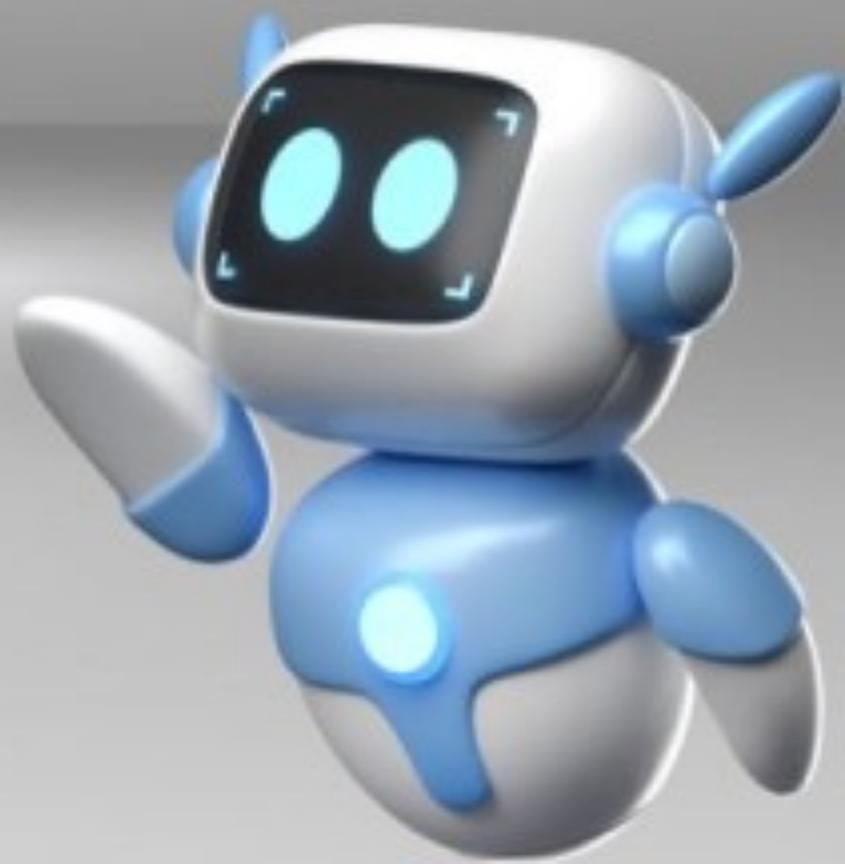
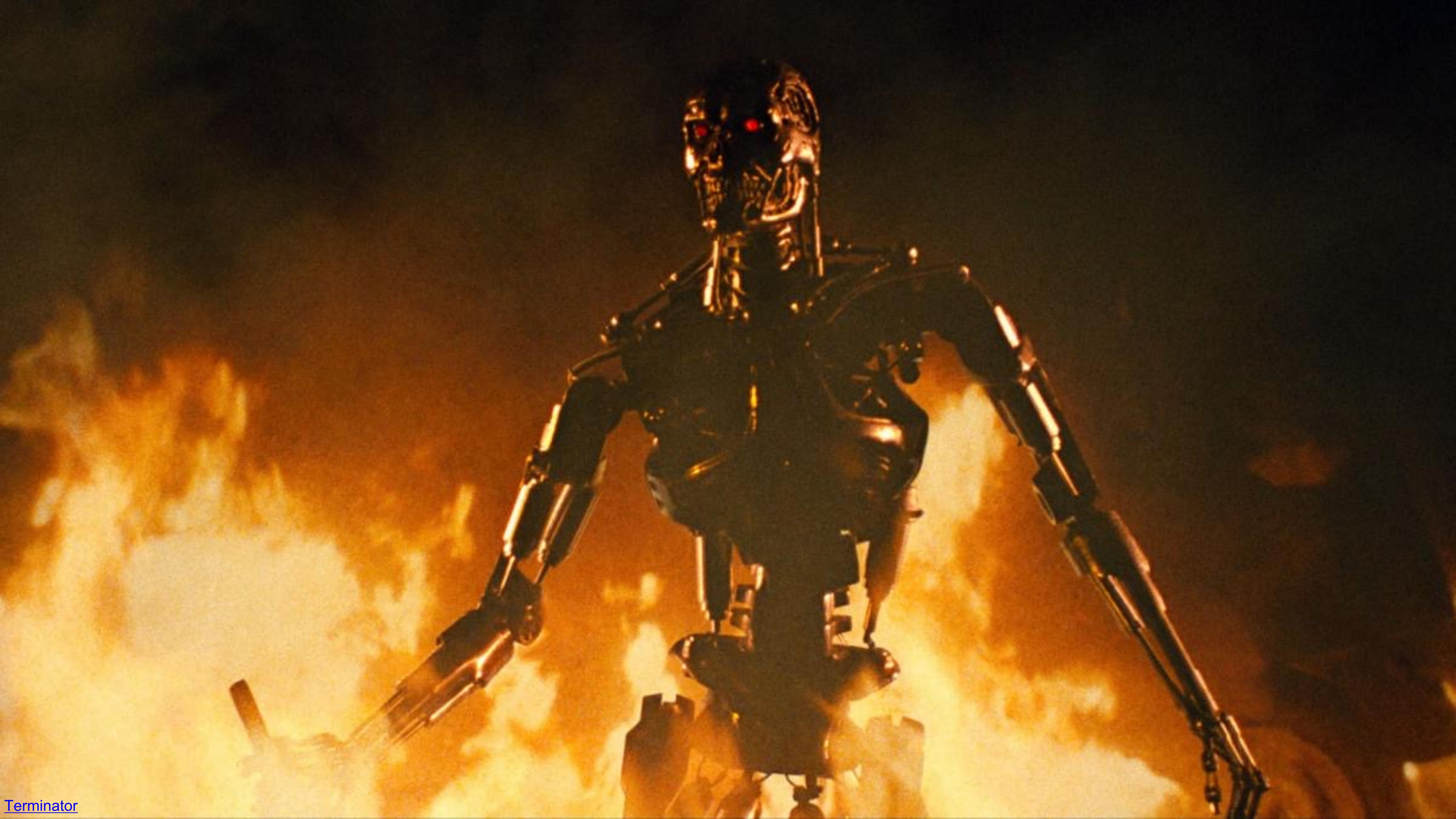


AI?



Google *vs* OpenAI







⚙️ Gemini was just updated. [See update](#)



Hello, Ed

How can I help you today?



Fun fact about the
Roman Empire



Python script for
daily email reports



Plan a relaxing day



Overcome
procrastination

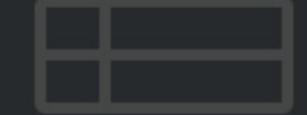
Detailed ancient library
with sunlit interior



Practice handling an
upset customer

Scenario: You are a customer service representative for a telecommunications company. I am an irate customer who has been experiencing intermittent internet outages for the past week. My calls

Identify trends and
patterns in my data



Enter a prompt here

✉️ Message ChatGPT





5 Key Applications of...

AI Abundance with Blockchain Assurance

Ed Marquez
Head of Developer Relations
Swirlds Labs

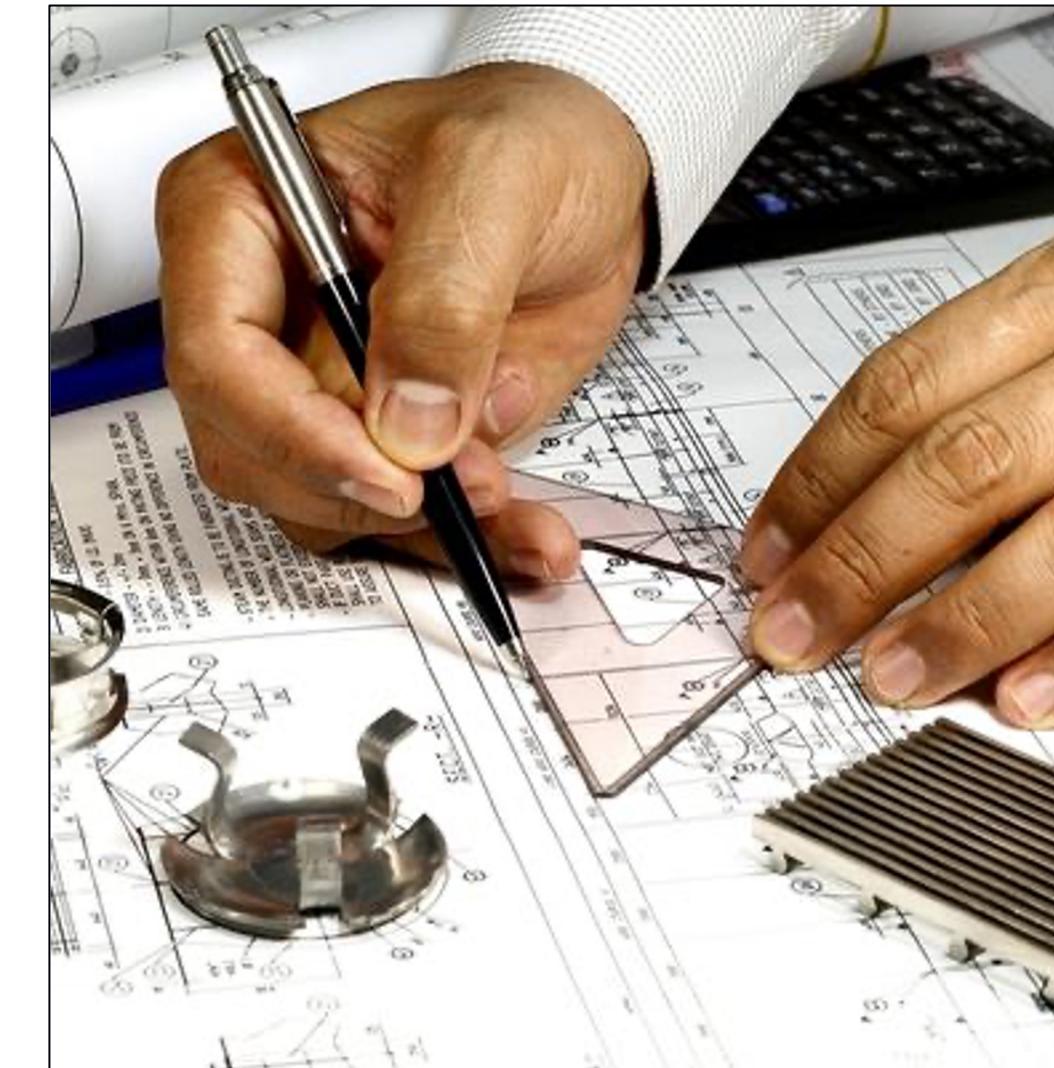


Ed Marquez

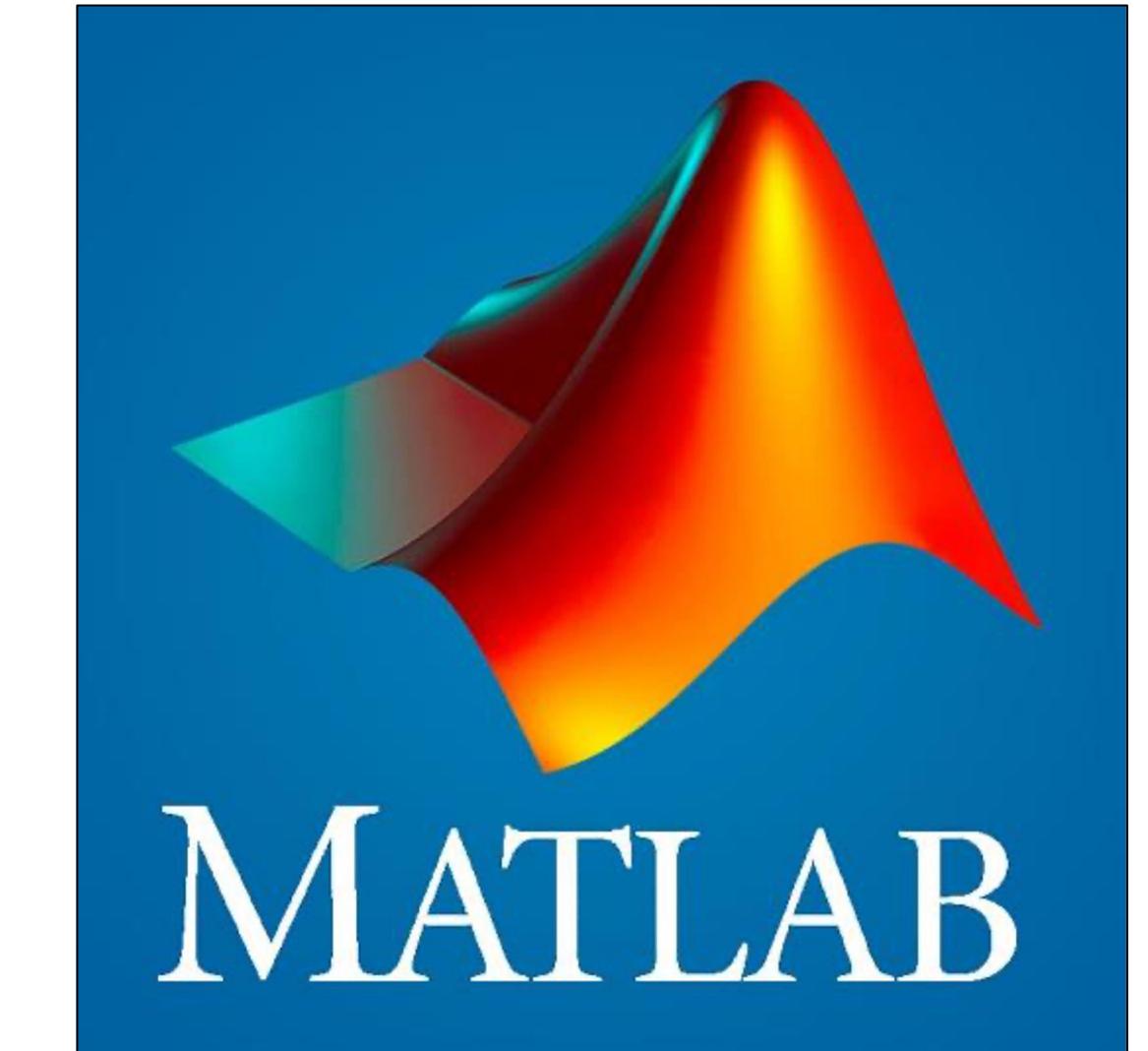
*Developer Relations Engineer
at Swirls Labs*

Let's Connect!

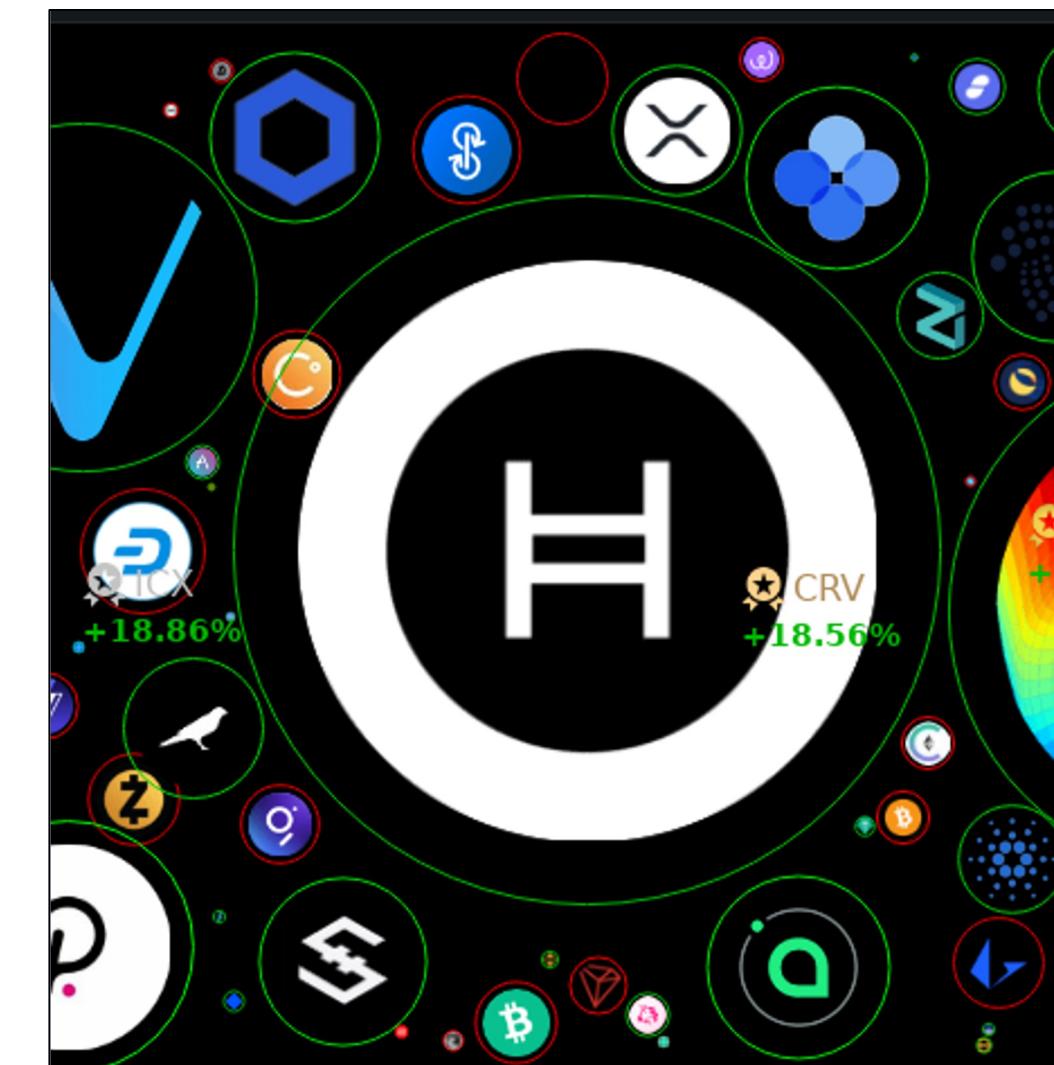
 @ed_marquez
 /in/ed-marquez



Mechanical Engineer



Engineering Software



Passionate about Web 3

ChatGPT plugin goes live for Hedera network

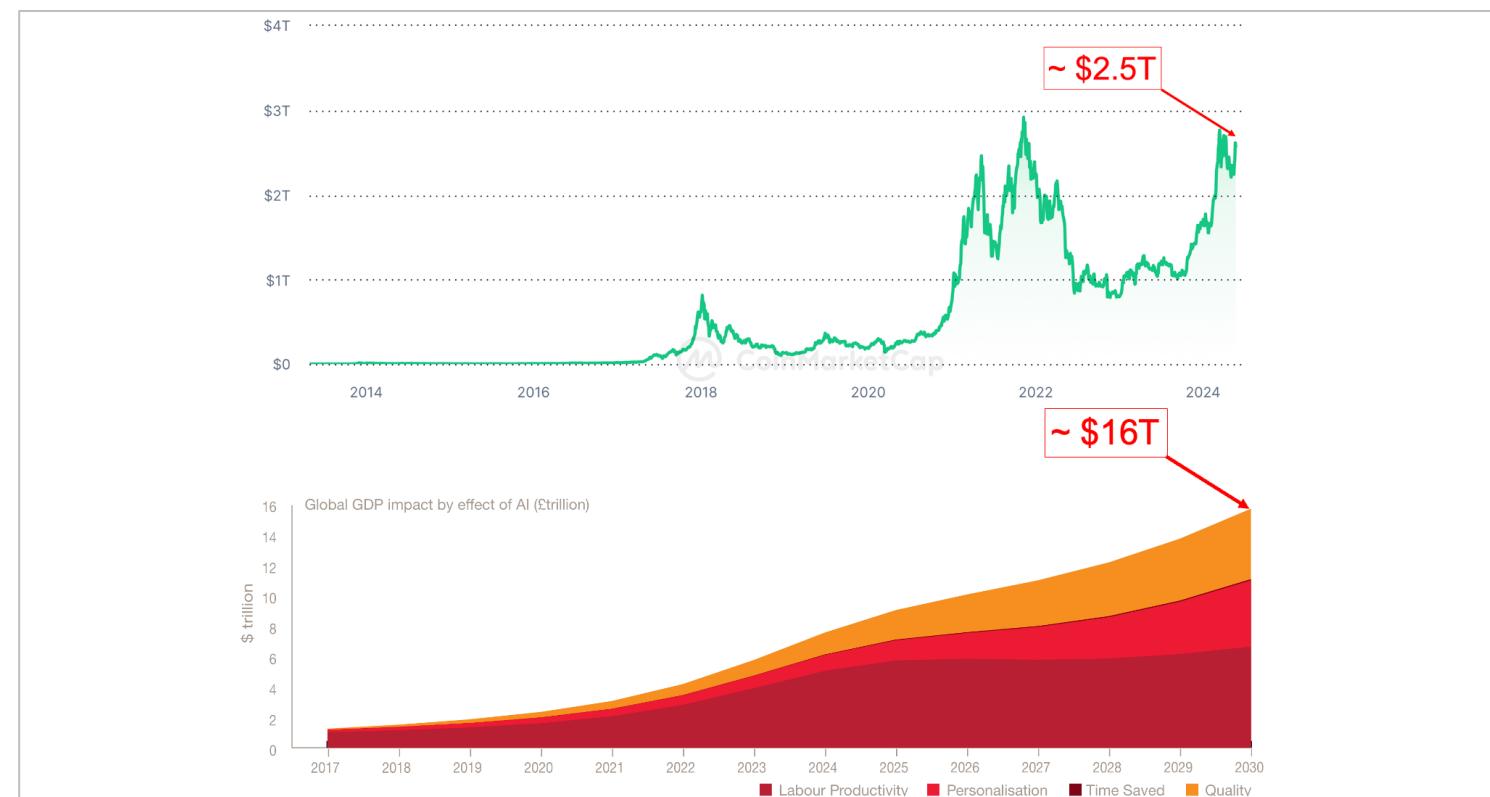
Users can view account balances through a network explorer or programmatically retrieve them via the mirror node Rest API, which the plugin will utilize.

21030 Total views 38 Total shares Listen to article



Blockchain & Tech

In this session, you will learn about...



AI & Blockchain



5 Key Applications



Resources & Next Steps

AI is revolutionizing industries

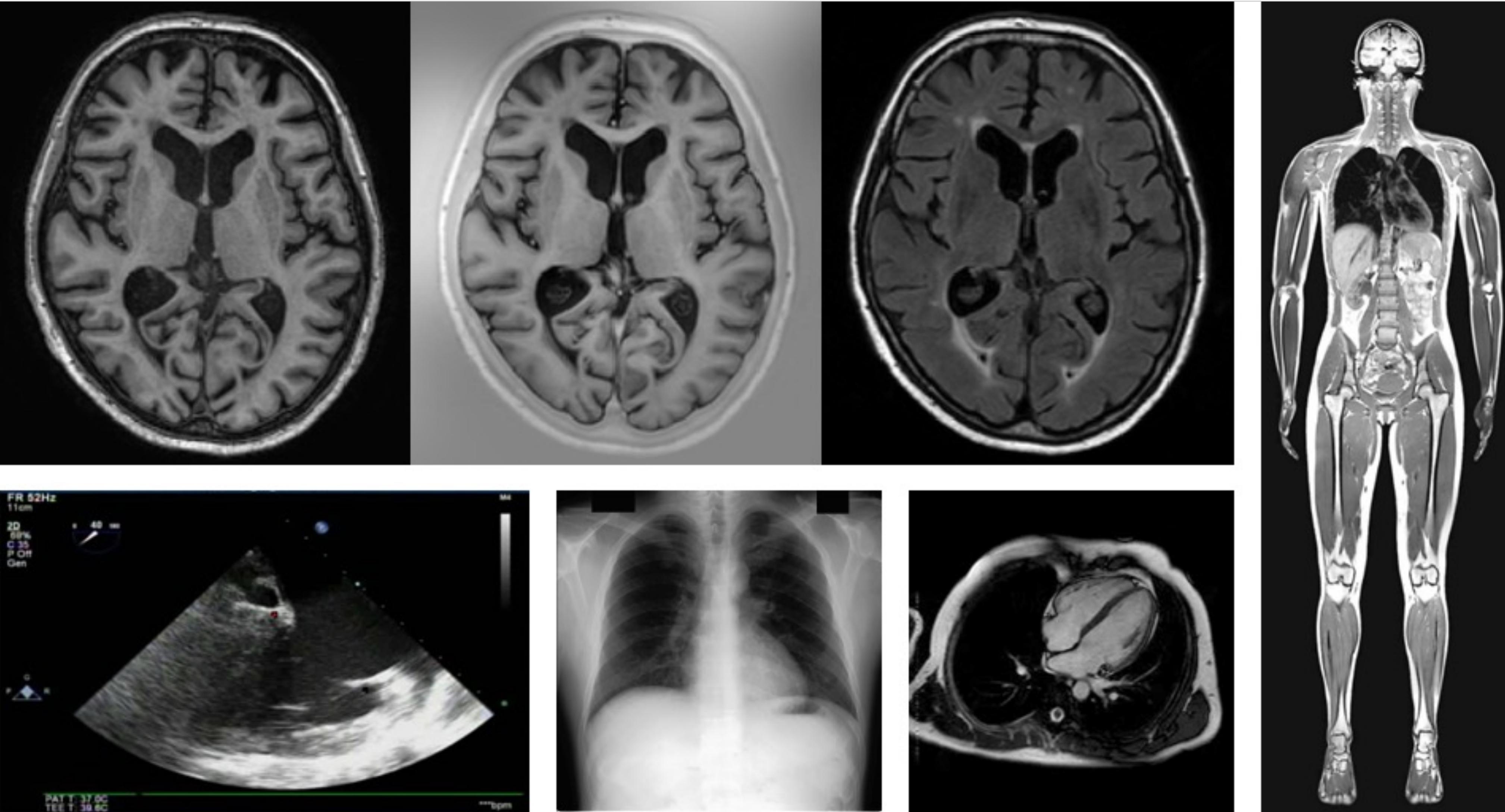
Analyze large datasets

Predict trends

Automate complex tasks

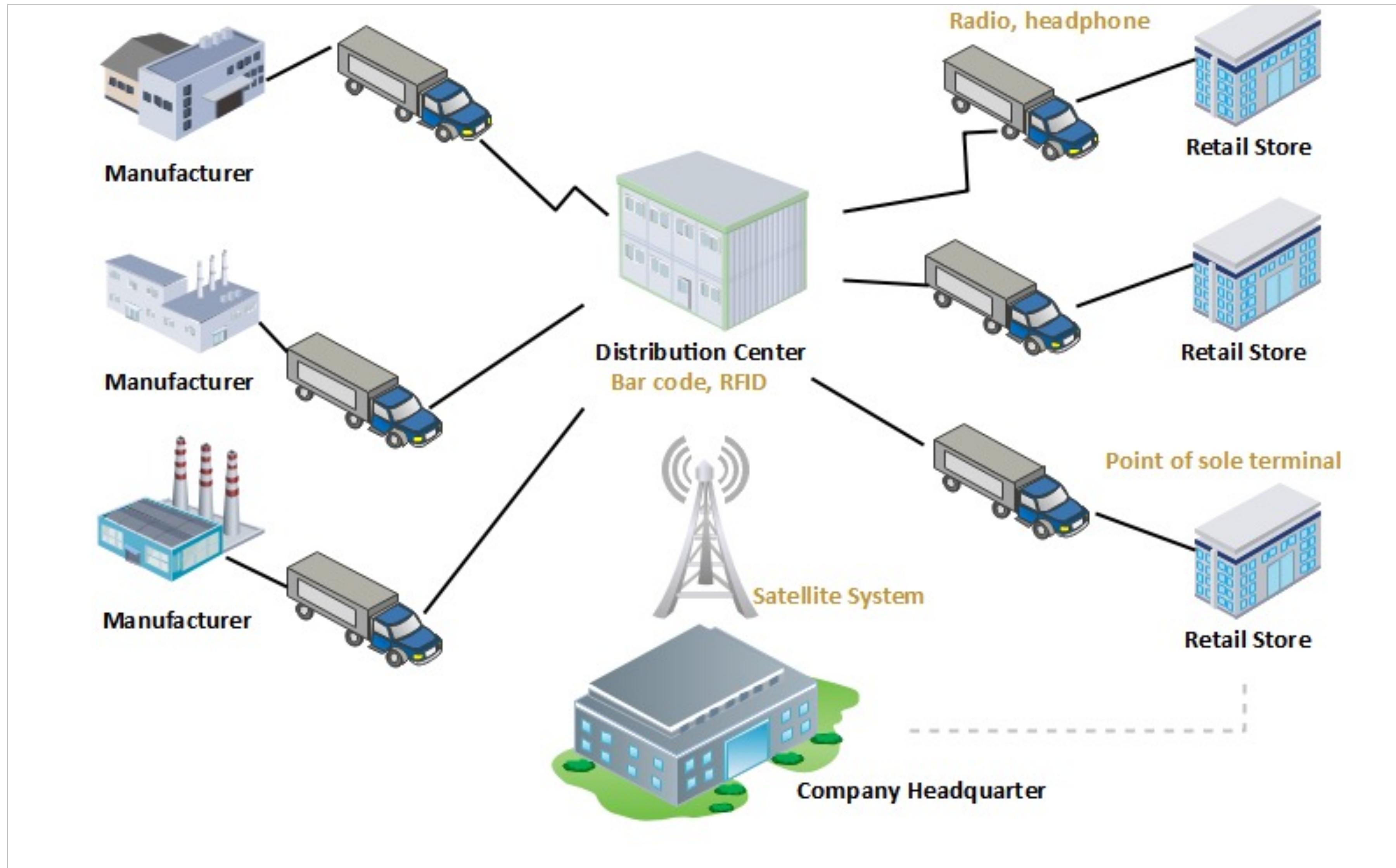
AI is revolutionizing industries

Improving medical diagnostics



AI is revolutionizing industries

Optimizing supply chains



AI is revolutionizing industries

Detecting fraud in finance



Market cap ⓘ

1d

7d

1m

1y

All

All coins ⚙



\$4T

\$3T

\$2T

\$1T

\$0

2014

2016

2018

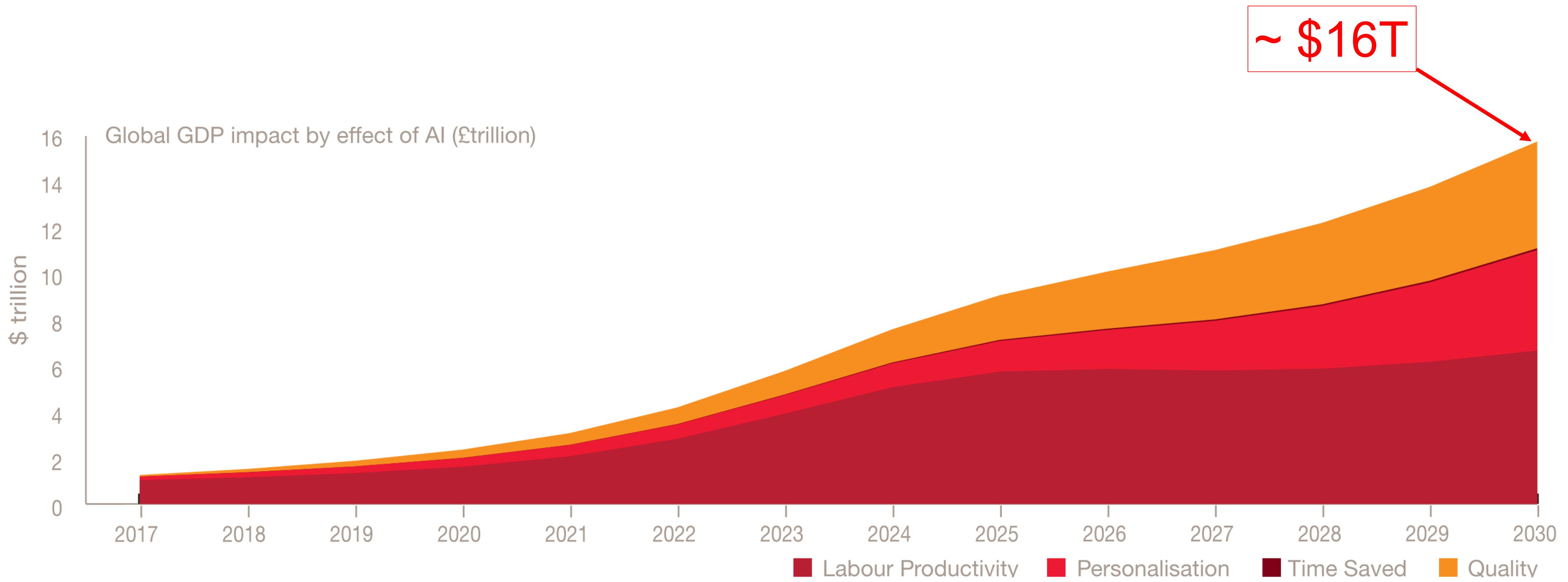
2020

2022

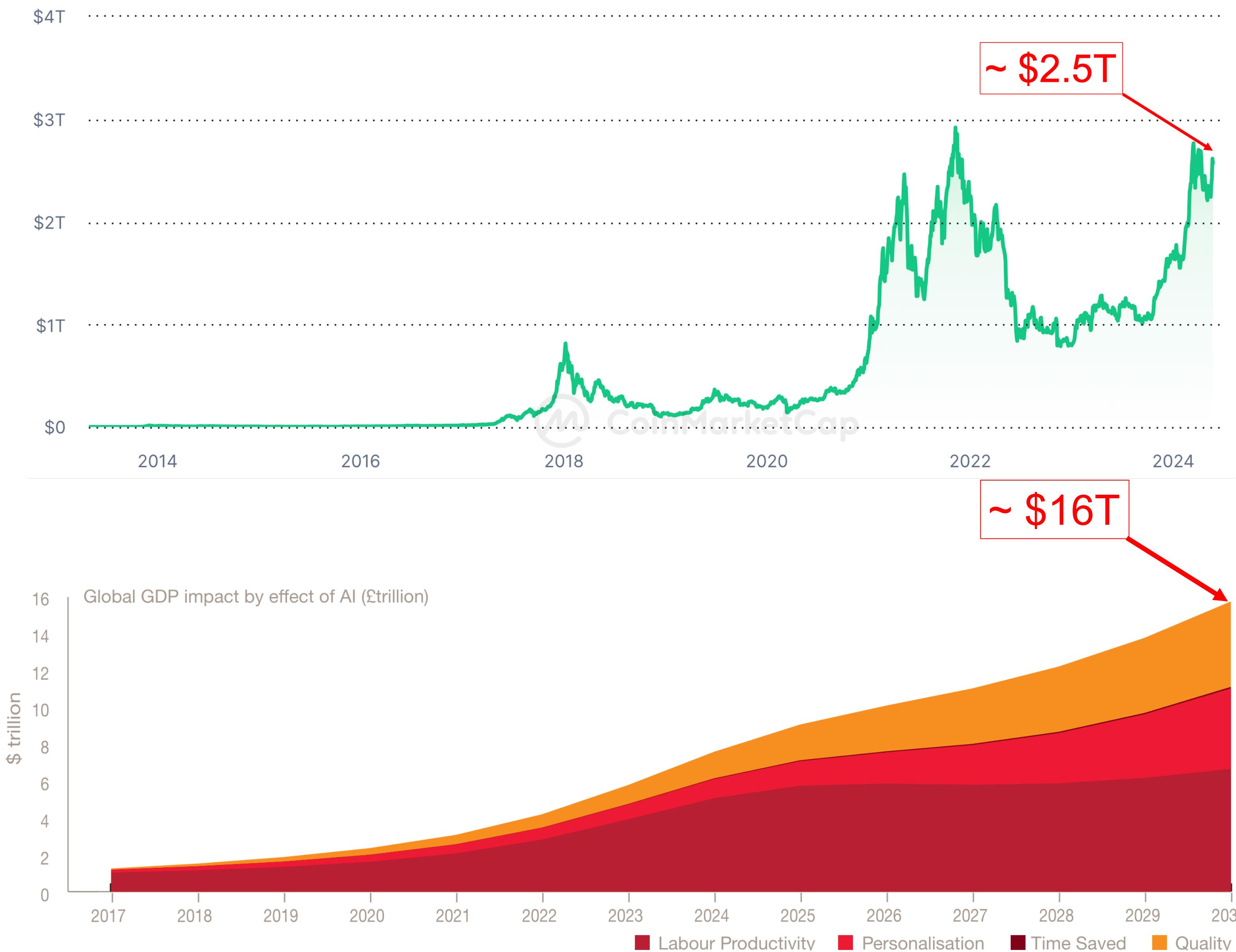
2024

~ \$2.5T

CoinMarketCap



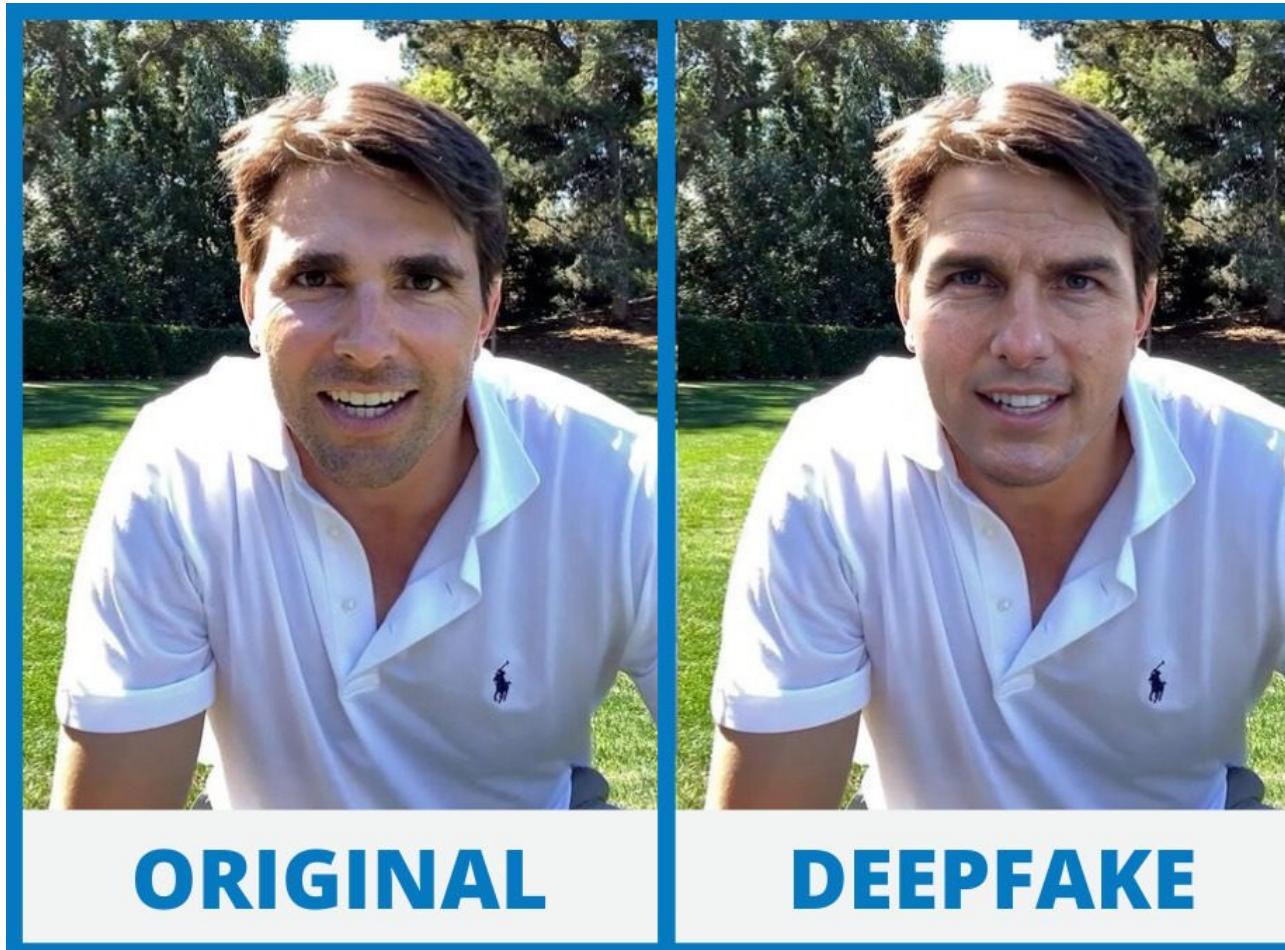
AI & blockchain provide exponential growth opportunities



With great power comes great ...

RISK

With great power comes great RISK



Deepfakes



Unauthorized use of © content



Decision black-box



Integrity of training data

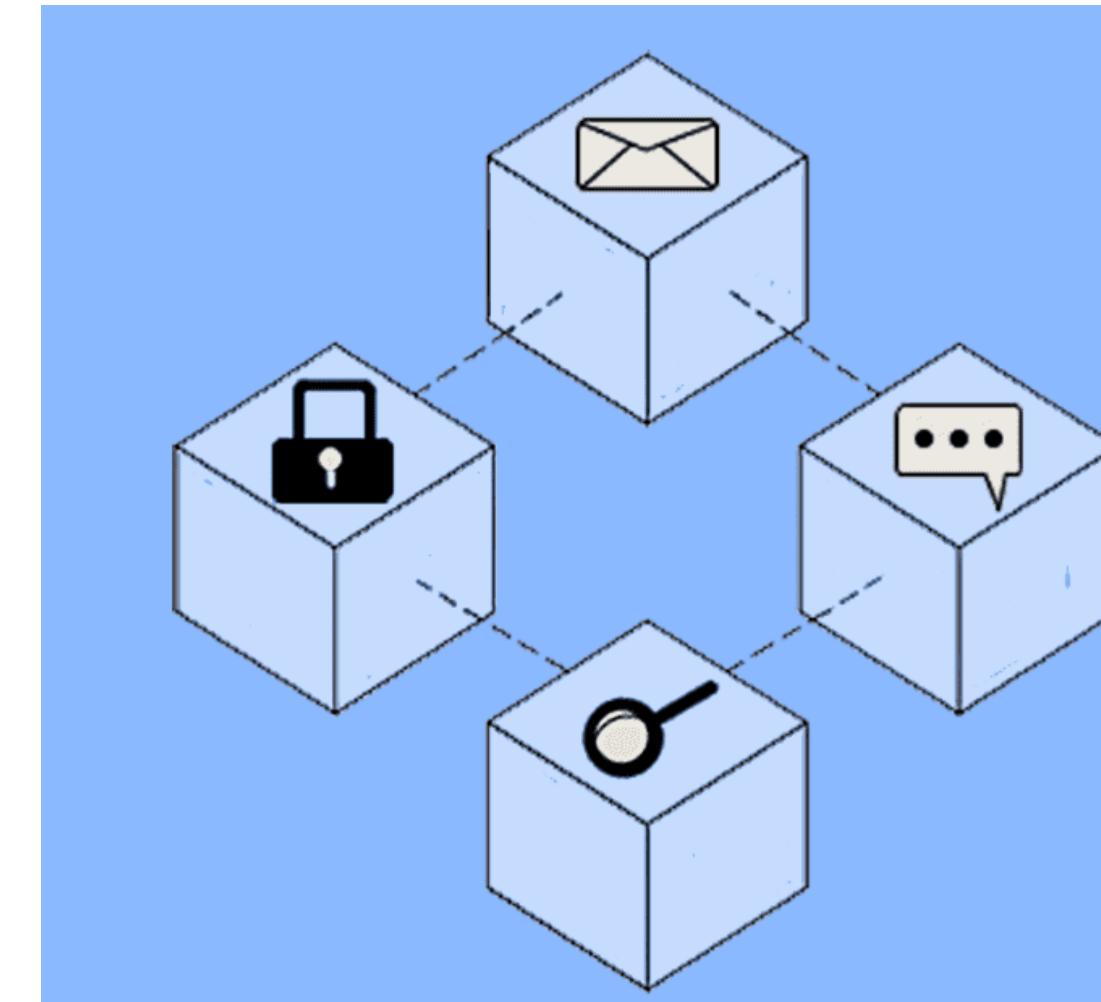


Hallucinations

[Maverick](#)
[Freshbooks](#)
[Freepik](#)
[LinkedIn](#)
[BrainBlogger](#)

Blockchain ensures the integrity of AI data and processes

Transaction history



Blockchain

[ˈbläk-,chān]

A digital database or ledger that is distributed among the nodes of a peer-to-peer network.

Immutability



Deepfakes



Unauthorized use of © content

Transparency



Decision black-box



Integrity of training data



Hallucinations

***“AI abundance &
blockchain assurance”***

“AI abundance & blockchain assurance”

1. Data integrity for training AI models
2. Tracking AI model lineage during development / tuning
3. Retrieval Augmented Generation (RAG)
4. Content ownership, traceability, and compensation
5. Auditing AI decisions



“AI abundance & blockchain assurance”

1. Data integrity for training AI models

2. Tracking AI model lineage during development / tuning

3. Retrieval Augmented Generation (RAG)

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5. Auditing AI decisions



Model accuracy depends on the quality of the training data

Perpetuate biases and errors in the data



Imagine: Altering training data
for AI model used in healthcare

Result: Incorrect diagnoses or
treatment recommendation

Data Integrity:

Identifying and Protecting Assets Against Ransomware and Other Destructive Events

Includes Executive Summary (A); Approach, Architecture, and Security Characteristics (B);
and How-To Guides (C)

Jennifer Cawthra
Michael Ekstrom
Lauren Lusty
Julian Sexton
John Sweetnam

FINAL

This publication is available free of charge from
<https://doi.org/10.6028/NIST.SP.1800-25>.

This publication is available free of charge from
<https://www.nccoe.nist.gov/projects/building-blocks/data-integrity/identify-protect>.



NIST guide to address the threat of data integrity attacks

Crucial to maintain data integrity during storage, transit, and processing

Impacts business operations, revenue, and reputation

Data Integrity: Identifying and Protecting Assets Against Ransomware and Other Destructive Events

Includes Executive Summary (A); Approach, Architecture, and Security Characteristics (B); and How-To Guides (C)

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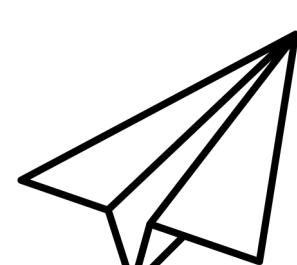
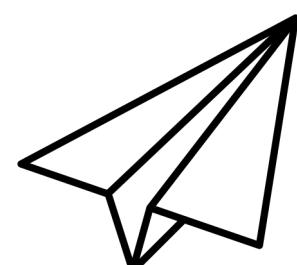
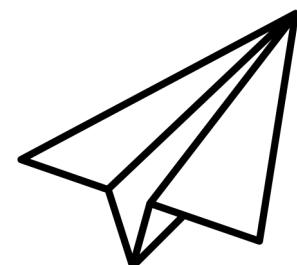
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<https://www.nccoe.nist.gov/projects/building-blocks/data-integrity/identify-protect>.

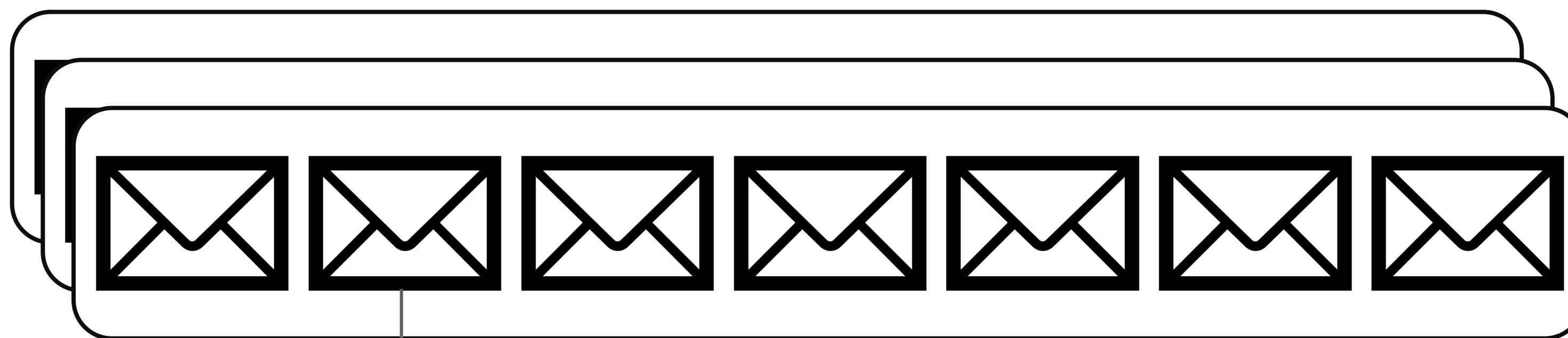


The Hedera Consensus Service (HCS) is a decentralized software utility that orders and notarizes transactions

Publishers



Decentralized Messaging with HCS



Topics

Messages

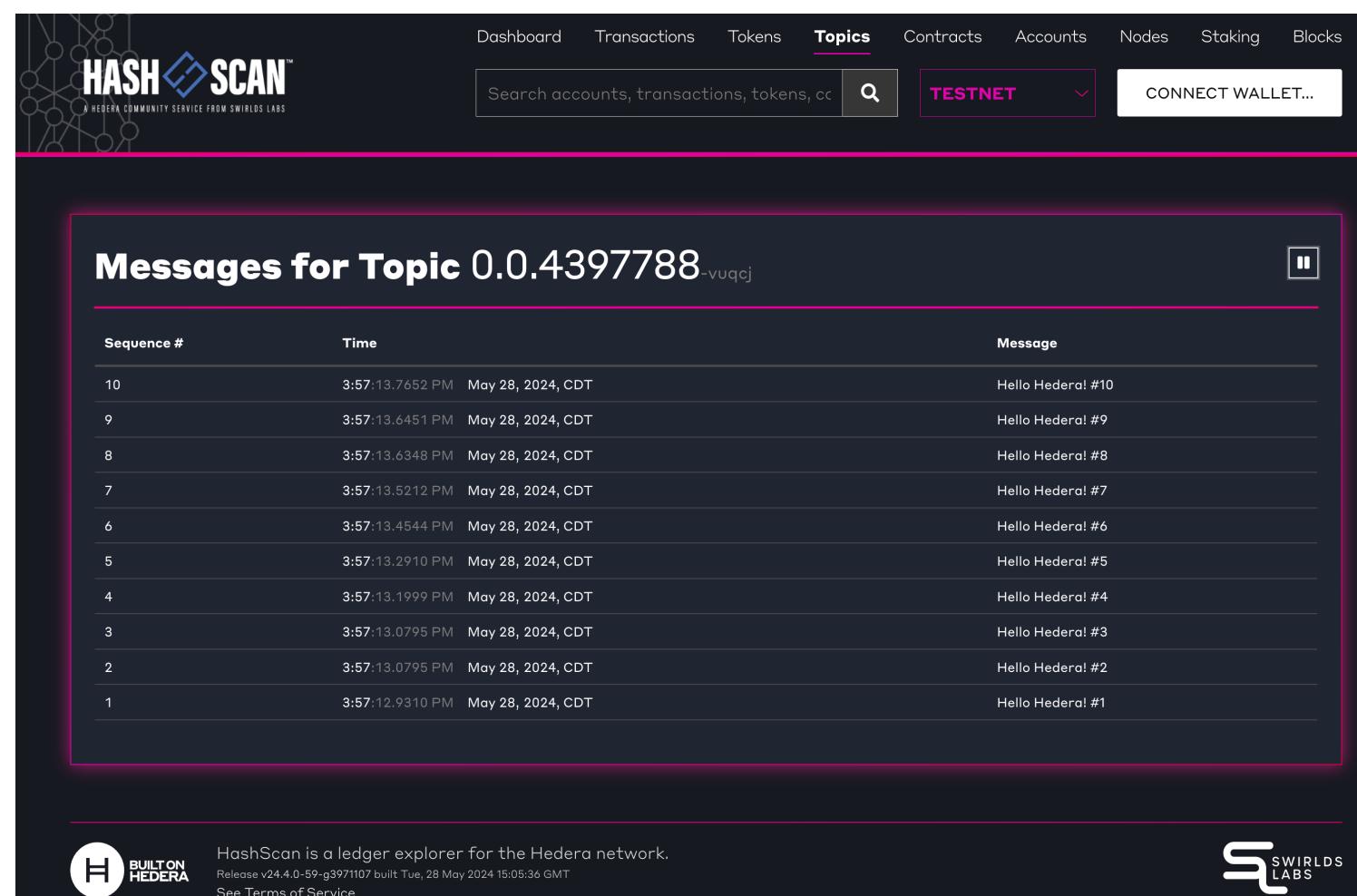
Subscribers



The Hedera Consensus Service (HCS) is a decentralized software utility that orders and notarizes transactions

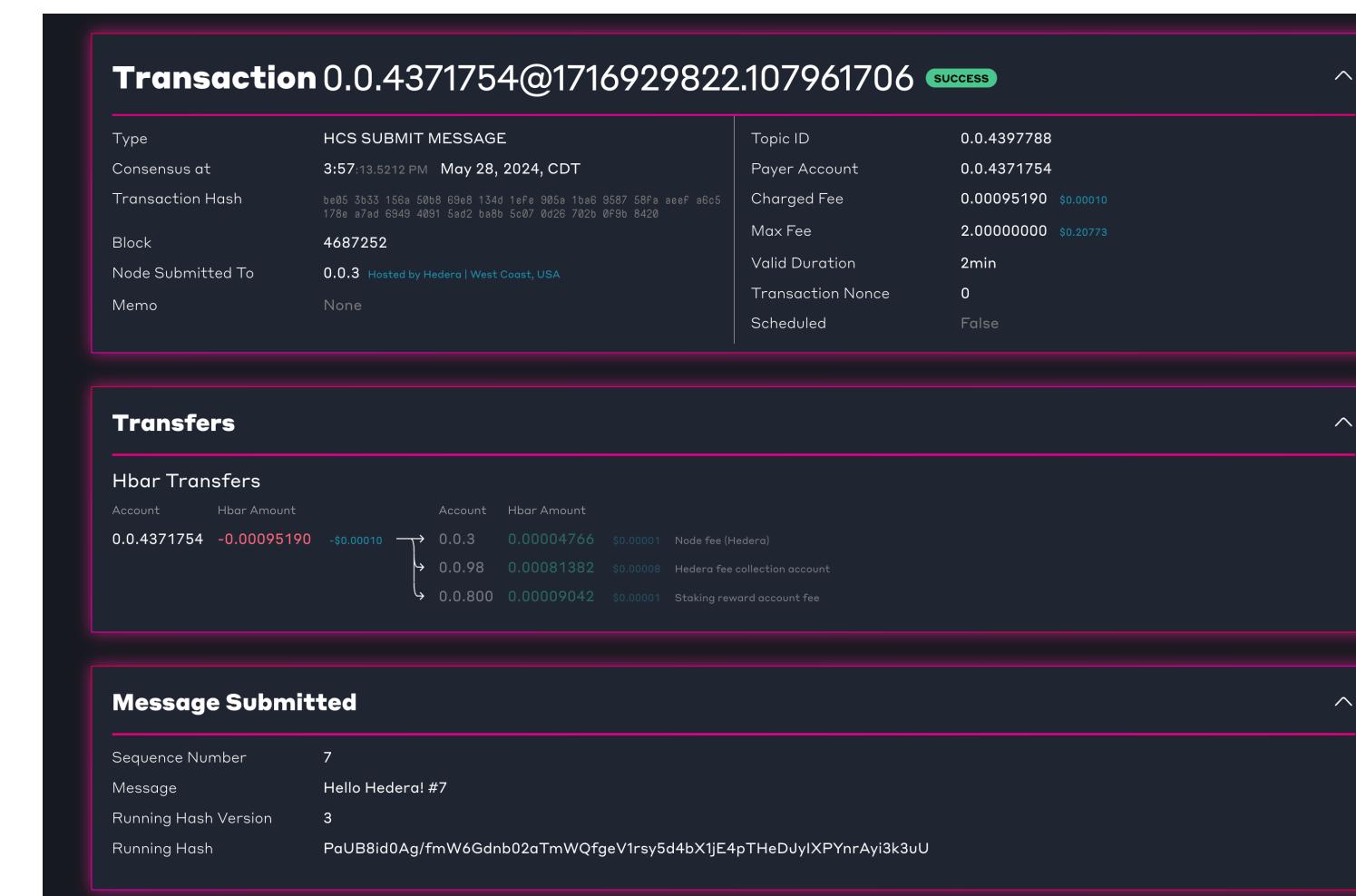
Each data entry is timestamped and cryptographically secured

Creates immutable logs that can be easily audited



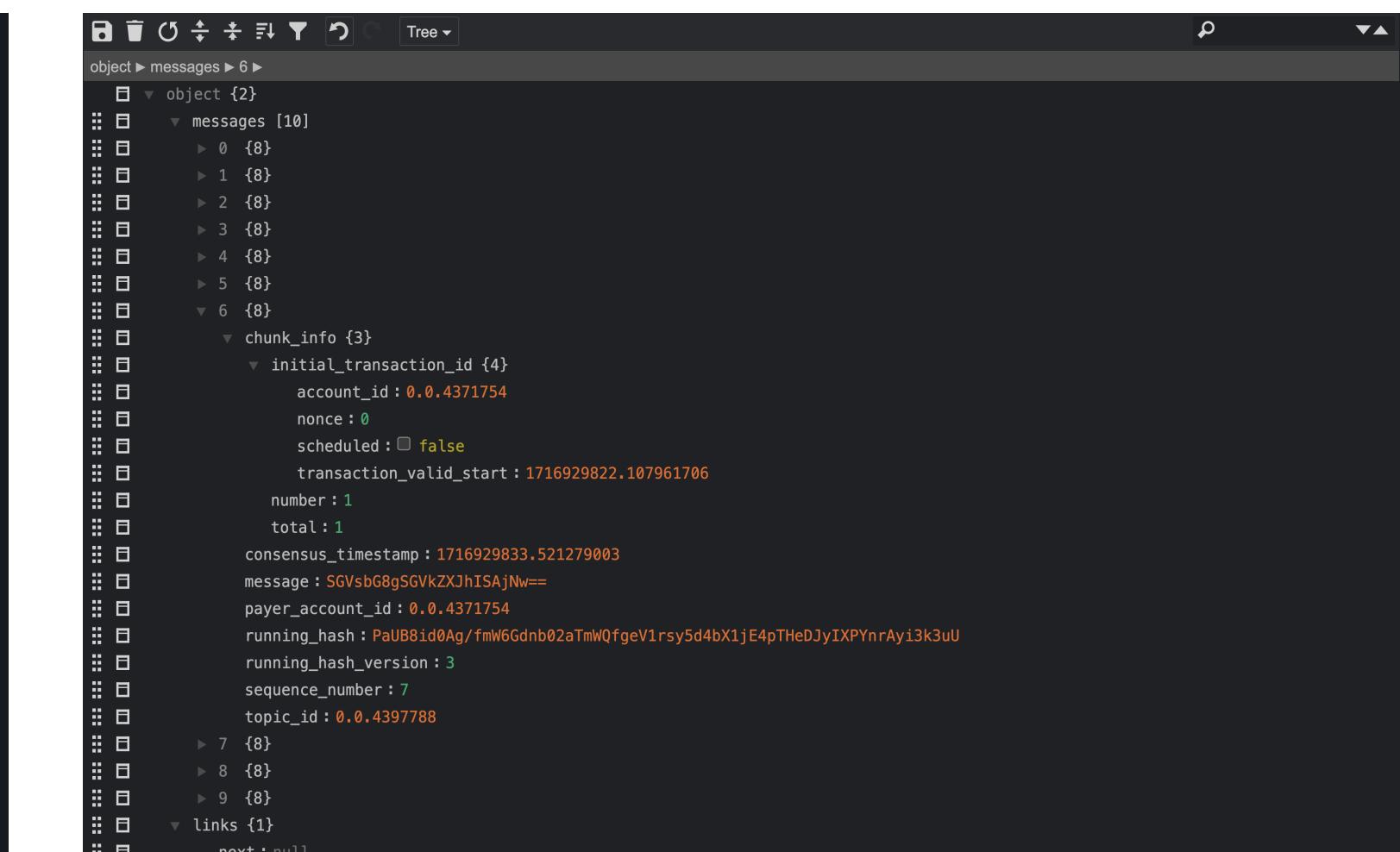
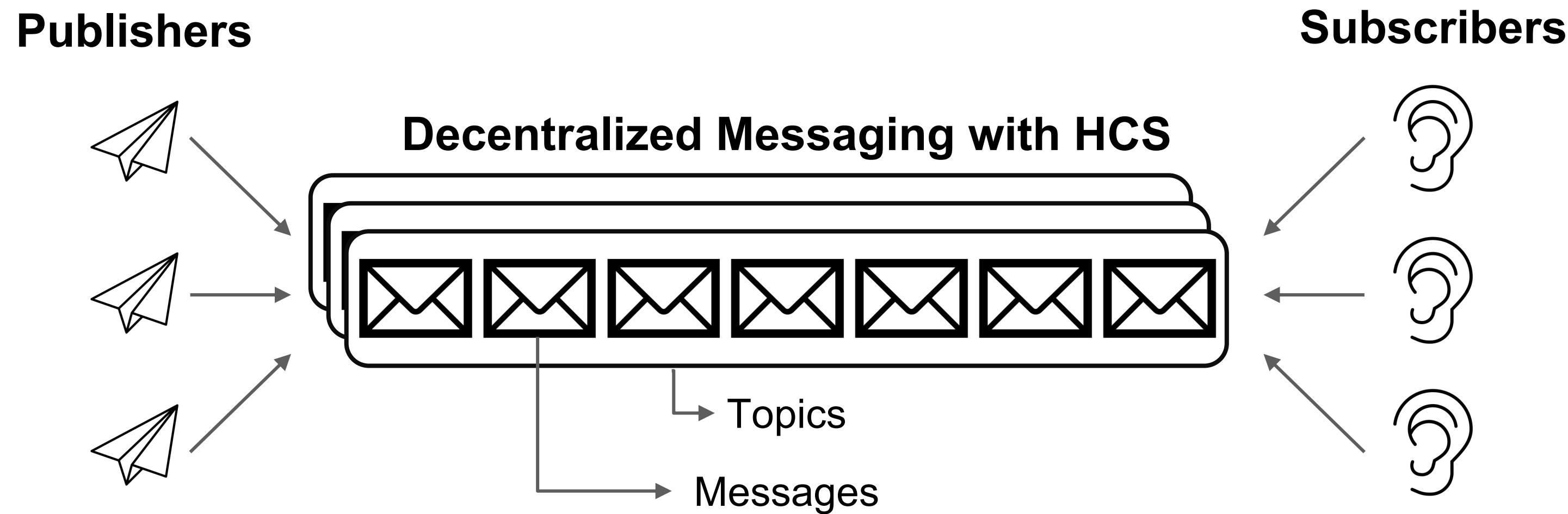
HashScan is a ledger explorer for the Hedera network. The screenshot shows a list of messages for Topic 0.0.4397788. The messages are listed by sequence number and time, with the most recent at the top. Each message entry includes the sequence number, time, and a brief message content.

Topic on HashScan



HashScan is a ledger explorer for the Hedera network. The screenshot shows a detailed view of a transaction message. The transaction ID is 0.0.4371754@1716929822.107961706. The message details include the type (HCS SUBMIT MESSAGE), consensus time (May 28, 2024, CDT), topic ID (0.0.4397788), and various fees and account details. Below the main transaction details, there are sections for 'Transfers' and 'Message Submitted'.

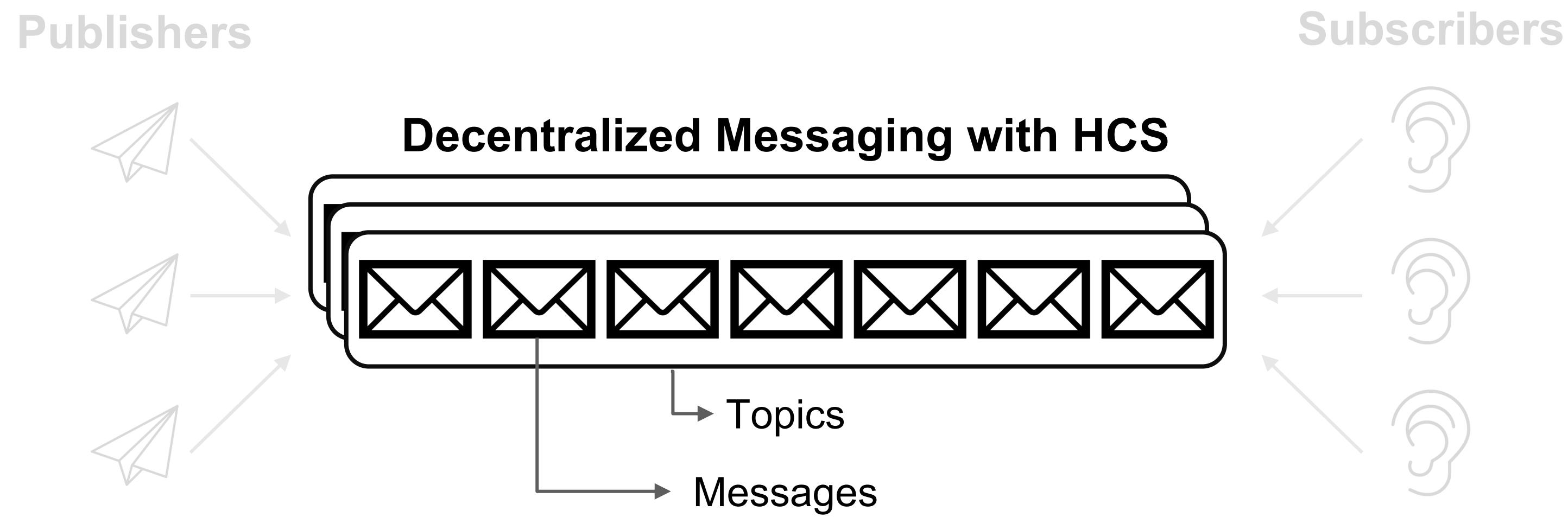
Message on HashScan



A screenshot of a REST API tool showing a JSON response for a topic. The response is a complex object structure with nested arrays and objects. Key fields include 'initial_transaction_id' (0.0.4371754), 'nonce' (0), 'scheduled' (false), 'transaction_valid_start' (1716929822.107961706), 'number' (1), 'total' (1), 'consensus_timestamp' (1716929833.521279003), 'message' (SGVsbG8gSGVzXJhISAjNw==), 'payer_account_id' (0.0.4371754), 'running_hash' (PaUB8id0Ag/fmW6Gdnb02aTmWQfgeVlrsy5d4bX1jE4pTHeDjylXPyNraYi3k3uU), and 'running_hash_version' (3).

Topic with REST API

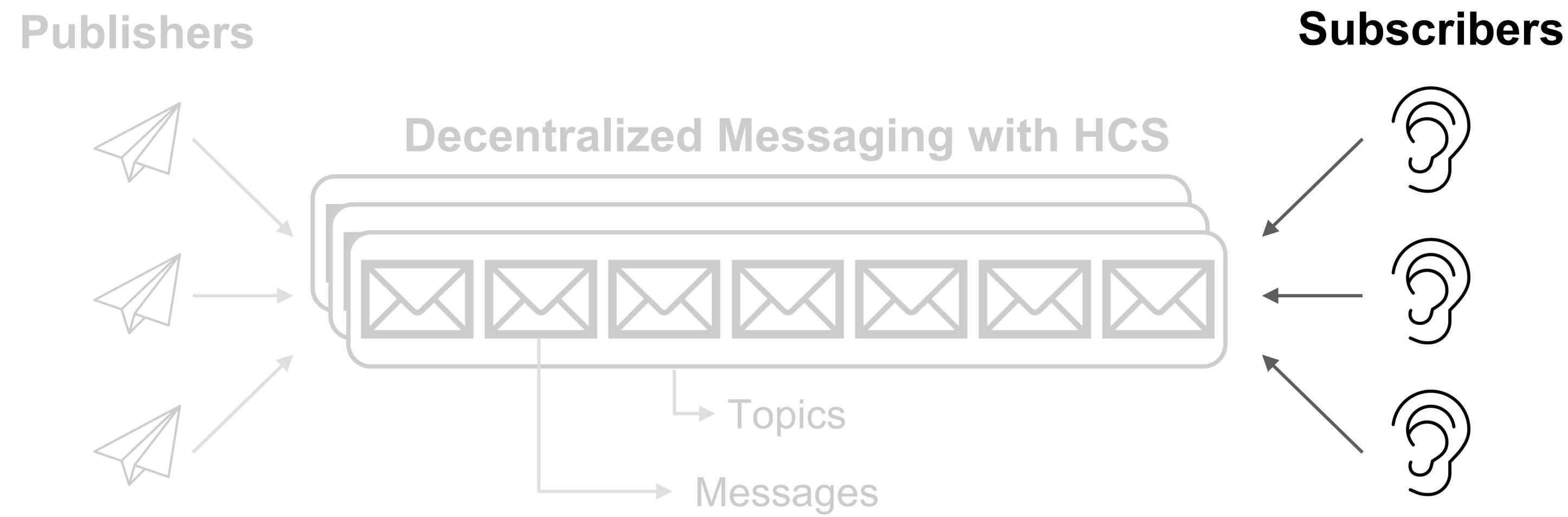
The Hedera Consensus Service (HCS) is a decentralized software utility that orders and notarizes transactions



```
// Create a new consensus topic

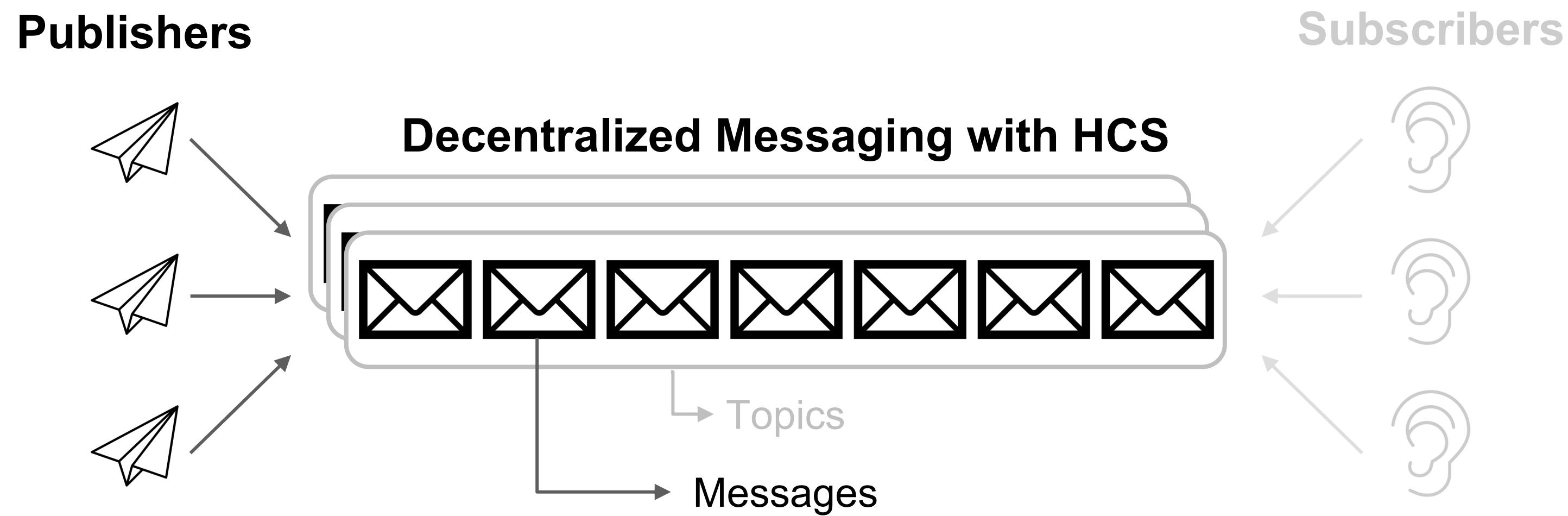
const newTopic = await new TopicCreateTransaction().execute(client);
const newTopicReceipt = await newTopic.getReceipt(client);
const newTopicId = newTopicReceipt.topicId;
console.log(`- Transaction status: ${newTopicReceipt.status.toString()} \n`);
console.log(`- New Topic ID: ${newTopicId.toString()} \n`);
```

The Hedera Consensus Service (HCS) is a decentralized software utility that orders and notarizes transactions



```
// Subscribe to the consensus topic
new TopicMessageQuery()
  .setTopicId(newTopicId)
  .subscribe(client, null, (message) => {
    let messageAsString = Buffer.from(message.contents, "utf8").toString();
    console.log(` ${message.consensusTimestamp.toDate()} Received: ${messageAsString}`);
});
```

The Hedera Consensus Service (HCS) is a decentralized software utility that orders and notarizes transactions



```
// Submit 7 messages to the new topic using a for loop

for (let i = 0; i < 7; i++) {

  const newMessage = `Hello Hedera! #${i + 1}`;

  const newMessageTx = await new TopicMessageSubmitTransaction()
    .setTopicId(newTopicId)
    .setMessage(newMessage)
    .execute(client);}
```

OneSpan Unveils Quantum-Safe Blockchain Storage to Secure Organizations' Most Valuable Digital Agreements

News Releases

November 2, 2023

Stored on an immutable blockchain, organizations can now safeguard valuable documents against emerging technologies and security threats

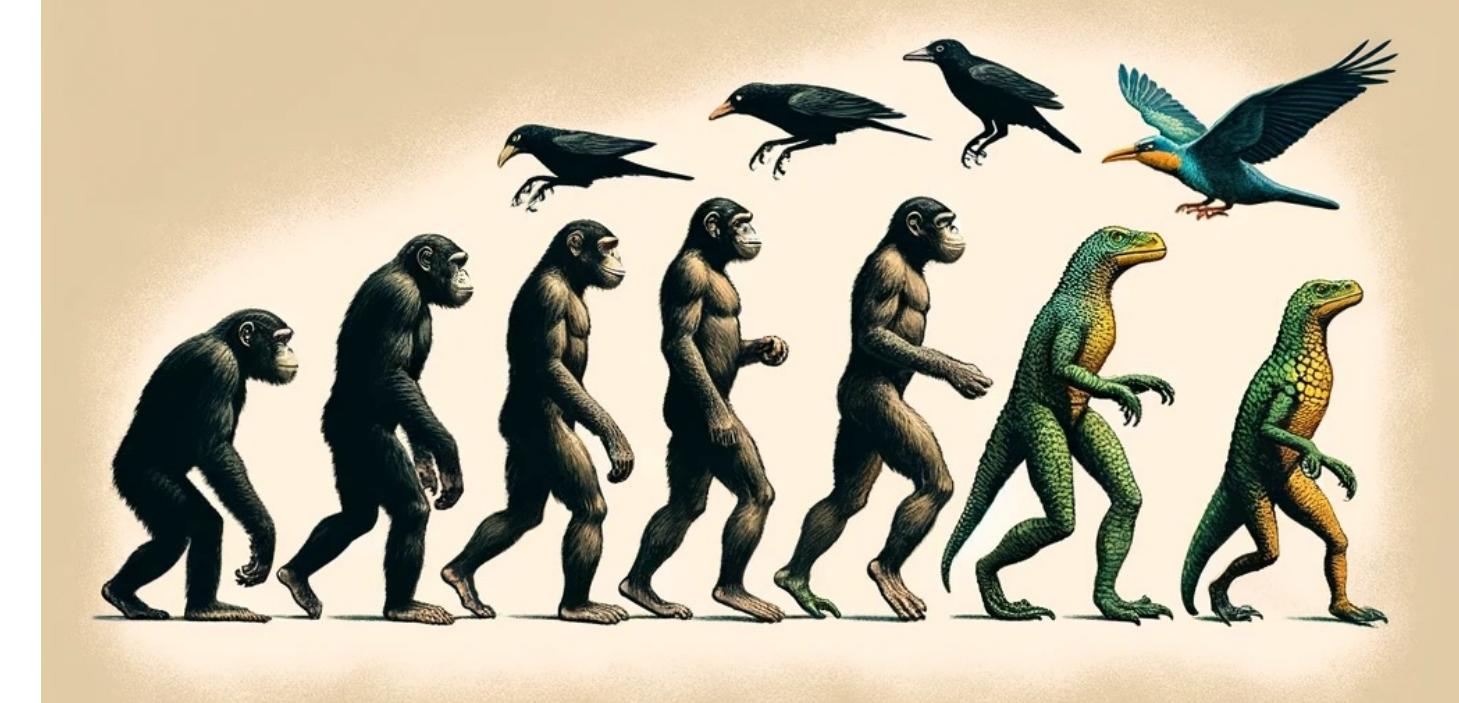
“AI abundance & blockchain assurance”

1. Data integrity for training AI models
2. **Tracking AI model lineage during development / tuning**
3. Retrieval Augmented Generation (RAG)
4. Content ownership, traceability, and compensation
5. Auditing AI decisions



Tracking the development history of AI models is crucial for transparency and accountability

Difficult to understand how a model evolves over time



Impossible to identify the root cause of issues without a record of what changed and when



Tracing model lineage may be a requirement in highly regulated industries



AI Integrity begins here.

We weave together **machine** and **human** processes to establish new trust in AI.

[Learn More](#)[Apply for Early Access](#)

BETA



Type a climate related question to start

G



or see what others are asking

ClimateGPT can make mistakes. Always make sure to double-check important information in its answers. [Learn more](#)

NEW Try Cohere Command R+ on HuggingChat



The AI community building the future.

The platform where the machine learning community collaborates on models, datasets, and applications.

Tasks Libraries Datasets Languages Licenses Other

Filter Tasks by name

Multimodal

 Text-to-Image  Image-to-Text

 Text-to-Video  Visual Question Answering

 Document Question Answering  Graph Machine Learning

Computer Vision

 Depth Estimation  Image Classification

 Object Detection  Image Segmentation

 Image-to-Image  Unconditional Image Generation

 Video Classification  Zero-Shot Image Classification

Natural Language Processing

 Text Classification  Token Classification

 Table Question Answering  Question Answering

 Zero-Shot Classification  Translation

 Summarization  Conversational

 Text Generation  Text2Text Generation

 Sentence Similarity

Audio

 Text-to-Speech  Automatic Speech Recognition

 Audio-to-Audio  Audio Classification

 Voice Activity Detection

Tabular

 Tabular Classification  Tabular Regression

Reinforcement Learning

 Reinforcement Learning  Robotics

Models 469,541

meta-llama/Llama-2-7b
Text Generation • Updated 1 day ago

stabilityai/stable-diffusion-2
Updated 6 days ago • 2.01k

openchat/openchat
Text Generation • Updated 2 days ago

11lyasviel/ControlNet-v1.0
Updated Apr 26 • 1.87k

cerspense/zeroscope_v2_XL
Updated 3 days ago • 2.66k • 33

meta-llama/Llama-2-13b
Text Generation • Updated 4 days ago

tiiuae/falcon-40b-instruct
Text Generation • Updated 27 days ago

WizardLM/WizardCoder-15B-V1.0
Text Generation • Updated 3 days ago

CompVis/stable-diffusion-v1-4
Text-to-Image • Updated about 17 hours ago

stabilityai/stable-diffusion-2
Text-to-Image • Updated about 17 hours ago

Salesforce/xgen-7b-8k-instruct
Text Generation • Updated 4 days ago • 6.1k



Models

eci-io/climategpt-70b

eci-io/climategpt-7b

eci-io/climategpt-13b

eci-io/climategpt-7b-fsc

eci-io/climategpt-7b-fsg

→ See 5 model results for "eci-io/climategpt"

Spaces

thomelane/eci-io-climategpt-7b

rinipu2/eci-io-climategpt-70b

→ See 2 space results for "eci-io/climategpt"

Use Full-text search

The AI builder

The platform where the machine learning community
collaborates on models, datasets, and applications.

Libraries Datasets Languages Licenses Other

Models 469,541

Search by name

Image Image-to-Text

Video Visual Question Answering

Question Answering Graph Machine Learning

Image Classification

Image Segmentation

Unconditional Image Generation

Zero-Shot Image Classification

Text Processing

Token Classification

Question Answering Question Answering

Classification Translation

Conversational

Text2Text Generation

Sentence Similarity

Audio

Text-to-Speech Automatic Speech Recognition

Audio-to-Audio Audio Classification

Voice Activity Detection

Tabular

Tabular Classification Tabular Regression

Reinforcement Learning

Reinforcement Learning Robotics

meta-llama/Llama-2-7b
Text Generation • Updatedstabilityai/stable-diffusion-v1-4
Updated 6 days ago • 2.01kopenchat/openchat
Text Generation • Updated 2 days agollyasviel/ControlNet-v1-0
Updated Apr 26 • 1.87kcerspense/zeroscope_v2_XL
Updated 3 days ago • 2.66k • 33meta-llama/Llama-2-13b
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Text Generation • Updated 27 days agoWizardLM/WizardCoder-15B-V1
Text Generation • Updated 3 days agoCompVis/stable-diffusion-v1-4
Text-to-Image • Updated about 17 hours agostabilityai/stable-diffusion-2
Text-to-Image • Updated about 17 hours agoSalesforce/xgen-7b-8k-instruction
Text Generation • Updated 4 days ago • 6.1

[Edit model card](#)

ClimateGPT-70B

ClimateGPT is a family of AI models designed to synthesize interdisciplinary research on climate change. ClimateGPT-70B is a 70 billion parameter transformer decoder model that was adapted from Llama-2 to the domain of climate science using continuous pre-training on a collection of 4.2B tokens from curated climate documents. The model is further instruction fine-tuned on a dataset of instruction-completion pairs manually collected by AppTek in cooperation with climate scientists. [ClimateGPT-7B](#) outperforms Llama-2-70B Chat on our climate-specific benchmarks. The model is designed to be used together with retrieval augmentation to extend the knowledge, and increase the factuality of the model and with cascaded machine translation to increase the language coverage.

Model Details

Explore the model lineage [here](#).

- Powered by: [Erasmus AI](#)
- Trained with: [AppTek](#)
- Authenticated by: [EQTYLab](#)

Downloads last month

29



Safetensors

Model size 69B params Tensor type BF16

Text Generation

Model is too large to load in Inference API (serverless). To try the model, launch it on [Inference Endpoints \(dedicated\)](#) instead.

Finetuned from [meta-llama/Llama-2-70b-hf](#)

Datasets used to train [eci-io/climategpt-70b](#)

[databricks/databricks-dolly-15k](#)

Viewer • Updated Jun 30, 2023 • 28.2k • 651

[OpenAssistant/oasst1](#)

Viewer • Updated May 2, 2023 • 4.25k • 1.21k

Space using [eci-io/climategpt-70b](#) 1

[rinipu2/eci-io-climategpt-70b](#)

AI Lineage Explorer

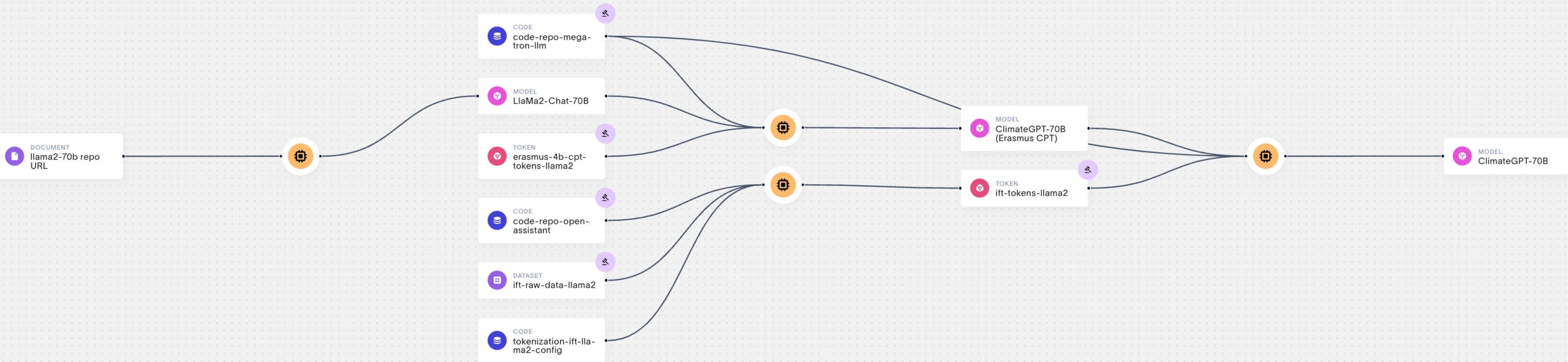


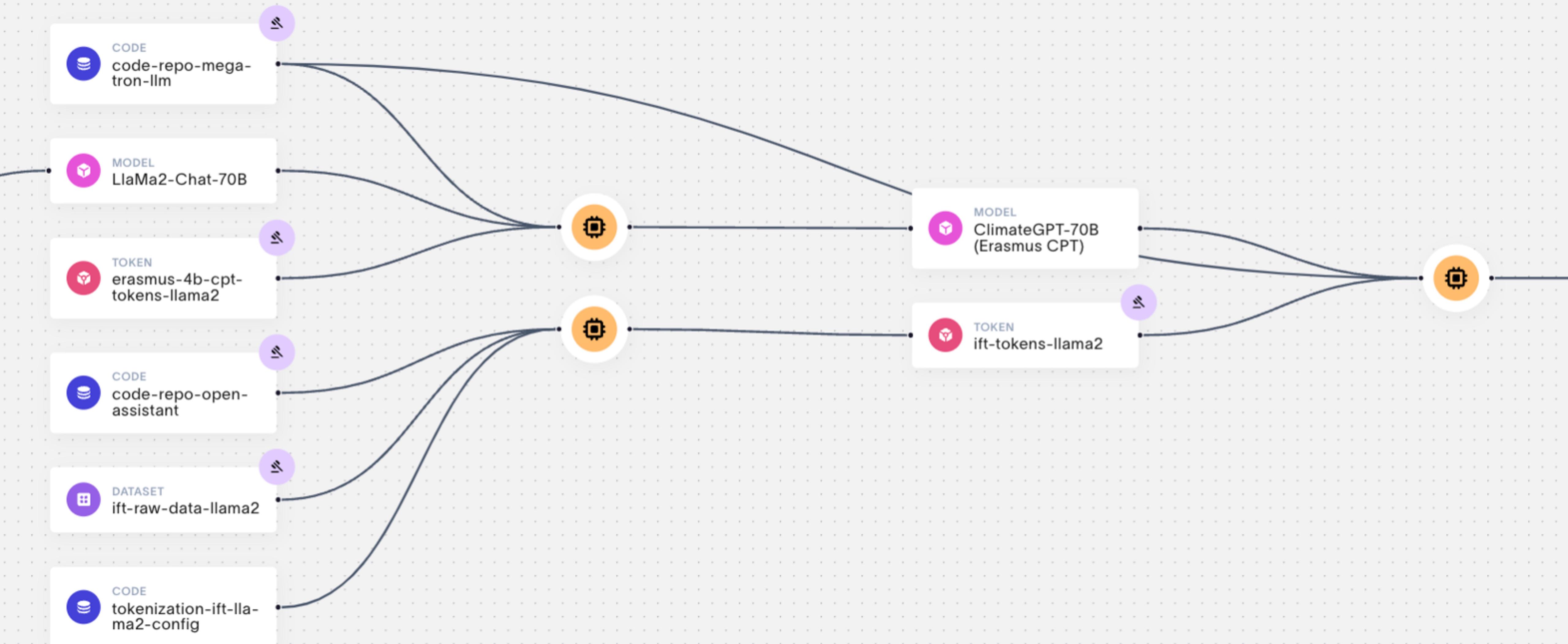
Search Hugging Face  or Type a URL 

Upload a Manifest 

Explore More...

eci-io/climategpt-70b





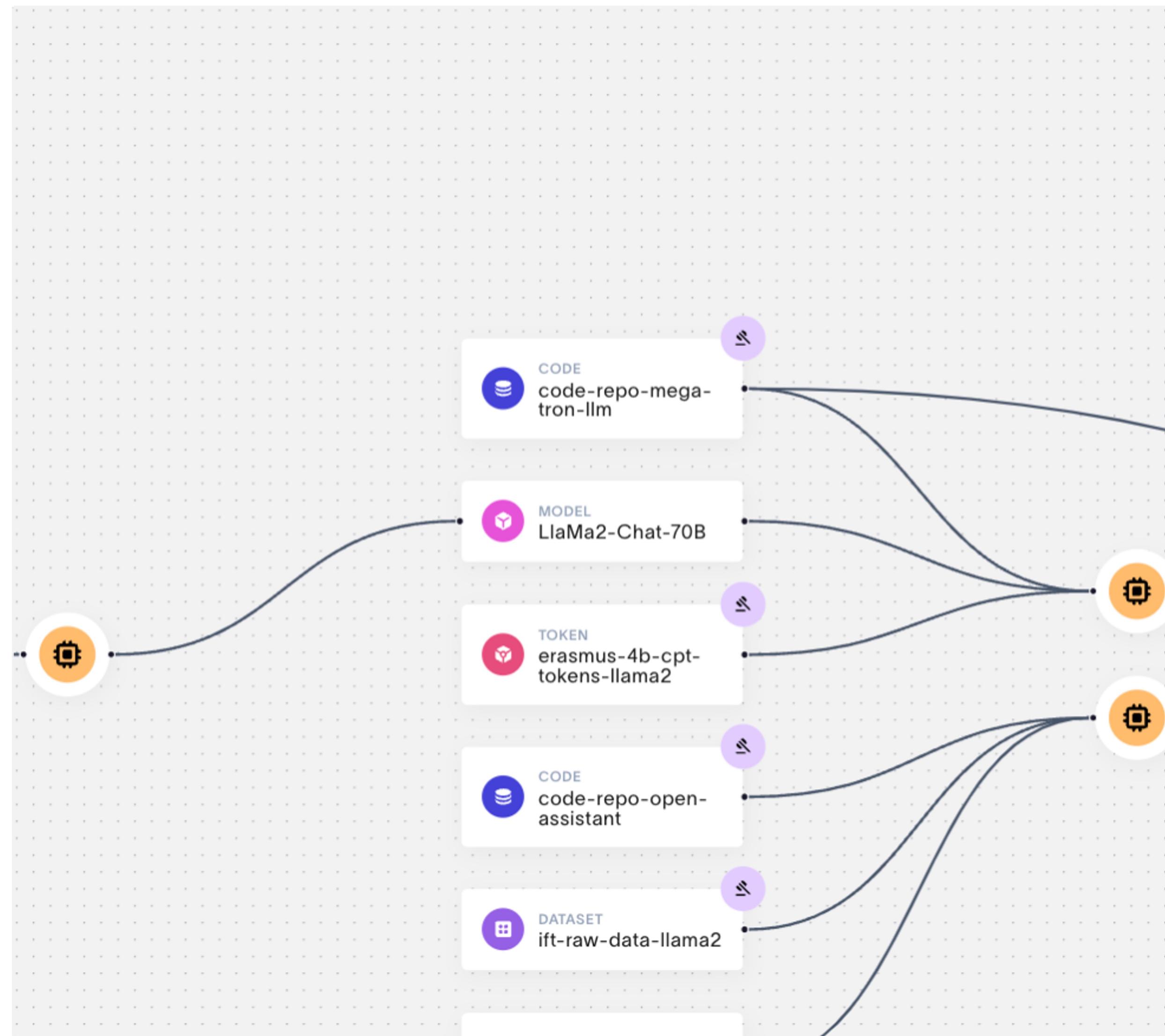
AI Lineage Explorer



Search Hugging Face or Type a URL

Upload a Manifest

Explore More...



Model

Asset

Name	LlaMa2-Chat-70B
Project	ECI_ClimateGPT
Description	General model

Model

Format	transformer
Location	https://huggingface.co/meta-llama/Llama-2-70b-hf
Contact	https://eci.io
License	Custom License - Refer to the official site for terms
Created	2023-12-02T00:59:02.034446Z
Last Modified	2024-01-05T01:12:22.506846Z

Registration

[download](#)

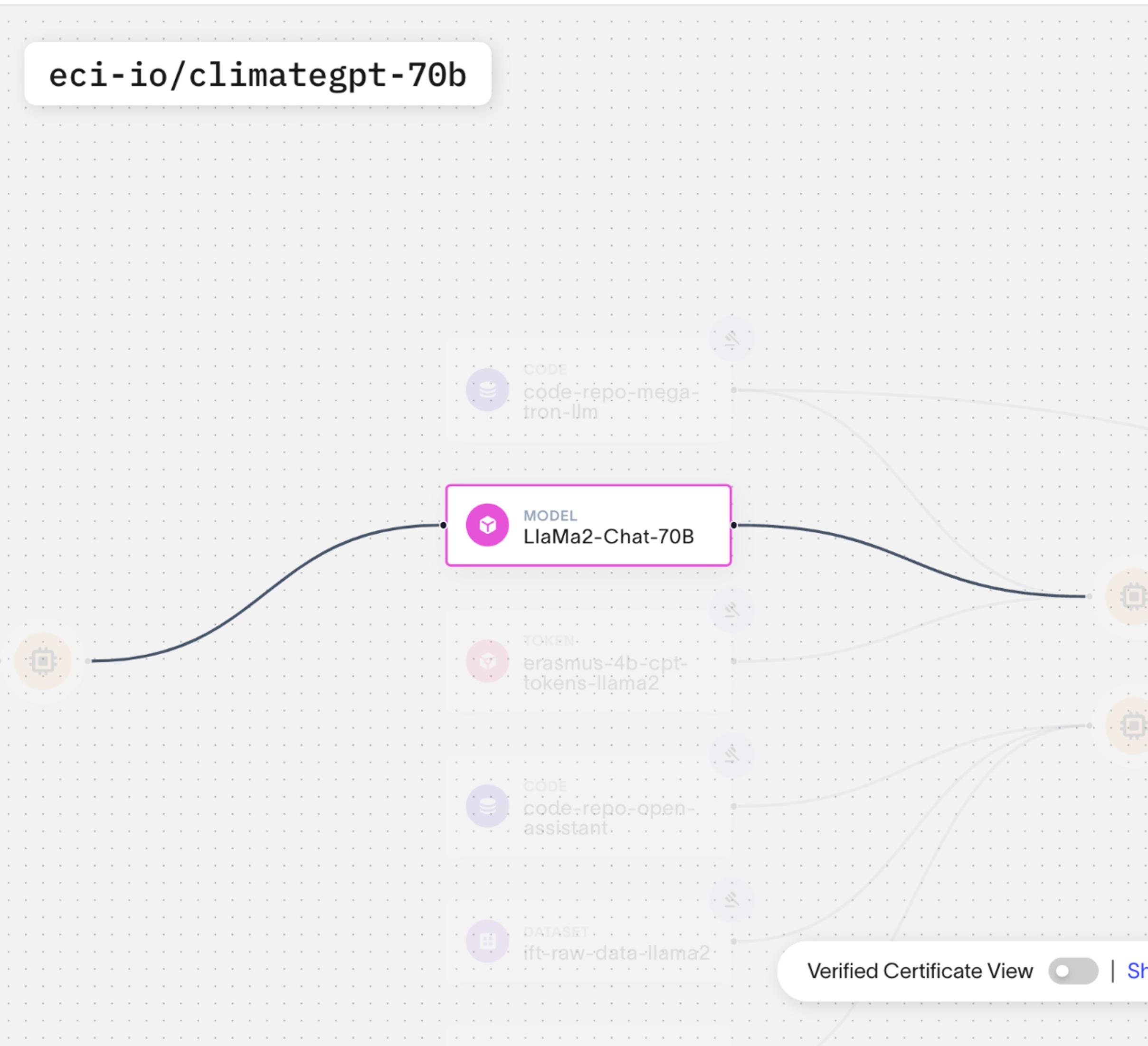
Node ID

CID bafkr...tepq

AI Lineage Explorer

 Search Hugging Face  or Type a URL Upload a Manifest 

Explore More...



Location	https://huggingface.co/meta-llama/Llama-2-70b-hf
Contact	https://eci.io
License	Custom License - Refer to the official site for terms
Created	2023-12-02T00:59:02.034446Z
Last Modified	2024-01-05T01:12:22.506846Z

Registration

[download !\[\]\(45b094497d14f5faba7346a0341fb09c_img.jpg\)](#)

Node ID

CID [bafkr...tepq](#) 

Date

December 5, 2023

Time

14:31:30 UTC

Registered By

KEY [zDnae...Zi1G](#) 

Anchored On

HCS [0x4a5...8724](#) 

Stored On

CID [baga6...sdh6](#) 

[← Show more](#)

Transaction 0.0.4109271@1705548579.347636217 SUCCESS

Type	HCS SUBMIT MESSAGE		Topic ID	0.0.4109344
Consensus at	10:29:50.5588 PM Jan 17, 2024, EST		Payer Account	0.0.4109271
Transaction Hash	4a58 a691 7d5a 2f5c 9e3c 6600 5fe0 4a08 16db f0e0 56ff 3eab eb64 8103 aed9 a22e 973a e0fb 2b17 beb5 ccd9 b33f 174a 8724		Charged Fee	0.00130169 \$0.00010
Block	58763144		Max Fee	100.000000000 \$7.82123
Node Submitted To	0.0.23 Hosted by Chainlink Labs Michigan, USA		Valid Duration	2min
Memo	None		Transaction Nonce	0
			Scheduled	False

Transfers

Hbar Transfers

Account	Hbar Amount	Account	Hbar Amount	
0.0.4109271	-0.00130169			
	-\$0.00010	→ 0.0.23	0.00006551	\$0.00001 Node fee (Chainlink Labs)
		→ 0.0.98	0.00111257	\$0.00009 Hedera fee collection account
		→ 0.0.800	0.00012361	\$0.00001 Staking reward account fee

Message Submitted

Sequence Number	6
Message	iroh: bafkr4ictj5wuwoswaibih3ls4gunhfleyihd5tsggsbqujvv cylgxarbg; ipfs: bafybeicoctcqkn7lzok7yax4vyp5clfefwdrha2ej2xbhgo54jq5655hpq;
Running Hash Version	3
Running Hash	mVNFWApToDDQmt6qA3wDwtl5Oa+qhMR6PCcUqb7rCOLK/KQGv2YMFdyDSCINT74v

Tracking AI Model Operation



0 0 0

ACME AI SYSTEM

AI MODEL

DETAILS LOG

DATE

REVERT?

LLM A

LLM B

LLM C

LLM D

LLM E

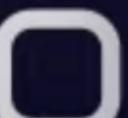
.....

.....

.....

.....

TODAY





ACME AI SYSTEM			
AI MODEL	TRAINING DATA	TIMESTAMP	STATUS
LLM E - v1.1	<div><div style="width: 100px;"></div></div>	10:01	✓
LLM E - v1.2	<div><div style="width: 150px;"></div></div>	10:04	✓
LLM E - v1.3	<div><div style="width: 200px;"></div></div> NEW'N'SHINY INSURANCE DATA	10:45	⚠
LLM E - v1.4	<div><div style="width: 250px;"></div></div>	11:05	⚠
LLM E - v1.5	<div><div style="width: 300px;"></div></div>	11:08	⚠



AI MODEL	DETAILS LOG	DATE	REVERT?
LLM A	[REDACTED]	[REDACTED]	<input type="checkbox"/>
LLM B	[REDACTED]	[REDACTED]	<input type="checkbox"/>
LLM C	[REDACTED]	[REDACTED]	<input type="checkbox"/>
LLM D	[REDACTED]	[REDACTED]	<input checked="" type="checkbox"/>
LLM E	[REDACTED]	[REDACTED]	<input type="checkbox"/>

“AI abundance & blockchain assurance”

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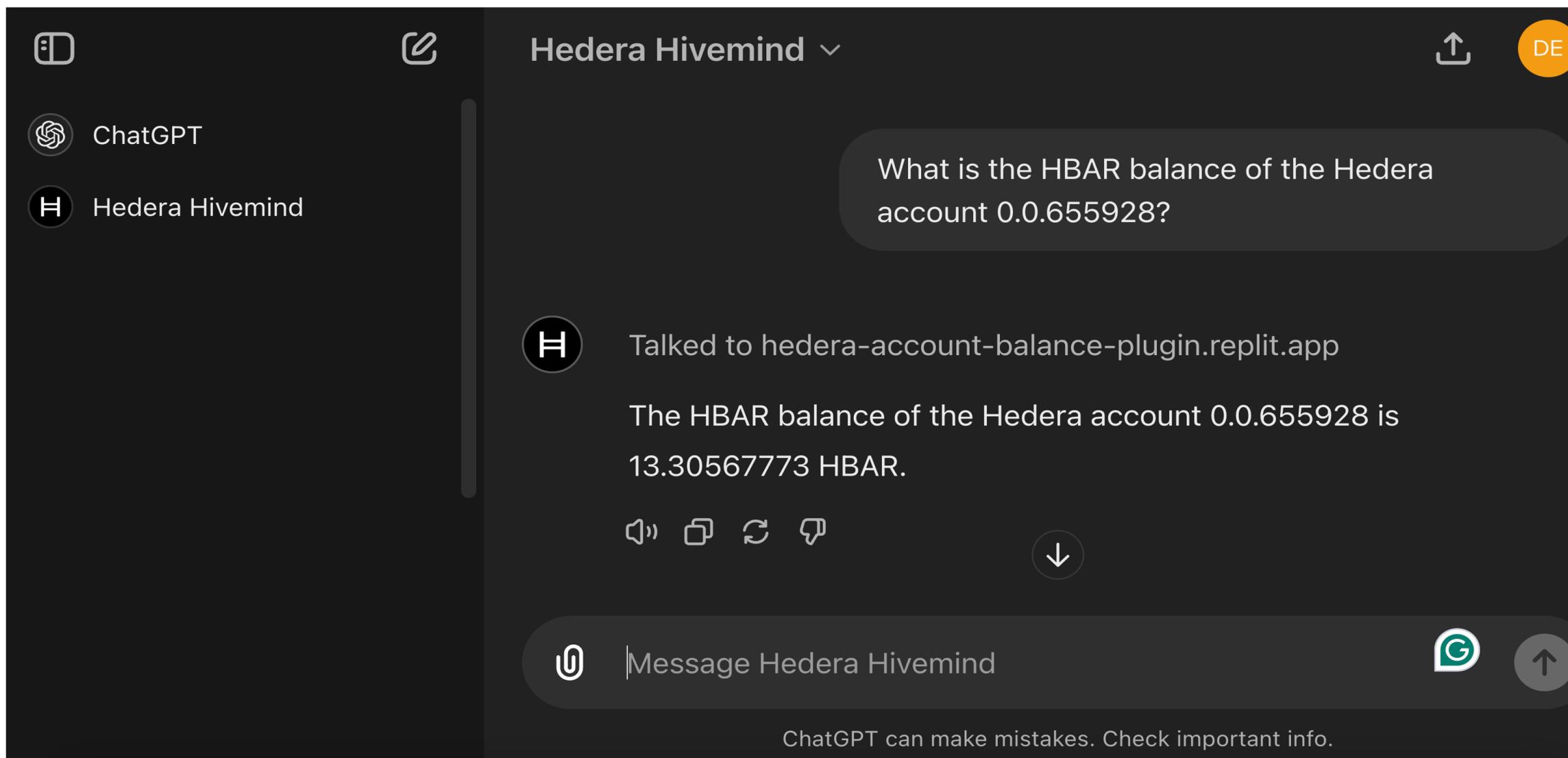
5. Auditing AI decisions



Blockchain networks are a source of valuable data

Extracting meaningful insights from blockchain can be challenging

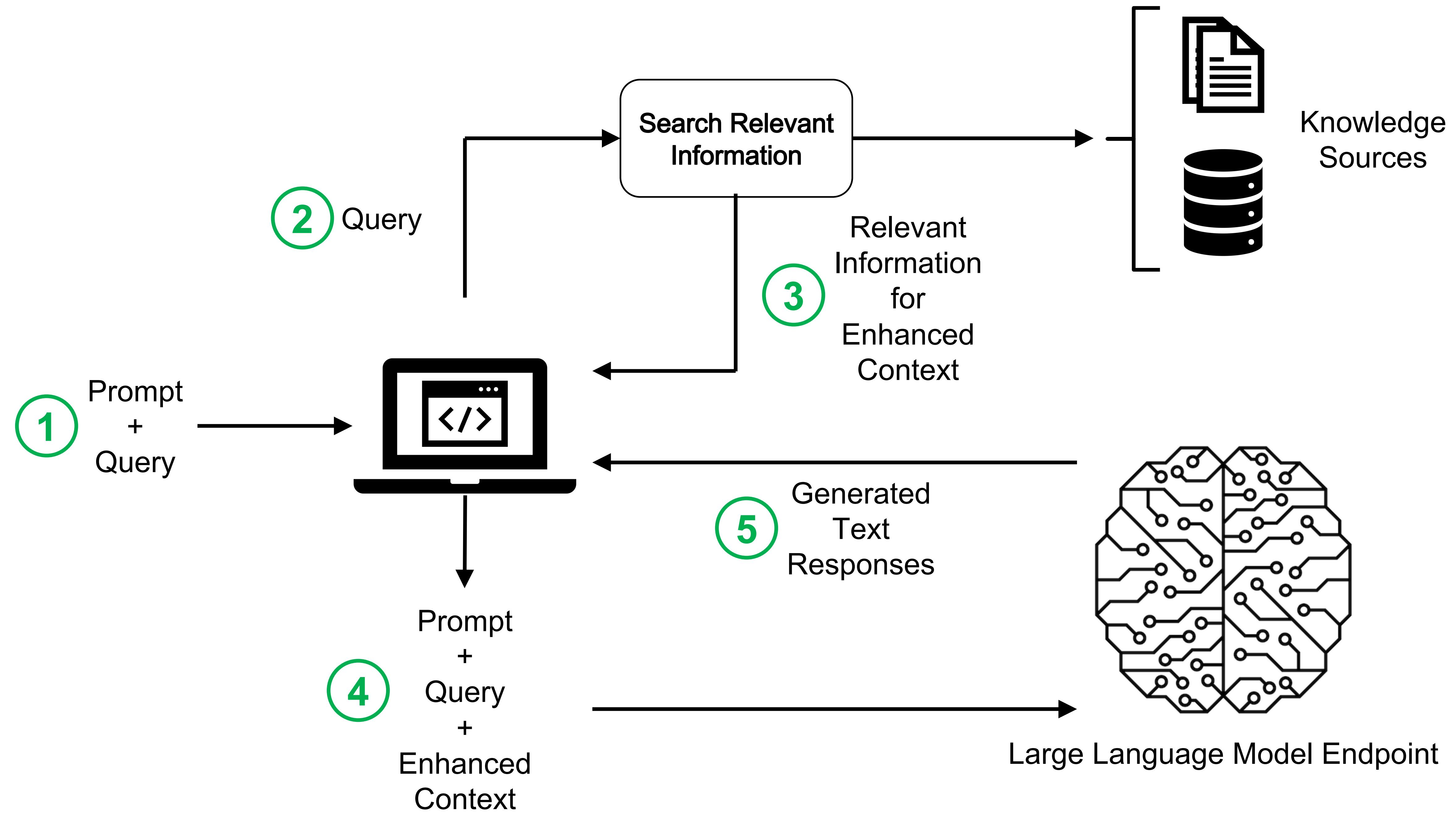
Often requires understanding platforms, data structure & format, and more



The screenshot shows a dark-themed ChatGPT interface. The user has typed: "What is the HBAR balance of the Hedera account 0.0.655928?". The AI response is: "Talked to hedera-account-balance-plugin.replit.app". Below this, the AI provides the balance: "The HBAR balance of the Hedera account 0.0.655928 is 13.30567773 HBAR." At the bottom, a note says: "ChatGPT can make mistakes. Check important info."

AI enables extracting insights using natural language

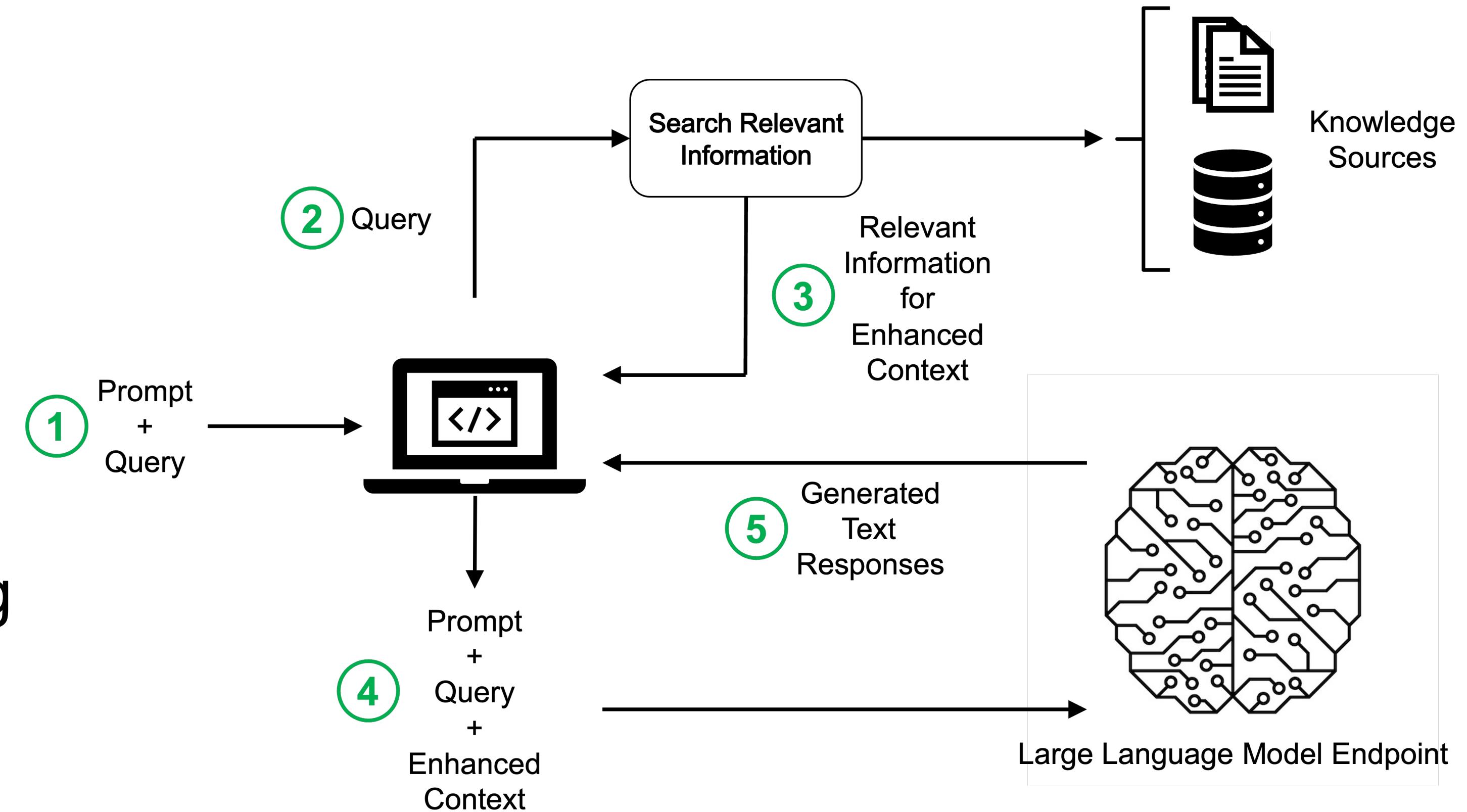
Data is accessible and useful to a broader audience



Retrieval Augmented Generation (RAG) enables access to updated info and grounds responses in credible sources

Addresses two common problems with LLMs:

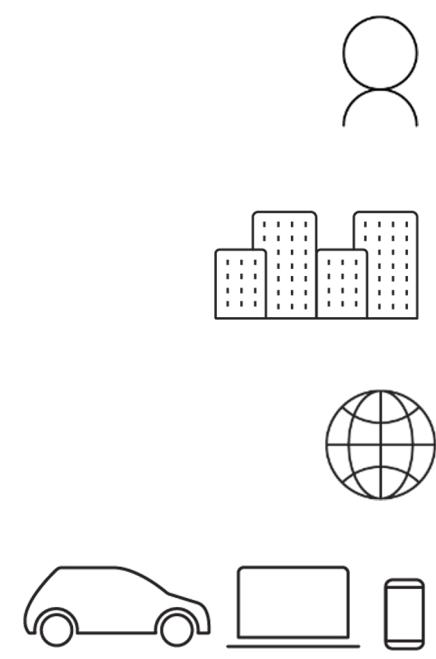
- Lack of source
- Outdated info from training



Function calling extends the capabilities of AI models with predefined functions

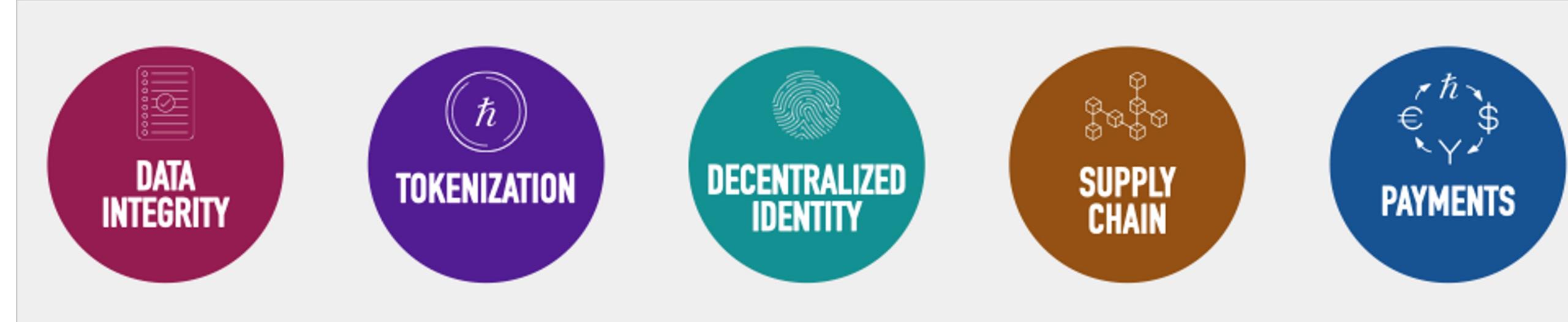
Feature	RAG	Function Calling
Primary Focus	Enhancing LLM knowledge and accuracy with external sources	Extending LLM capabilities with external tools and APIs
Interaction	The LLM processes retrieved information	The LLM triggers and uses external functions
Example	Answering a question by referencing relevant documents or database	Calculating the sum of two numbers using a calculator API

END USERS

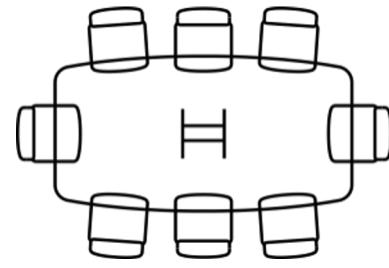


INDIVIDUALS
ENTERPRISES
GOVERNMENTS
DEVICES

APPLICATION USE CASES



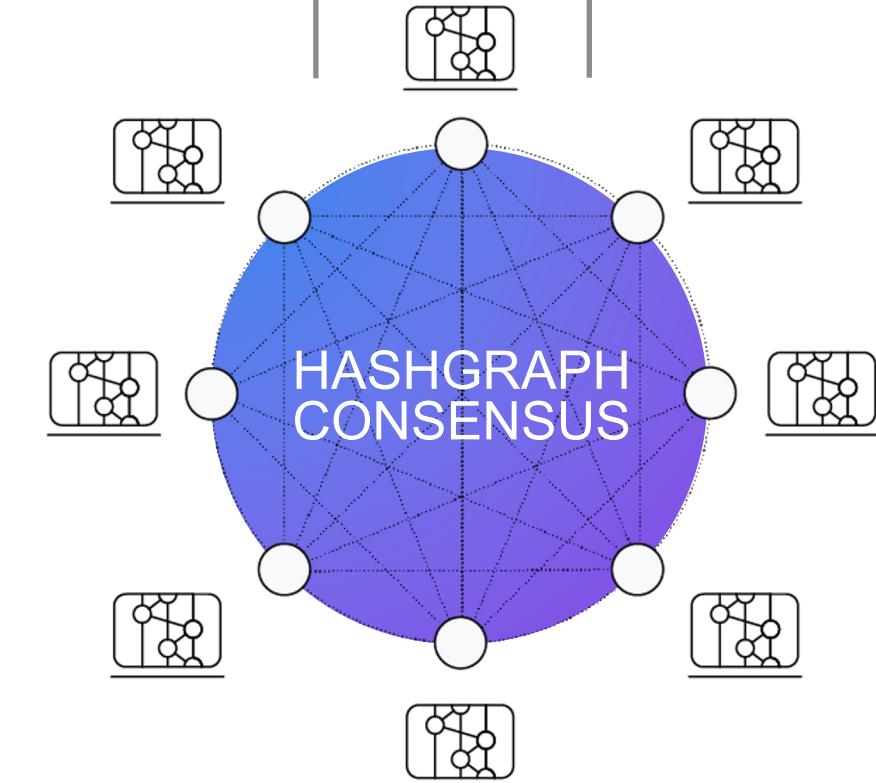
HEDERA GOVERNING COUNCIL



CONSENSUS SERVICE

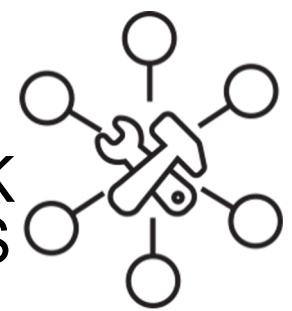
TOKEN SERVICE

SMART CONTRACTS



HEDERA MAINNET & MIRROR NODES

PRIMARY NETWORK SERVICES



RAG Example



Welcome

You're working in [vertex-ai-test](#)

Project number:



Project ID:



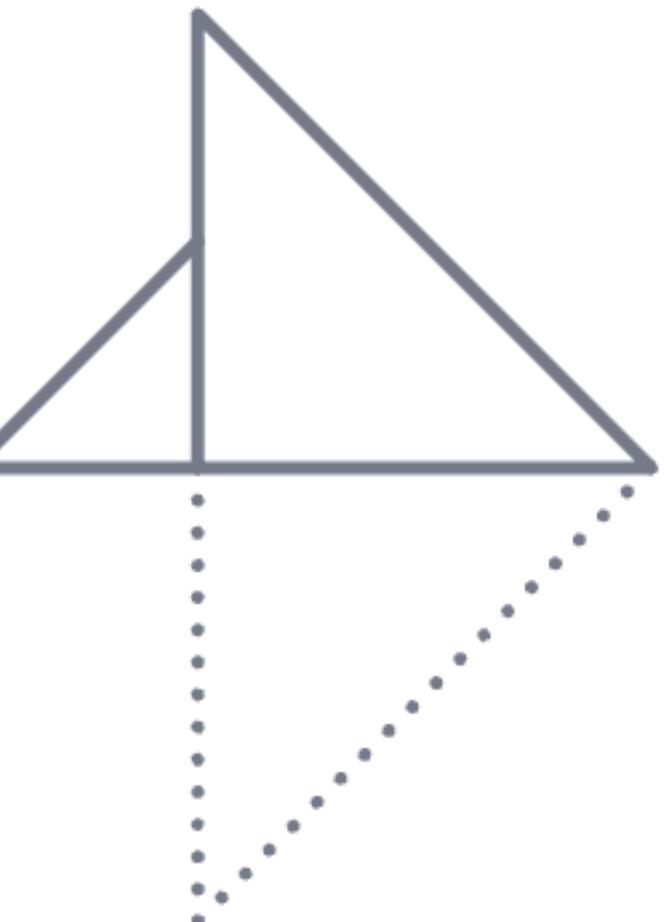
[Dashboard](#)

[Recommendations](#)

[Create a VM](#)

[Run a query in BigQuery](#)

[Create a GKE cluster](#)



+ Code + Text

✓ RAM 
Disk 

◆ Gemini



```
▶ # ///////////////////////////////////////////////////
# USING FUNCTION DECLARATION TO EXTRACT
# STRUCTURED INFO FROM PROMPT INPUT
# ///////////////////////////////////////////////////
get_hbar_balance = FunctionDeclaration(
    name="accounts",
    description="Get the HBAR balance of a specific Hedera account",
    parameters={
        "type": "object",
        "properties":
            {"account_id":
                {"type": "string",
                "description": "The ID of the Hedera account"}
            },
        },
)
◀ hedera_discovery_tool = Tool(
    function_declarations=[get_hbar_balance]
)
```

+ Code + Text

✓ RAM Disk

◆ Gemini



```
▶ # //////////////////////////////////////////////////////////////////  
# INITIALIZING THE MODEL & CHAT  
# PASSING THE HEDERA DISCOVERY TOOL TO THE MODEL  
# //////////////////////////////////////////////////////////////////
```

```
▶ model = GenerativeModel(  
    "gemini-pro",  
    generation_config={"temperature": 0},  
    tools=[hedera_discovery_tool]  
)
```

```
▶ chat = model.start_chat()
```

```
▶ prompt = """  
What's the HBAR balance of account id 0.0.4574554?  
"""  
▶ response = chat.send_message(prompt)
```

+ Code + Text

✓ RAM 
Disk 

◆ Gemini



```
# EXTRACTING RELEVANT INFO FROM PROMPT INPUT FOR API QUERY
# /////////////////////////////////
function_call = response.candidates[0].content.parts[0].function_call
args = function_call.args.pb
argName = list(args.keys())[0]
argValue = str(args[argName]).split(":")[1].strip().replace("'", '')

account_id = argValue
endpoint = function_call.name
base_url = "https://mainnet-public.mirrornode.hedera.com/api/v1/"

# /////////////////////////////////
# MAKING THE API REQUEST (GET METHODS)
# AND CHECKING STATUS OF THE RESPONSE
# /////////////////////////////////
api_url = f"{base_url}{endpoint}"
if account_id is not None:
    api_url += f"?account.id={account_id}"

api_response = requests.get(api_url)

# API request was successful
if api_response.status_code == 200:
    data = api_response.json()
    print("API response data:", data) # Process the data returned
else:
    # API request failed
    print("API request failed with status code:", api_response.status_code)
    print("Response content:", api_response.text)
```



{x}

⌚

📁

◀

☰

▶

+ Code + Text

✓ RAM 
Disk 

◆ Gemini



```
▶ # //////////////////////////////////////////////////////////////////  
# EXTRACT NUMERIC VALUES  
# AND PROVIDE ANSWER FROM THE MODEL  
# //////////////////////////////////////////////////////////////////  
balance = data["accounts"][0]["balance"]["balance"]*1E-8
```

```
# //////////////////////////////////////////////////////////////////
```

```
▶ response = chat.send_message(  
    Part.from_function_response(  
        name=function_call.name,  
        response={  
            "content": balance,  
        },  
    ),  
)  
▶ response.candidates[0].content.parts[0]
```

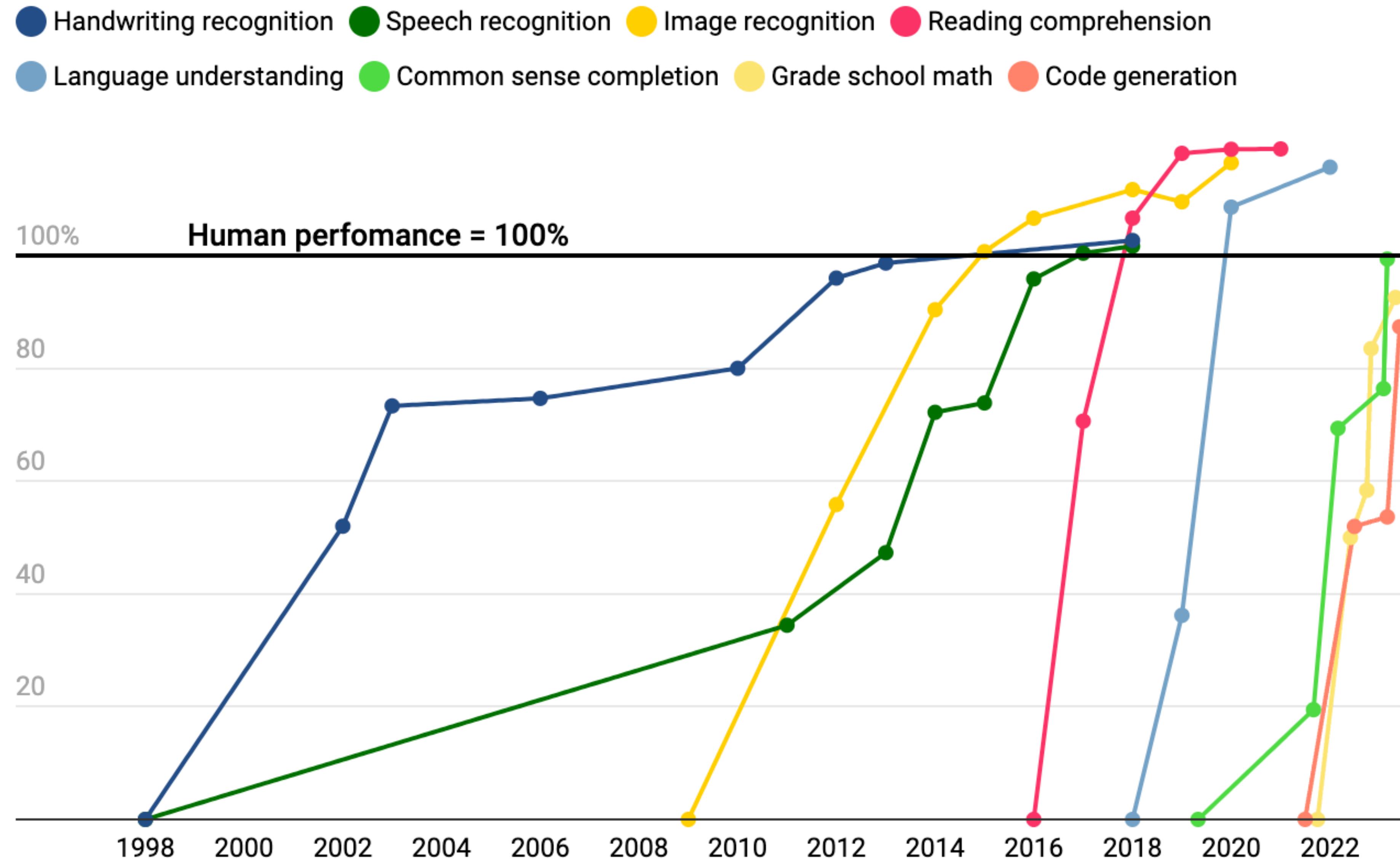
```
API response data: {'accounts': [{}{'account': '0.0.4574554', 'alias': None, 'auto_renew_period': 7776000, 'balance':  
text: "The HBAR balance of account id 0.0.4574554 is 288.73097214 HBAR. \n"}]
```

“AI abundance & blockchain assurance”

1. Data integrity for training AI models
2. Tracking AI model lineage during development / tuning
3. Retrieval Augmented Generation (RAG)
4. **Content ownership, traceability, and compensation**
5. Auditing AI decisions



AI systems are surpassing the volume of output of humans



Concerns: ownership, attribution, traceability, & compensation

High-profile lawsuits:

- NYT vs OpenAI
- Getty Image vs Stable Diffusion

Copyright laws are ill-equipped to deal with the nuances of AI-generated content



Devaluation of human-generated content & undermining of incentives

AI companies and owners of large private datasets are the beneficiaries

Blockchain can protect human creativity & ensure that the benefits of AI are shared more equitably across society



Digital Ownership

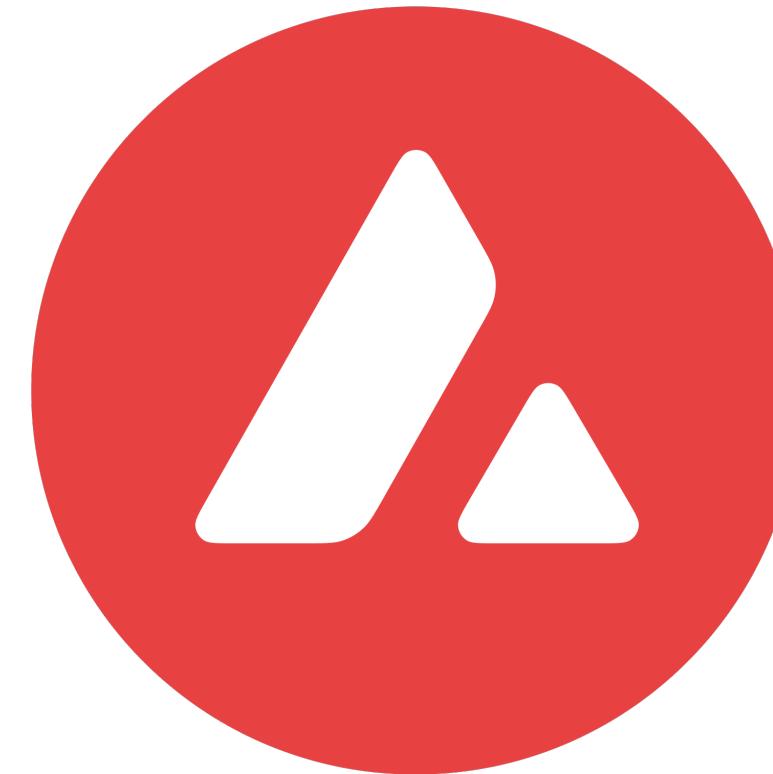


Immutable Traceability

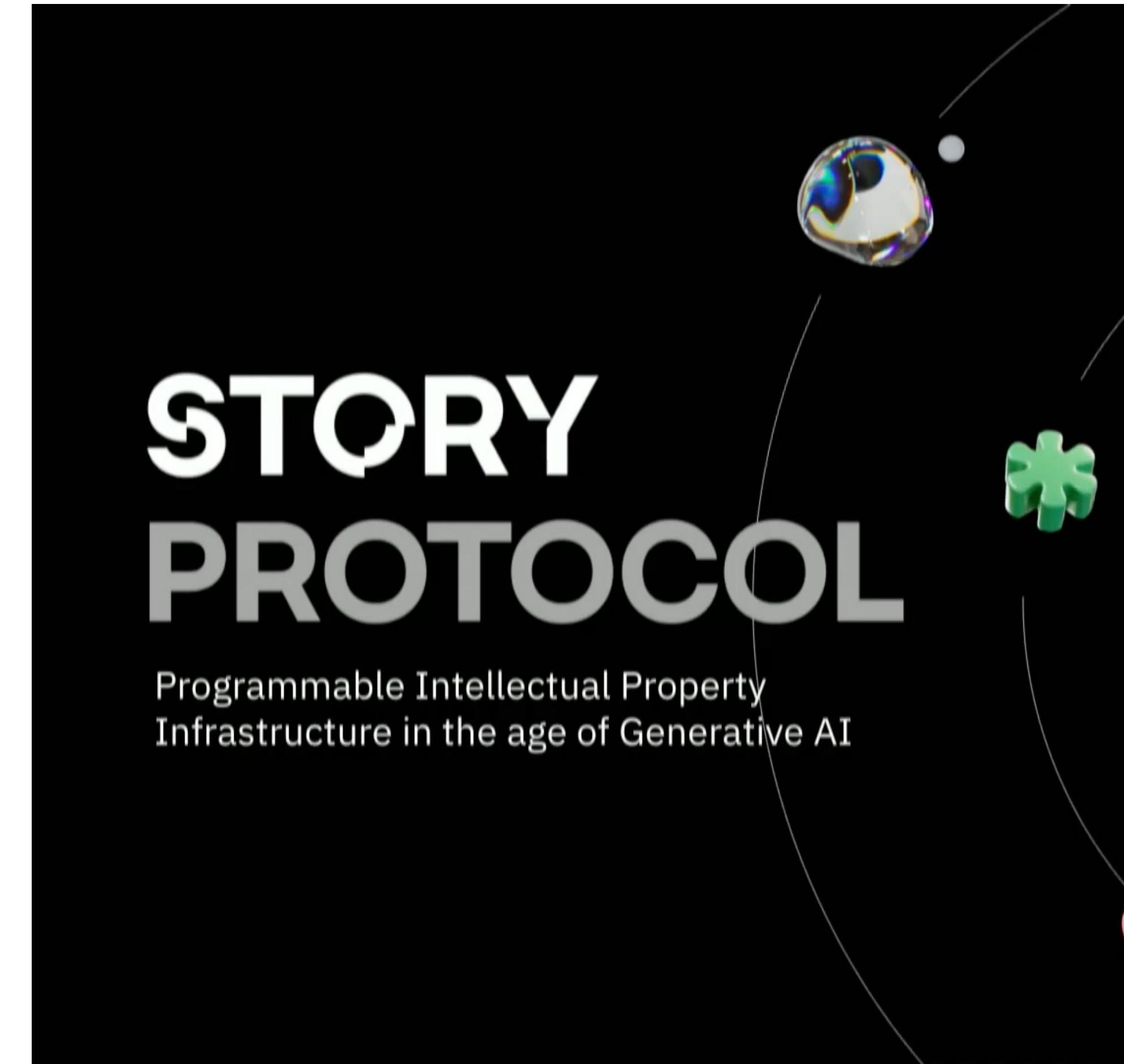


Direct Value Exchanges

Layer 1 blockchains and specialized protocols as a solution



Layer 1 Blockchains



Specialized Protocols

“AI abundance & blockchain assurance”

1. Data integrity for training AI models

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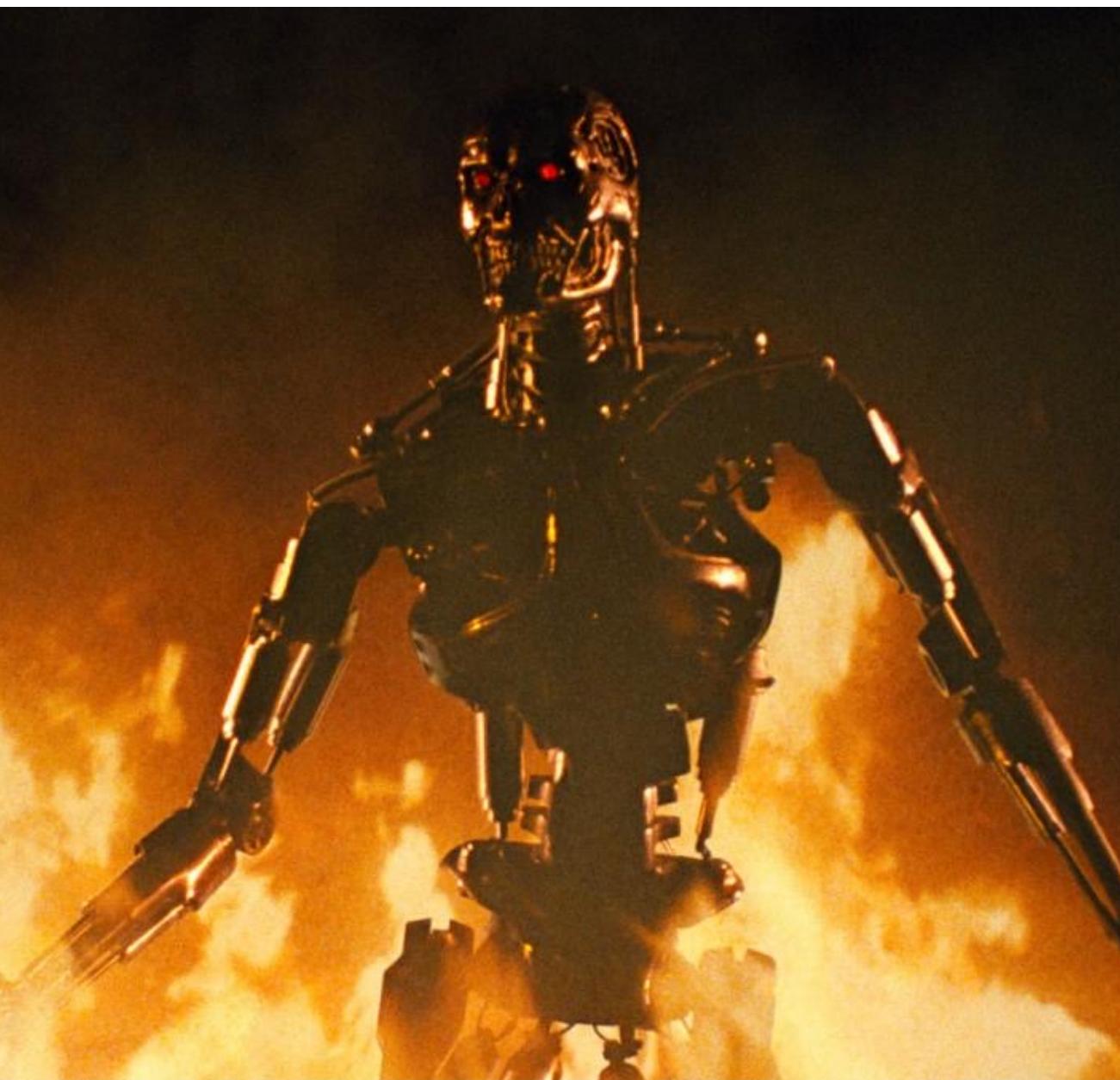
Can AI pose existential risks?



...



Maybe



!!

Who is deciding the direction of AI?



Sam at OpenAI?



Satya at Microsoft?



Elon?

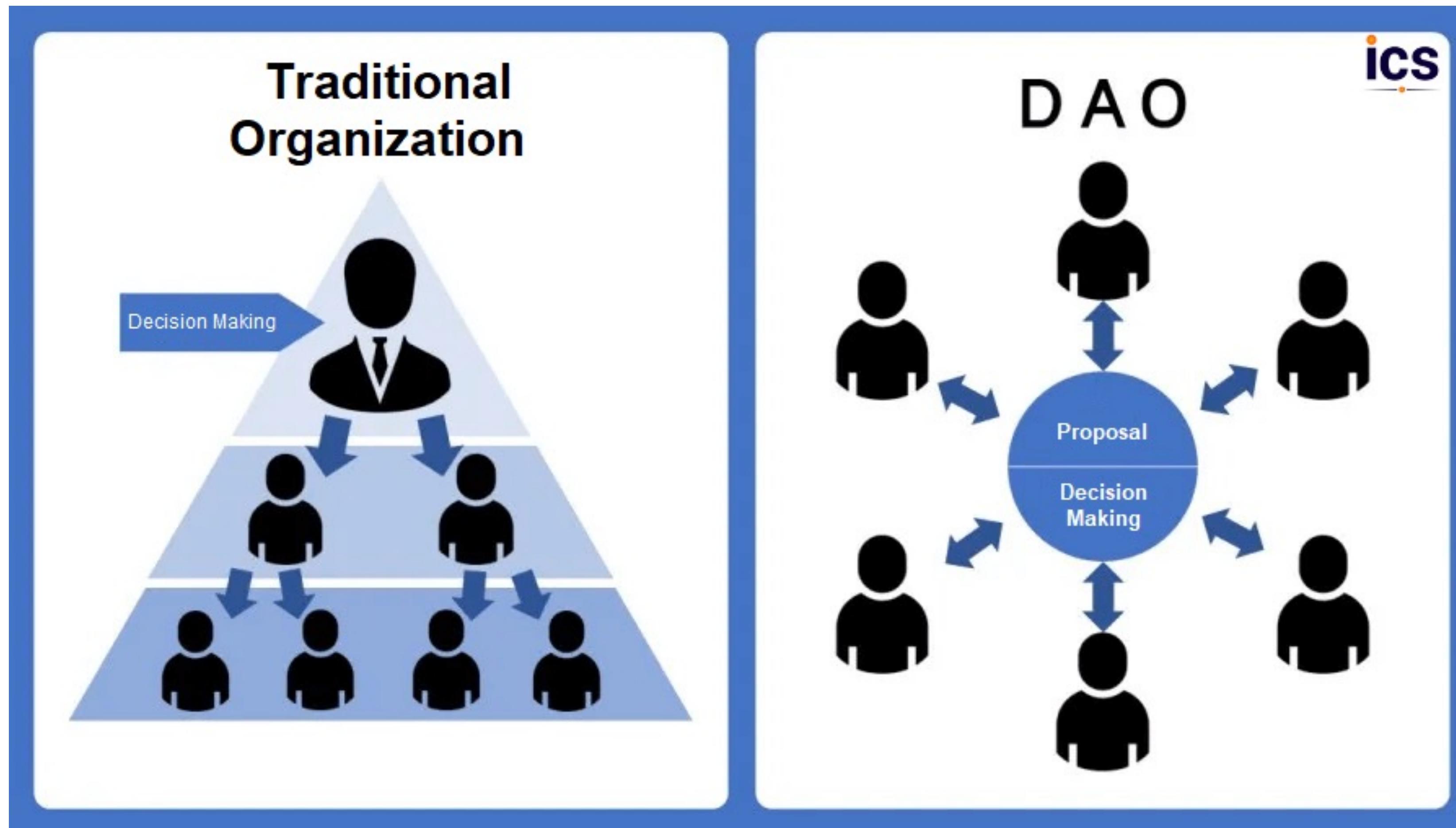
[Marca](#)

[NY Times](#)

[Fortune](#)

All of us can participate in AI decisions

with Decentralized Autonomous Organizations (DAOs)



DAOs are blockchain-based entities that enable decentralized decision-making & transparent community-driven governance

Filter Clear

Categories

DAO Tools

- DAO Developer Tools
- DAO Project Management Tools
- DAO Reputation Tools
- Web3 Achievements

Explore By Chain

- Arbitrum
- Avalanche
- Bitcoin
- BNB Chain
- Celo

Colony DAO Developer Tools

Colony - a complete no-code toolkit for building DAOs.

 CREW³ Free Customers DAO Developer Tools

Crew - a one-stop tool for onboarding and incentivization in DAOs.

 DaoLens DAO Developer Tools

DaoLens offers DAO onboarding and contribution tools.

 Llama Free Customers DAO Developer Tools

Llama is a governance system for onchain organizations.

 Fabric Free Customers DAO Developer Tools

Fabric is the easiest way to crowdfund onchain.

 Lore Free Customers DAO Developer Tools

Lore enables collectives to spin up a shared vault, pool resources and own NFTs together.

 Coordinape Free Customers DAO Developer Tools

Coordinape - a DAO-tooling infrastructure for an efficient reward distribution system.

 Guild Web3 30 Winners DAO Developer Tools

Guild is an automated community creation and management tool.

 Neighbourhoods Network DAO Developer Tools

Provides tools and services for a new framework for creating and organizing online communities.

 DeWork Free Customers DAO Project Management Tools

A web3-native project management tool, bounty platform, and professional network.

 Wonderverse Free Customers DAO Project Management Tools

Wonderverse is a DAO project management tool and Web3 credentialing platform.

 Charmverse Free Customers DAO Project Management Tools

CharmVerse is a Web3 operations platform handling docs, tasks, bounties, proposals, and votes.

DAO Tooling on Ethereum

Connect to a Wallet

HASHIODAO

Kabila Governance Token

Dovu Governance Token

BankSocial Governance Token

Hbarsuite Governance Token

Galaxy Governance Token

Saucerswap Again Governance Token

TheDAO - Test Governance Token

1 2 **Next**

HashioDAO on Hedera

In this session, you will learn about...



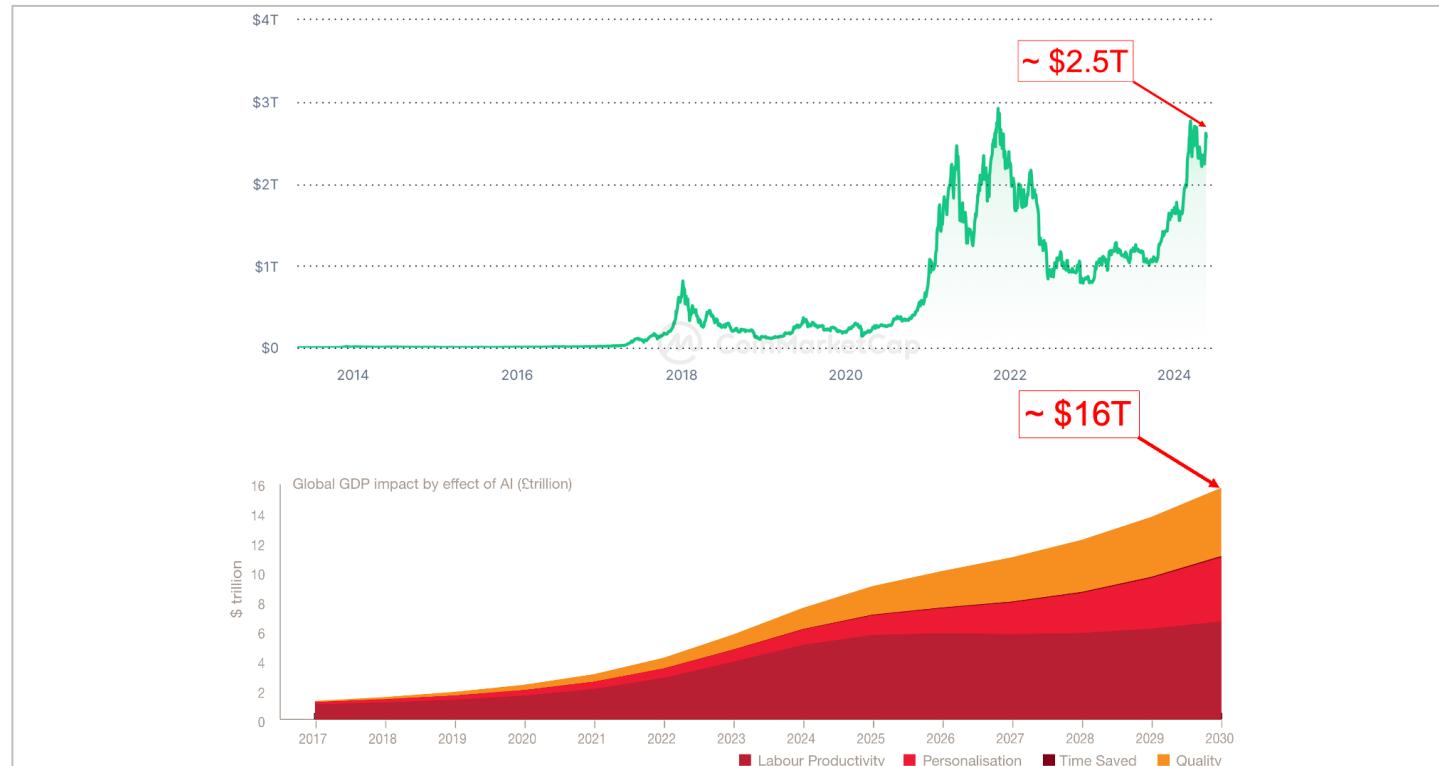
AI & Blockchain

5 Key Applications

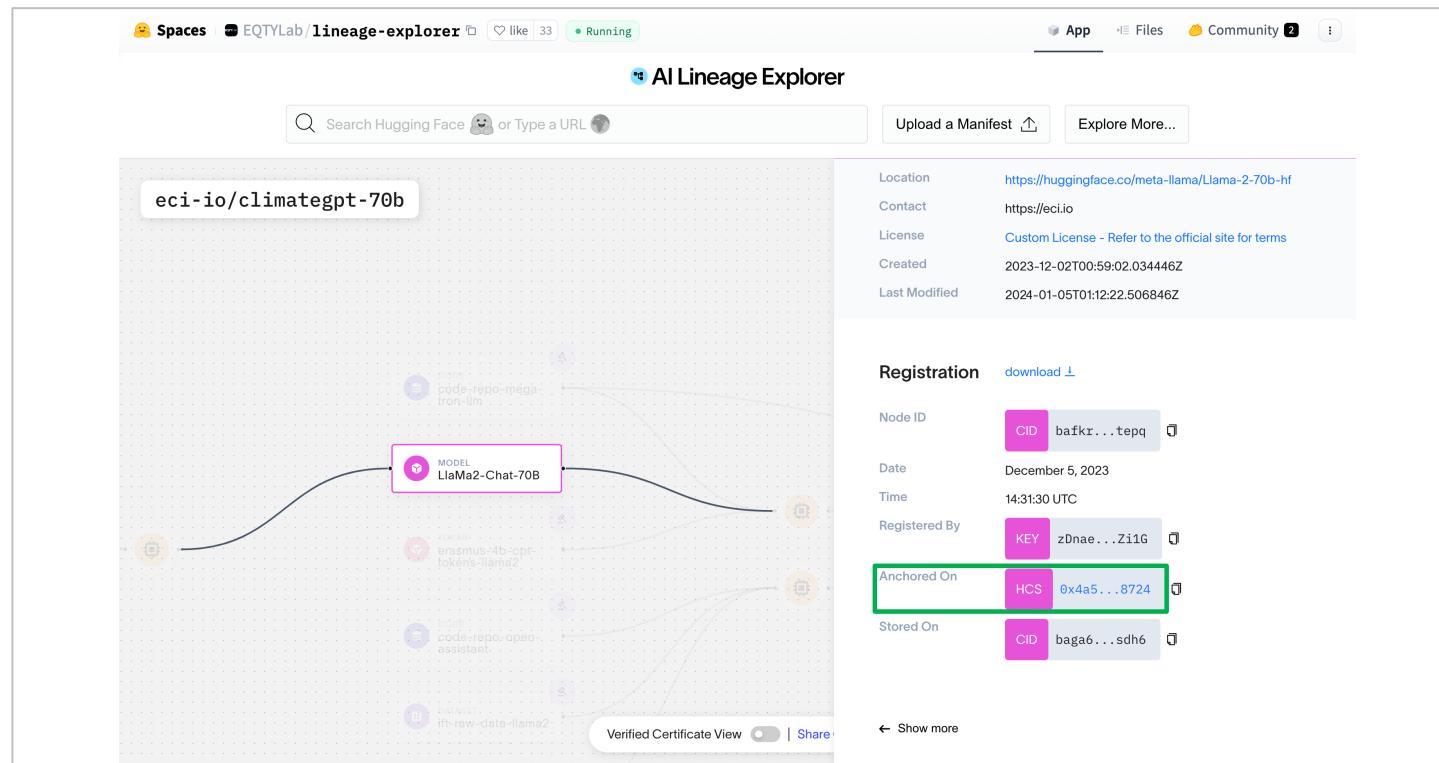
Resources & Next Steps

In summary, AI & blockchain work really well together!

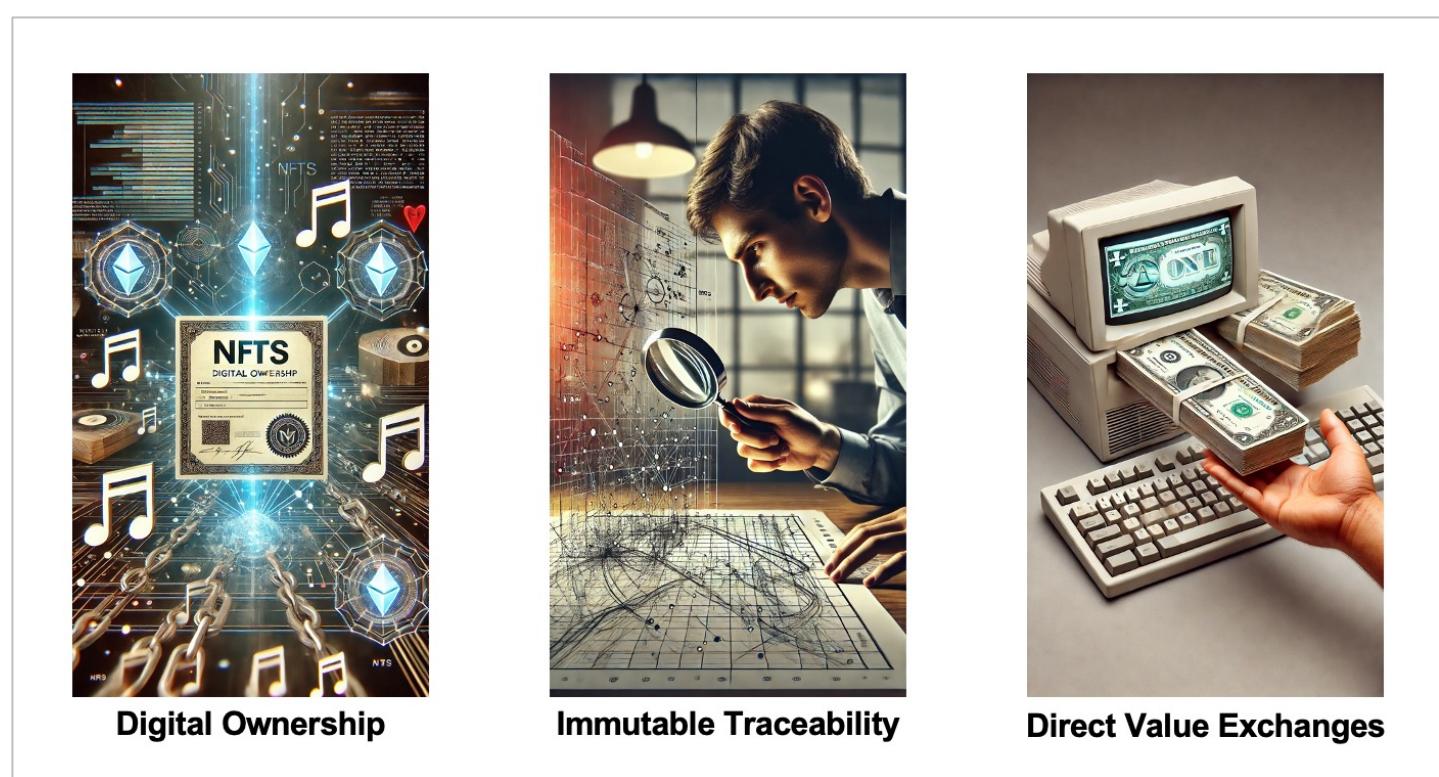
1. Data integrity for training AI models



2. Tracking AI model lineage during development & versions in operation

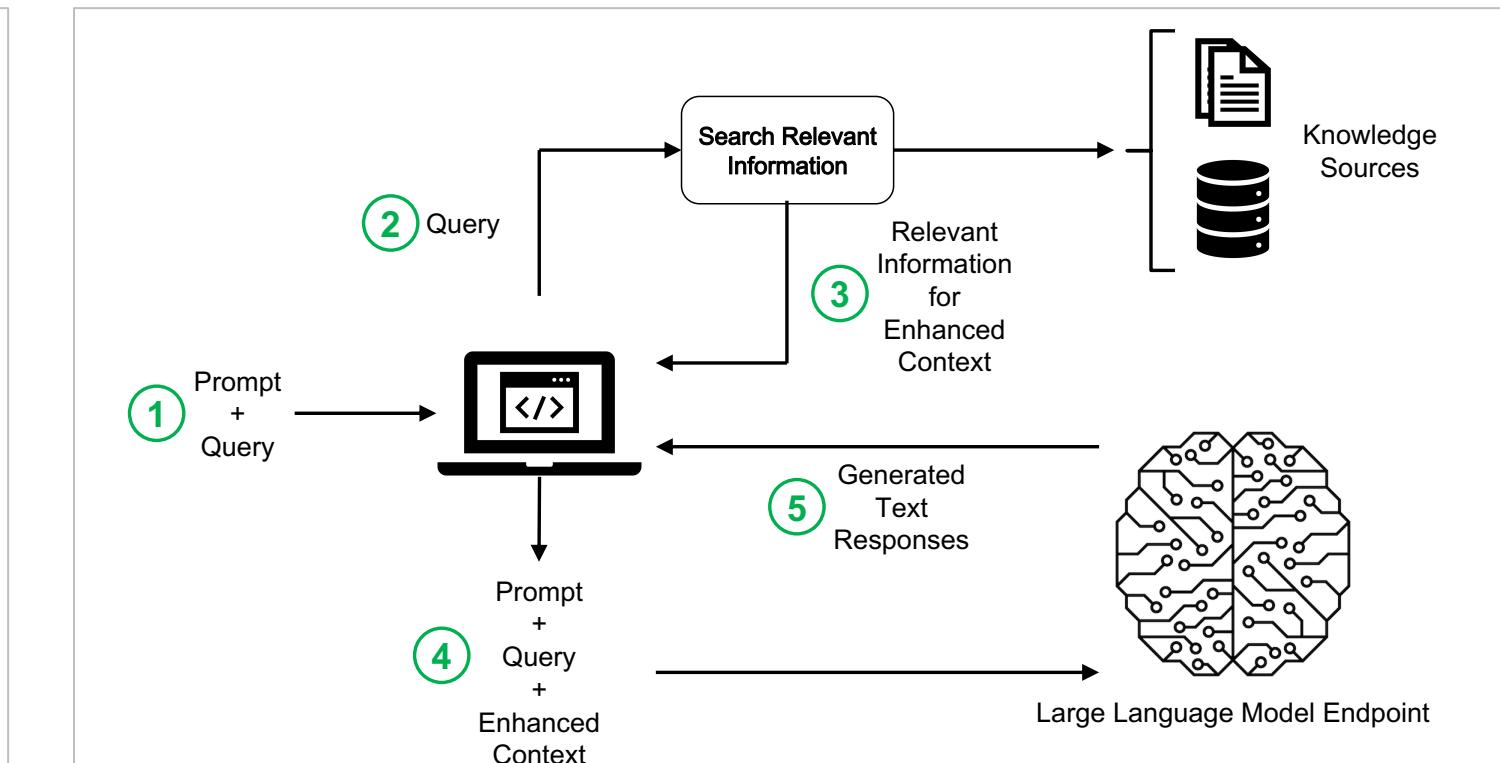
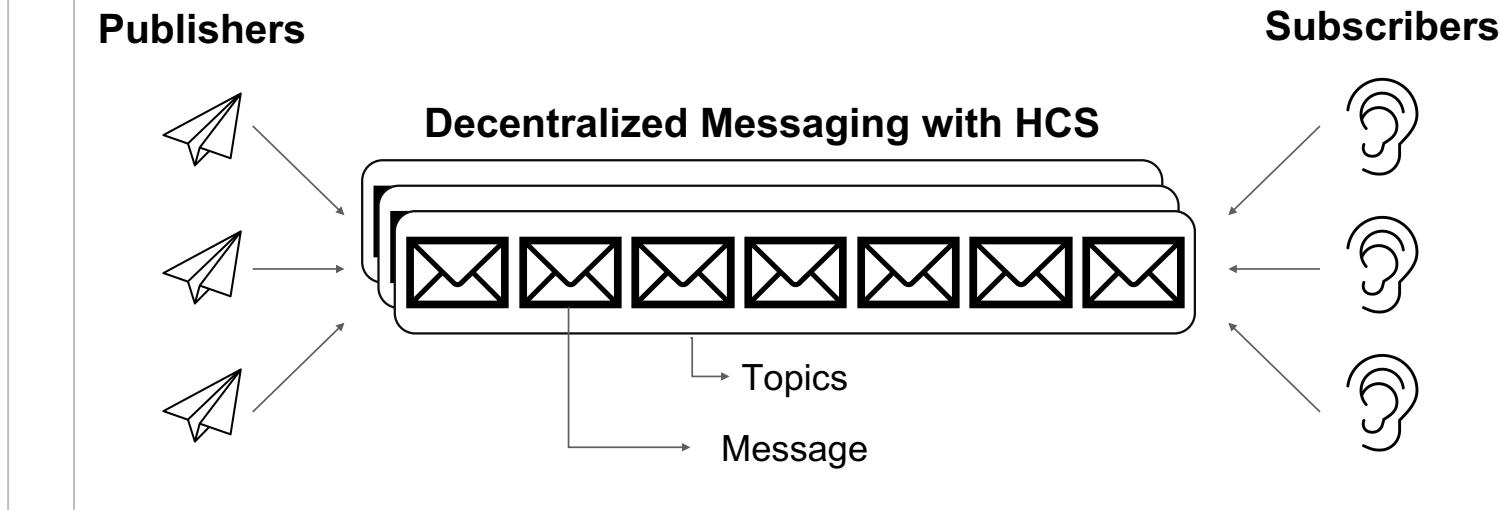


3. Retrieval Augmented Generation (RAG)

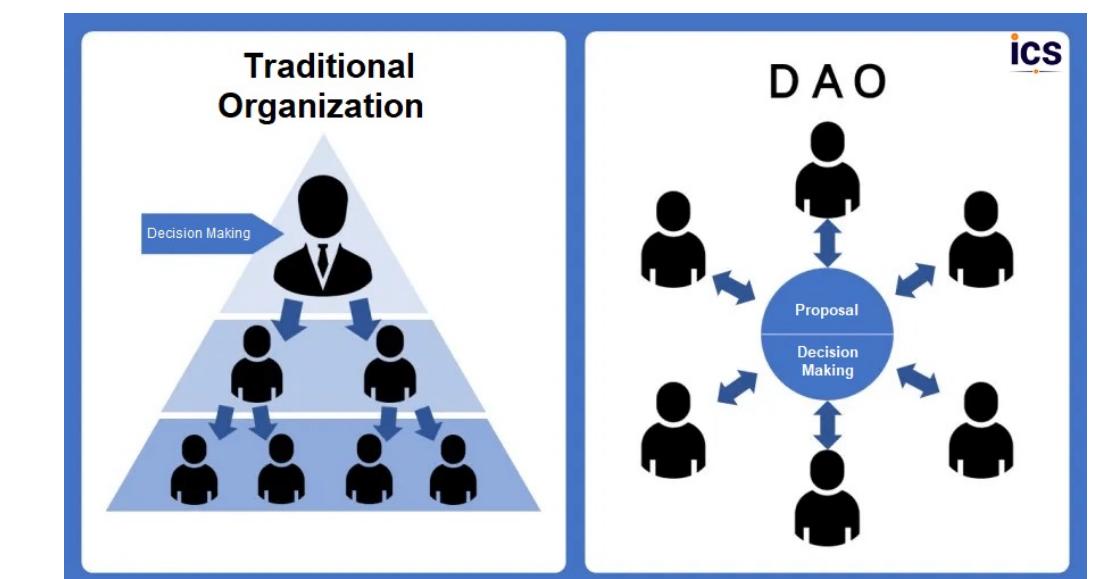


5. Auditing AI decisions

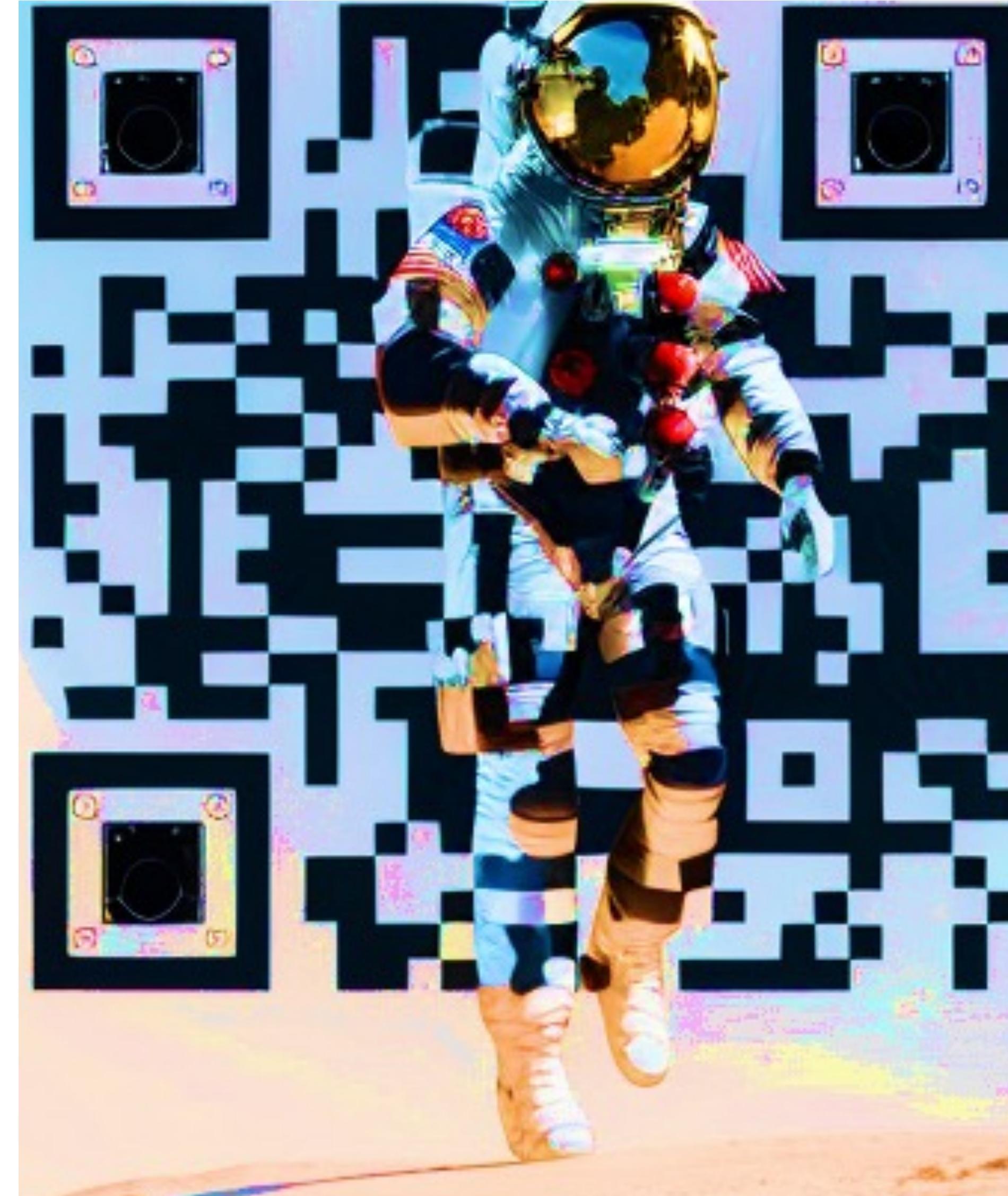
The Hedera Consensus Service (HCS) is a decentralized software utility that orders and notarizes transactions



All of us can participate in AI decisions
with Decentralized Autonomous Organizations (DAOs)



Get these slides **today!**



tinyurl.com/4xwcwnxr

Take the next step today!



Come talk to us!



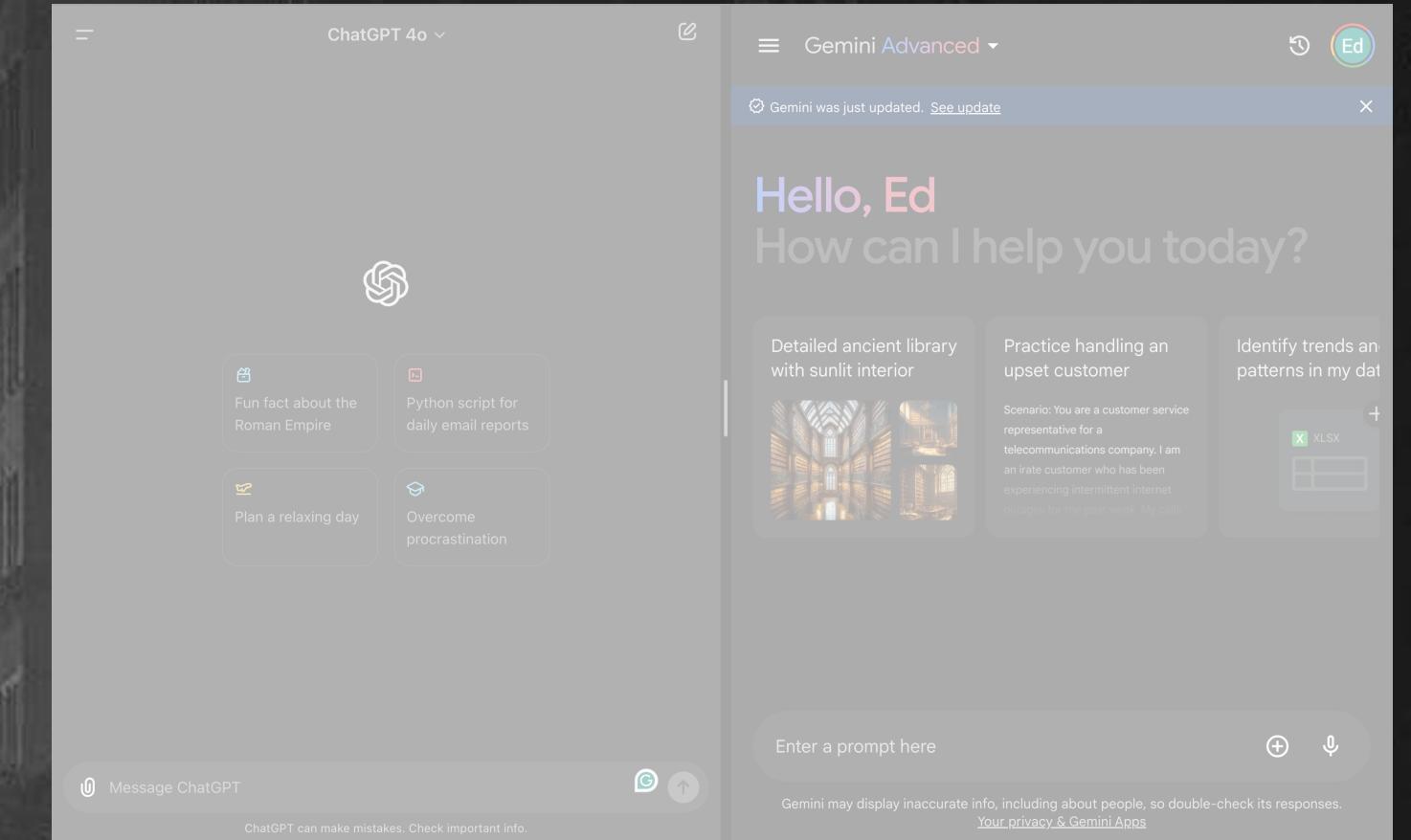
HELLO FUTURE HACKATHON

REGISTRATIONS CLOSE: 18 AUG

HACKATHON PERIOD: 22 JUL – 20 AUG

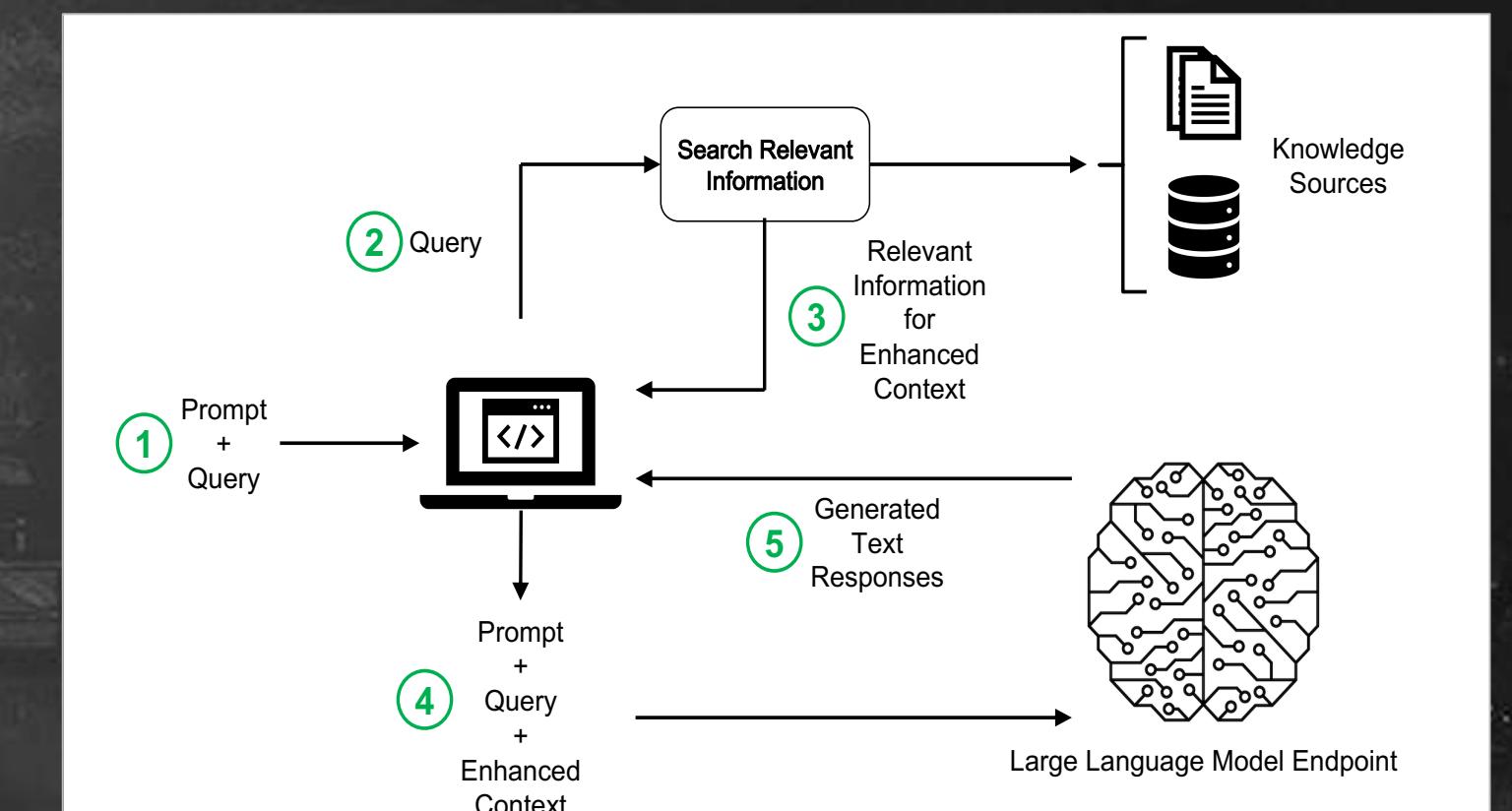
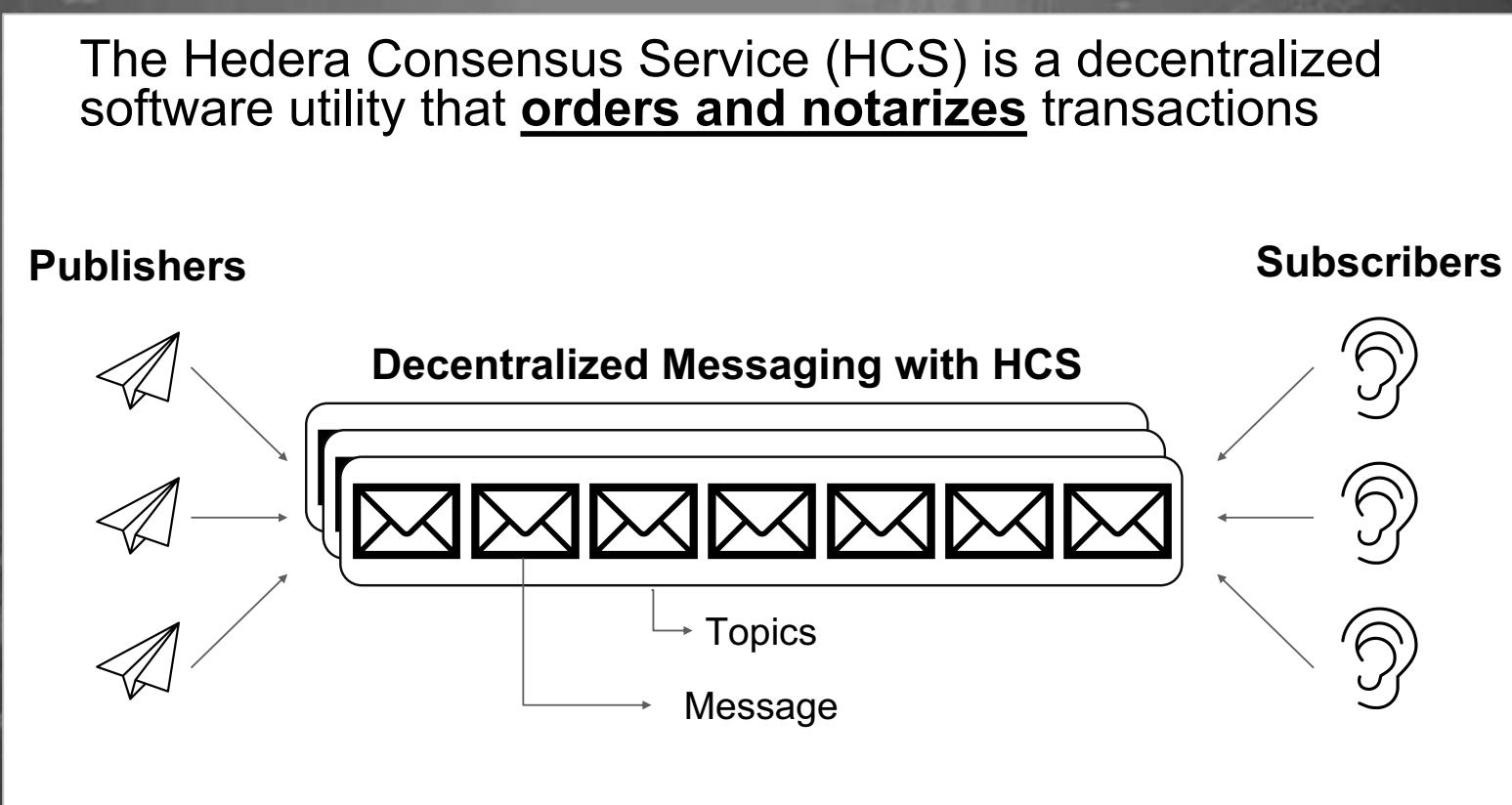
[Register](#)

AI?



“AI abundance & blockchain authenticity”

1. Data integrity for training AI models
2. Tracking AI model lineage during development / tuning
3. Retrieval Augmented Generation (RAG)
4. Content ownership, traceability, and authenticity
5. Auditing AI decisions



Thank you!



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