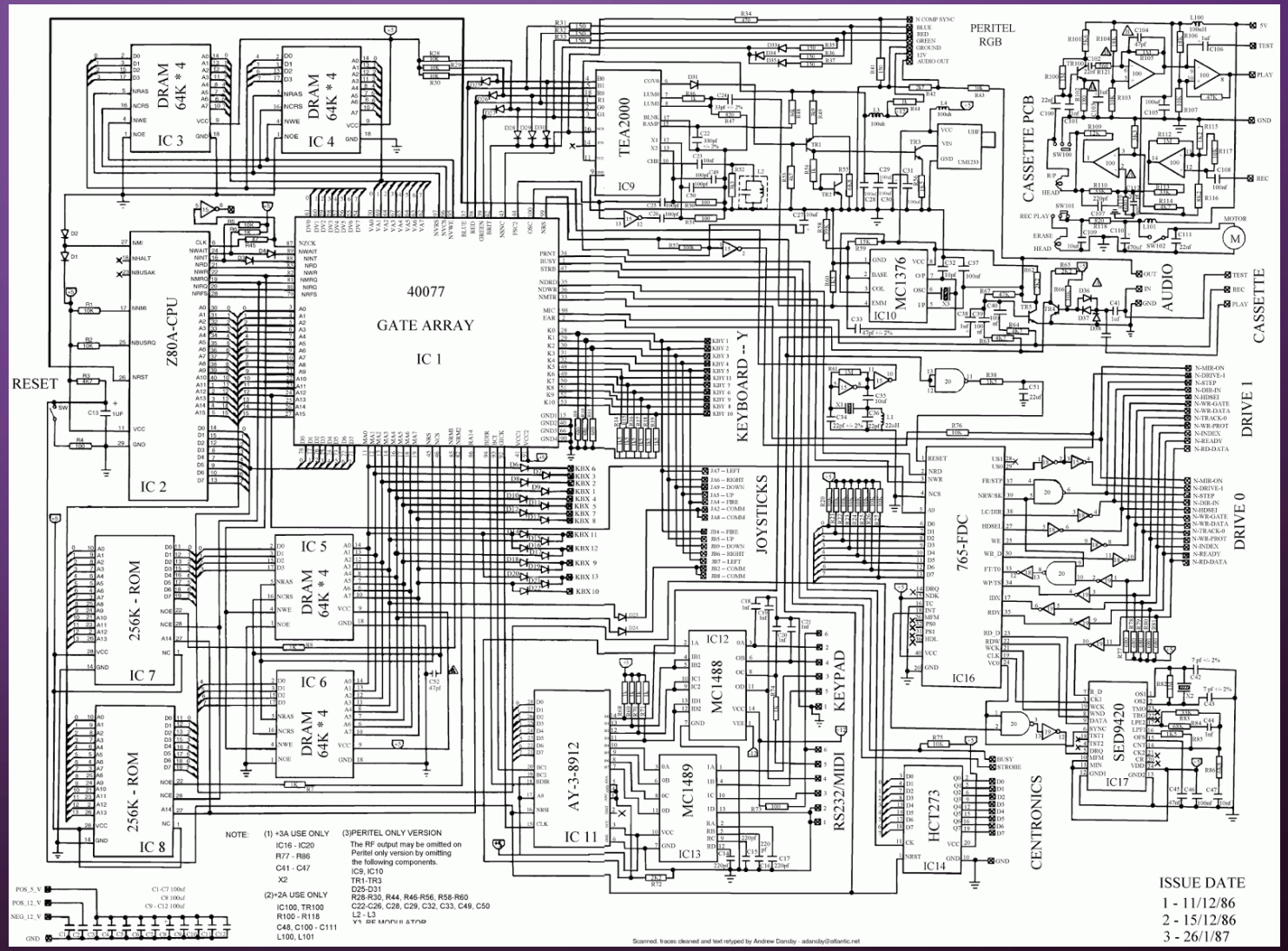
# MEDICAL



# CHEMISTRY



# ELECTRONICS



# PARKING


NO
PARKING
11 A.M. TO 1 P.M.
TUESDAY
STREET CLEANING
TOW AWAY
SCHOOL DAYS
NO STOPPING
MON THRU FRI
7:30 AM THRU 4 PM
SCHOOL DAYS EXCEPTIONS
15 MINUTES
MON THRU FRI
7:30 AM TO 8 AM
SCHOOL BUSINESS
TOW AWAY
SCHOOL DAYS
1 HOUR PARKING
MON THRU FRI
4 PM 6 PM
ONCE PER DAY, PER DISTRICT
DIST. PERMITS 4
EXEMPT
TOW AWAY

# HOMEWORK



**73** The opposite table shows different values of lengths, cross-sectional areas and resistivities for wires that are made of different materials:

| | Wire length $\ell$ (m) | Cross-sectional area A ($cm^2$) | Resistivity $\rho_e \times 10^{-4}$ ($\Omega$.m) |
|---|---|---|---|
| (1) | 10 | 0.1 | 0.05 |
| (2) | 5 | 0.5 | 0.25 |
| (3) | 5 | 0.1 | 0.5 |
| (4) | 0.5 | 0.5 | 0.005 |

**(i)** Which of these wires carries a current of intensity 2 A when the potential difference between its terminal equals 10 V?

ⓐ Wire (1) ⓑ Wire (2) ⓒ Wire (3) ⓓ Wire (4)

**(ii)** Which of these wires gives larger amount of heat than the other wires when the same current intensity passes through them for the same time interval?

ⓐ Wire (1) ⓑ Wire (2) ⓒ Wire (3) ⓓ Wire (4)

**(iii)** Which of these wires gives less thermal power than the other wires when each of them is connected between the same potential difference?

ⓐ Wire (1) ⓑ Wire (2) ⓒ Wire (3) ⓓ Wire (4)

**74** A wire of resistance R consumes an electric power $P_w$ when the potential difference between its terminals is V, if the wire is drawn uniformly so that its length gets doubled while keeping the potential difference between its terminals V, it will consume an electric power of ..... .

ⓐ $2\ P_w$ ⓑ $4\ P_w$ ⓒ $\frac{P_w}{2}$ ⓓ $\frac{P_w}{4}$

**75** ✱ A wire of length 2 m has a cross-sectional area of $4 \times 10^{-6}\ m^2$, when the potential difference between its terminals was 20 V, the consumed power through it was 10 W, so:

**(i)** The resistivity of the wire's material equals ..... .

ⓐ $2 \times 10^{-7}\ \Omega$.m ⓑ $10^{-5}\ \Omega$.m

ⓒ $8 \times 10^{-5}\ \Omega$.m ⓓ $4 \times 10^{-6}\ \Omega$.m

**(ii)** The number of electrons that pass through a cross-section of the wire in one minute equals ..... . (Where: $e = 1.6 \times 10^{-19}$ C)

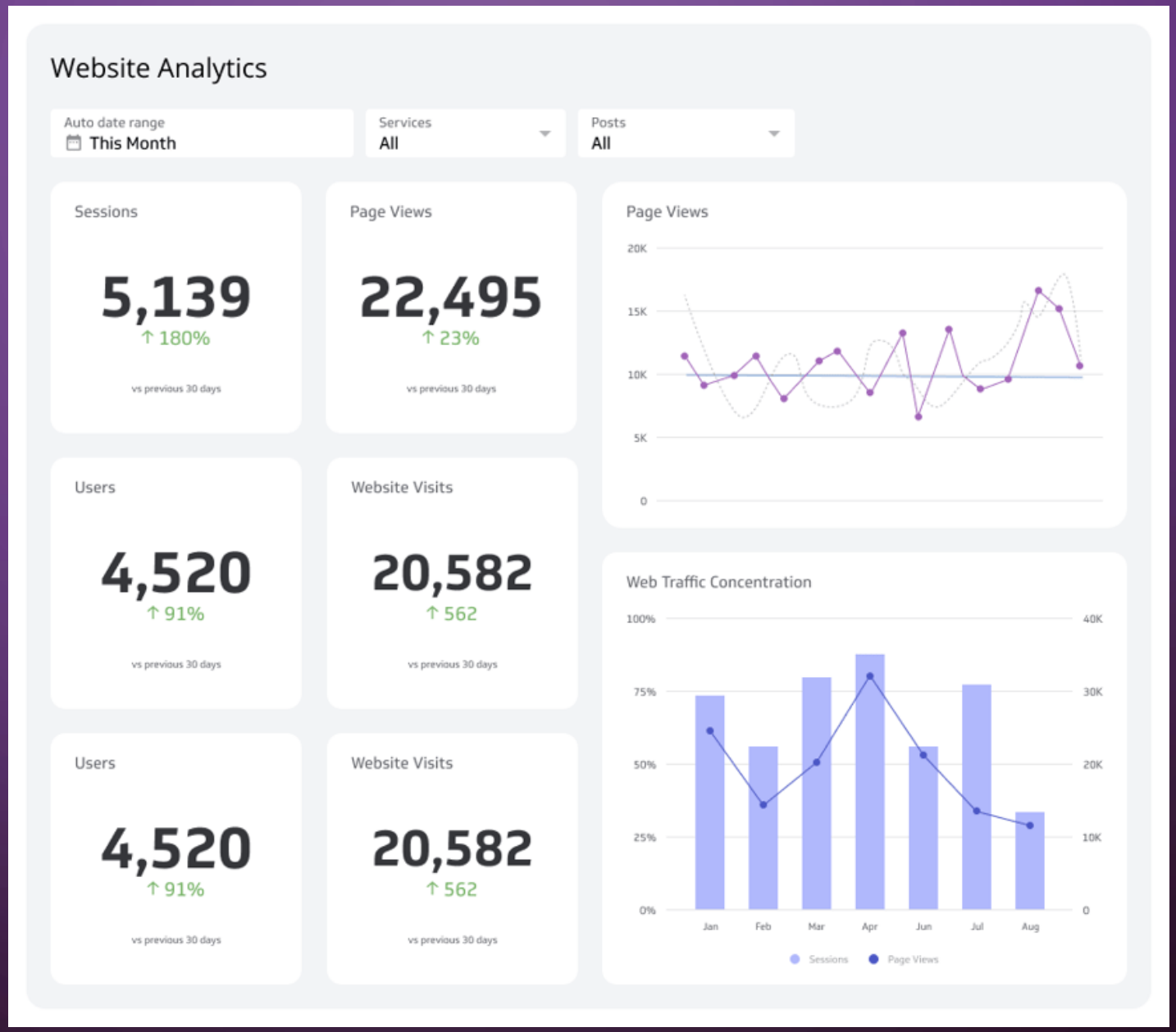
ⓐ $9.741 \times 10^{17}$ electrons ⓑ $6.435 \times 10^{18}$ electrons

ⓒ $2.314 \times 10^{19}$ electrons ⓓ $1.875 \times 10^{20}$ electrons

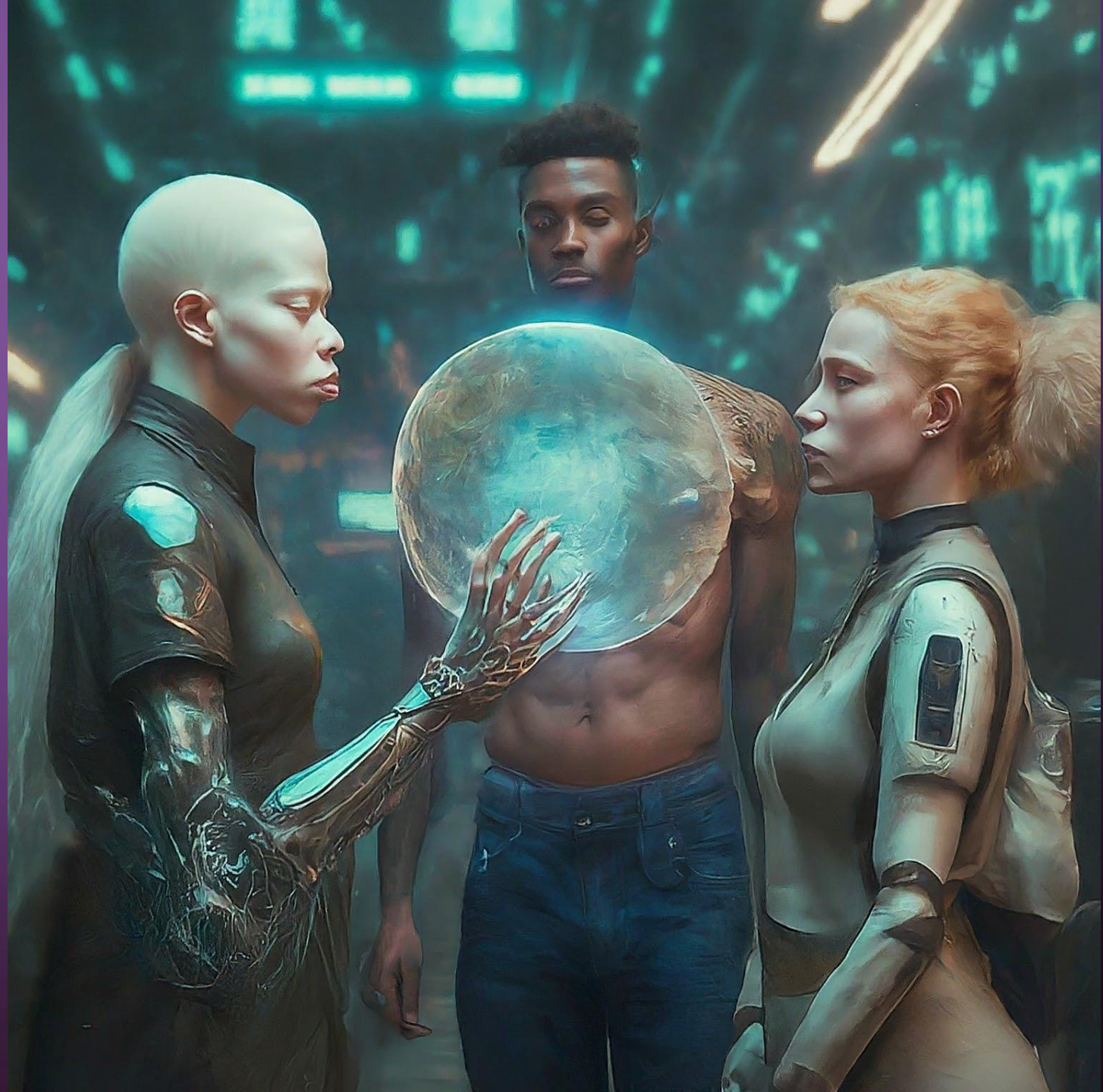
# COOKING

# POKER

# CODE

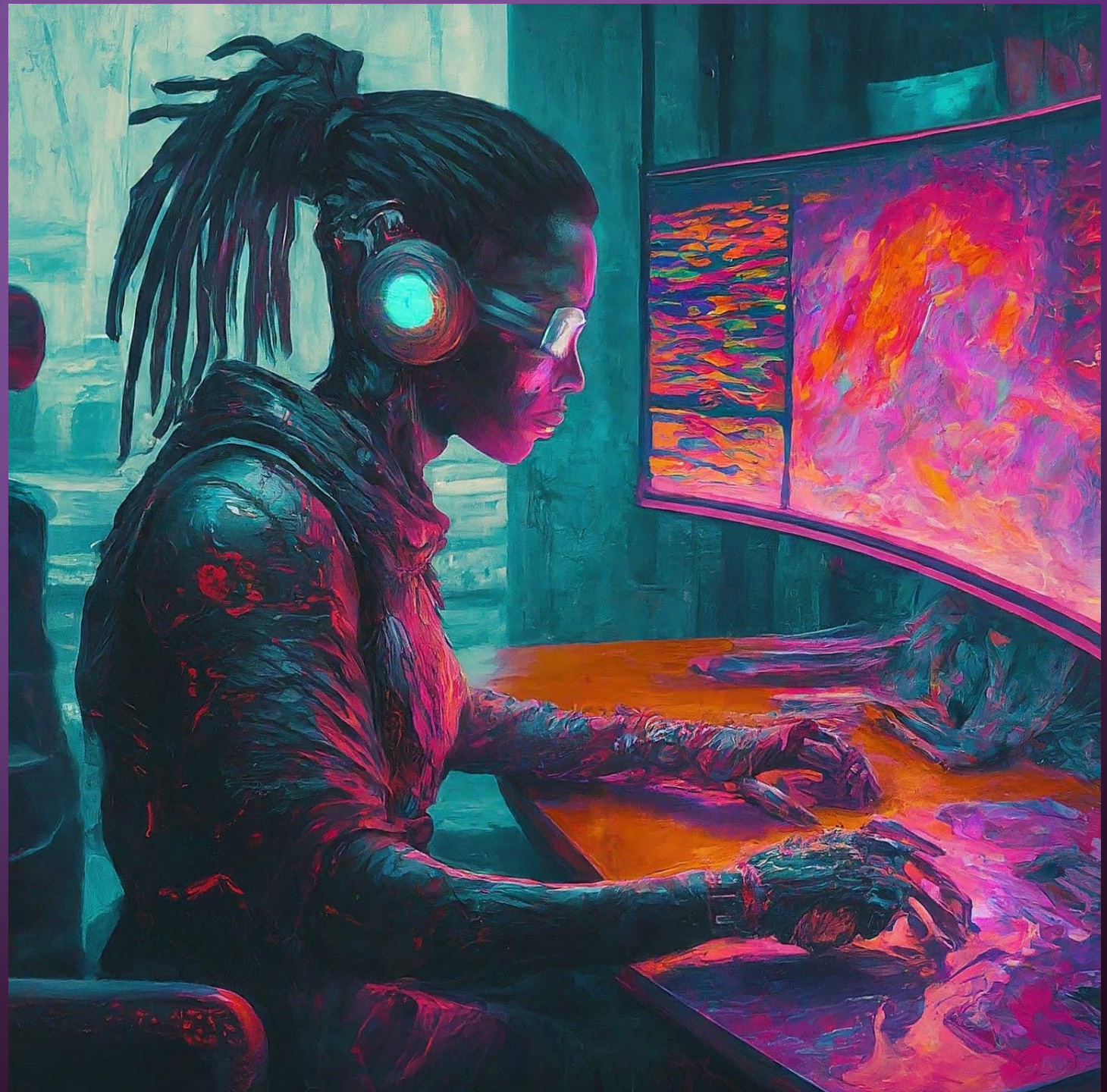

Website Analytics
Auto date range
This Month
Services
All
Posts
All
Sessions
5,139
↑ 180%
vs previous 30 days
Page Views
22,495
↑ 23%
vs previous 30 days
Page Views
20K
15K
10K
5K
0
Users
4,520
↑ 91%
vs previous 30 days
Website Visits
20,582
↑ 562
vs previous 30 days
Web Traffic Concentration
100%
75%
50%
25%
0%
40K
30K
20K
10K
0
Jan
Feb
Mar
Apr
Jun
Jul
Aug
Sessions
Page Views
Users
4,520
↑ 91%
vs previous 30 days
Website Visits
20,582
↑ 562
vs previous 30 days

# BROWSING



# IMAGE GENERATION

# DATA ANALYSIS



# EXTENSIONS