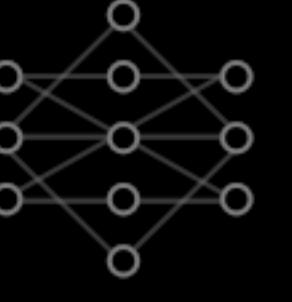


# Origin Systems

Unlocking true collective intelligence



# AI is eating the world...

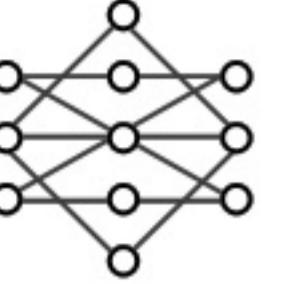
Unexpected accelerationism for foundation models has led to the large-scale adoption by millions of users, thousands of companies, and a growing number of nation-states.

How is this manifesting?

ChatGPT grew to 100m users in just two months, the fastest growing application in history

Nvidia is up 85% this year relative to the S&P500's ~8%, all due to sales of high end chips used to run models

Institutional adoption is here. Everyone from Bloomberg to Coca-Cola are using FMs in their workflow



# ...but AI infrastructure is flawed

## Permissioned & centralized APIs

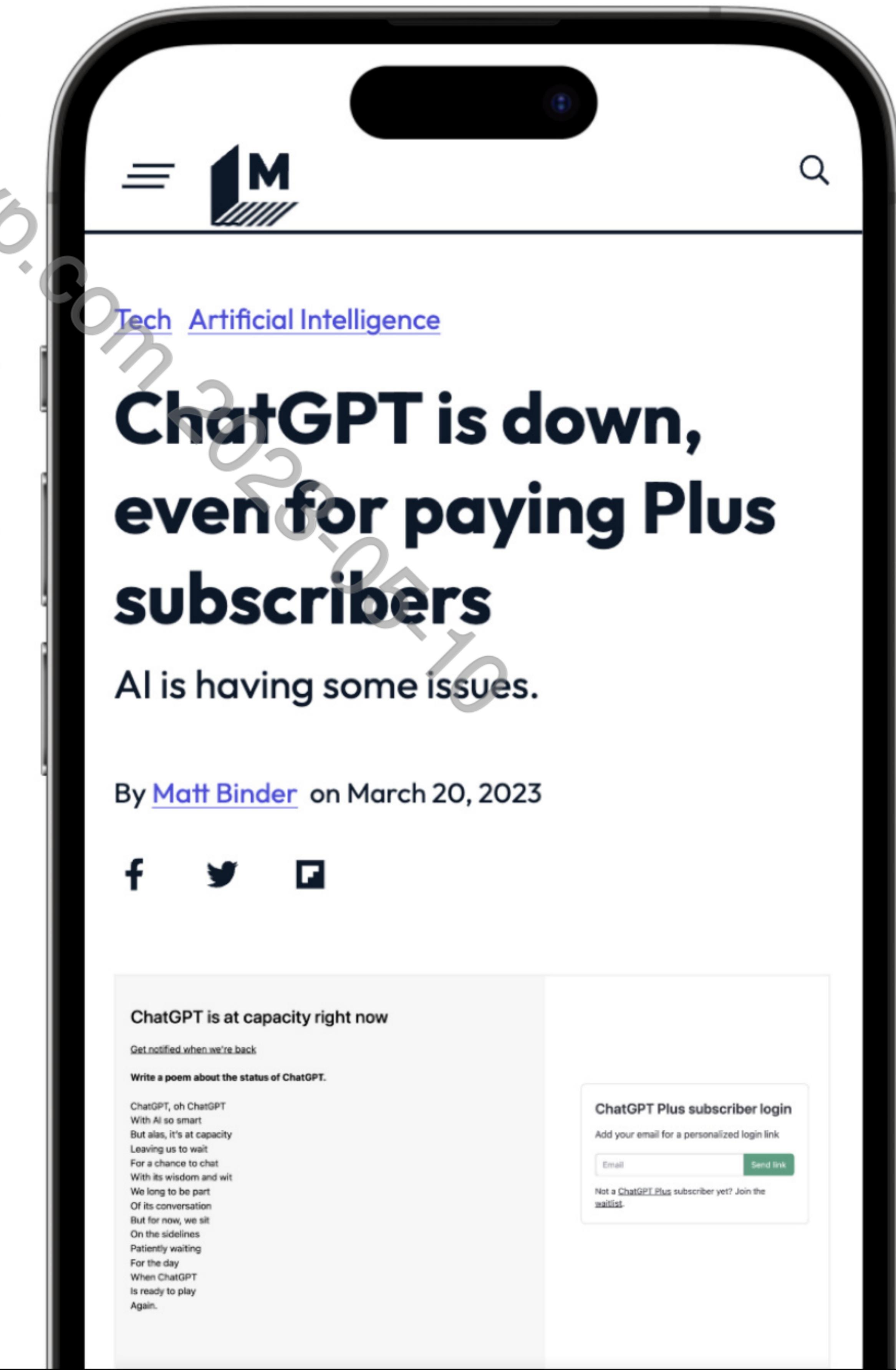
Existing infrastructure is hosted by a few centralized corporations, which limits developers and users from building native integrations and can lead to liveness failure.

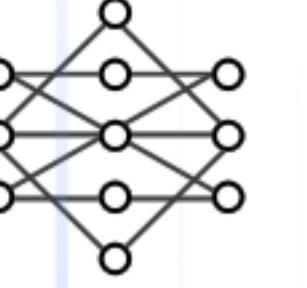
## No privacy & computational integrity

Companies like OpenAI and Anthropic offer no guarantees around model inference, protection of chat history and user prompts or protection against extraction of trained data.

## Lack of censorship resistance

Many models are handicapped due to information censorship and politicking while companies and nations alike have restricted access to models or IP banned users for requests.





# We are at an inflection point

## Rate of growth

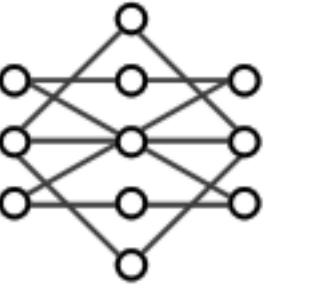
Rate of OSS for foundation models, especially LLMs and diffusion, are achieving pseudo-similar performance to closed-source models is **years ahead** of what was predicted just **months ago**.

## Decentralized incentives

Nearly a decade of building and observing changes in decentralized networks have taught us how to build on-chain applications using cryptographic schemes that align censorship-resistance. Coordination and privacy with individual incentives.

## Cryptographic innovation

Advances in core cryptopgraphic primitives including zero-knowledge proofs, FHE and MPC are enabling entirely new capabilities for models. including verifiable inference and computation over fully private data.



# Demon of our own design

## Regulation seems impossible

Every behemoth in AI has recently been calling for “global regulation” by governments masquerading as benevolent intent whilst furthering their own regulatory moat.

Historically, politicians worldwide have shown time and time again they’re incapable of governing what they don’t understand, and we’ve all recently seen they don’t understand all that much, especially as it relates to frontier technologies.

All world governments coming to consensus on a unified regulatory regime has never been done to date

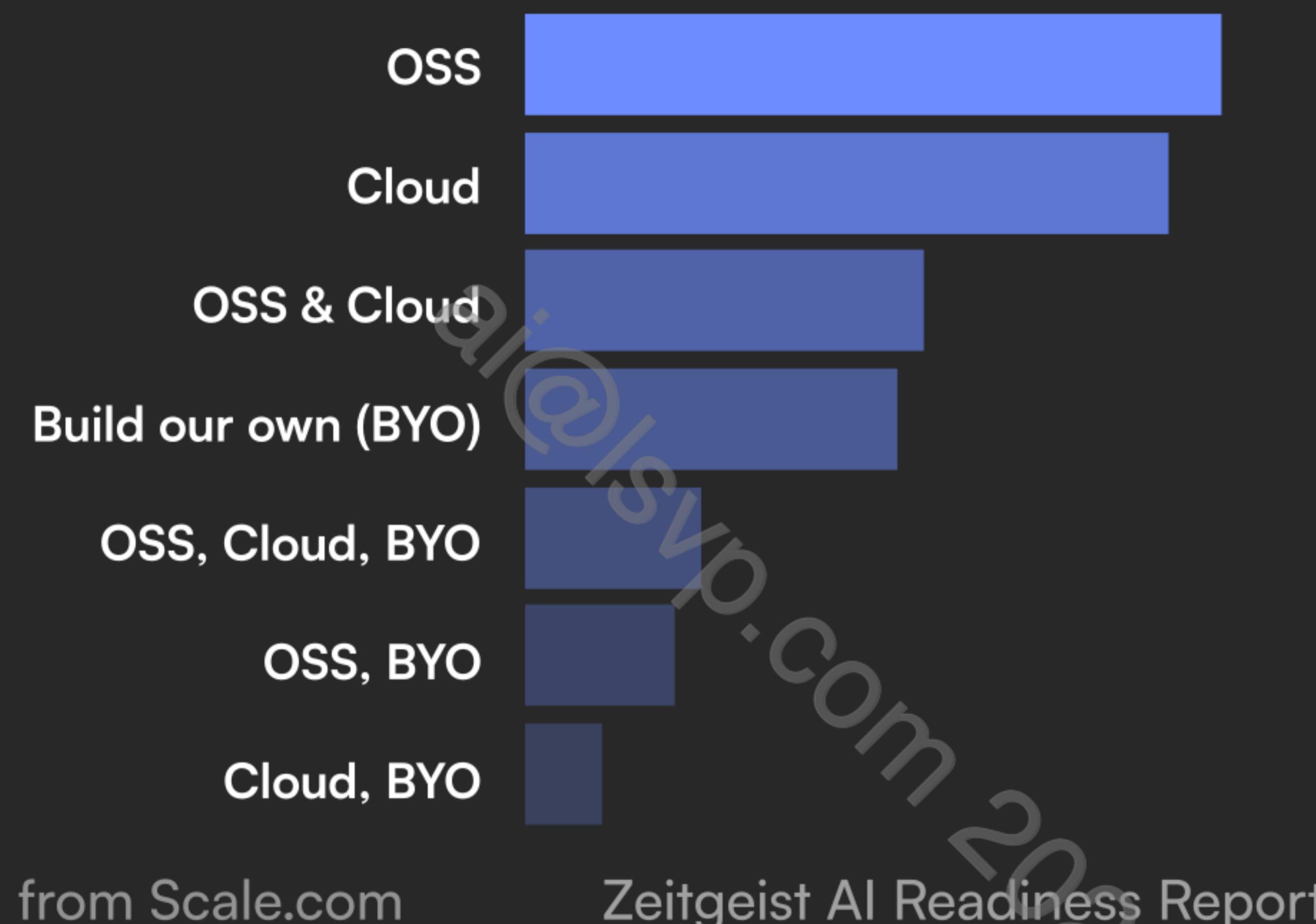
## Oligopolistic

High risk of replicating existing oligopoly as currently 3-5 companies in the world control AI

## Structurally misaligned

Poor incentive mismatch between technological progress and corporate profits. Leads to perverse rent-extractive incentives, keeping the models closed-source and stifling innovation

How do you work with generative models?



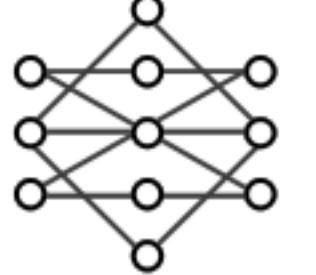
from Scale.com

Zeitgeist AI Readiness Report

Published on April 3, 2023 In Breaking Boundaries  
Leaked LLaMA  
Unveils the Power of  
Open Source for AI

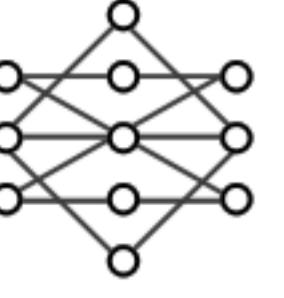
In just a month, LLaMA has become the  
darling of the open-source community

By Anirudh VK



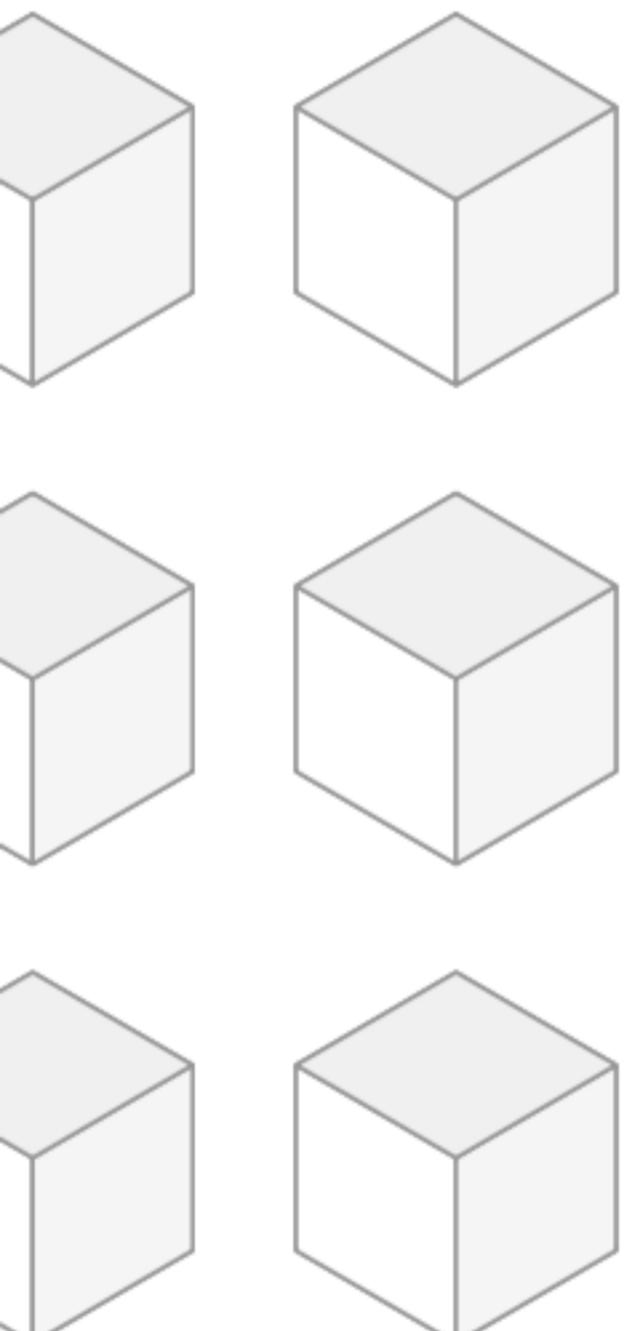
# Open source AI is on the rise

- OSS has been at the center of every major platform shift across crypto, internet, and cloud. This has the potential to be the **largest open-source project in history**. Closed-source AI is highly centralizing.
- Community driven development is critical to the success of open foundation models across the {data, training, inference} stack. An **ethresearch**-like developer community is nonexistent in AI today.
- Foundation Models have been built on the backs of the humans that donated data to the internet. Only fitting that those same humans are downstream recipients of value creation.



# Crypto × AI

A diametrically opposite emergence, and bidirectional ecosystem



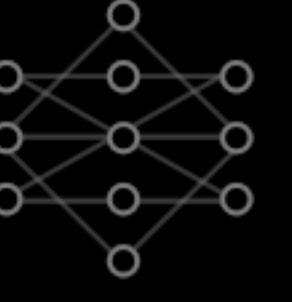
## Crypto

Everyone controls their own deterministic objects with provable guarantees around privacy, censorship resistance, and computational integrity.

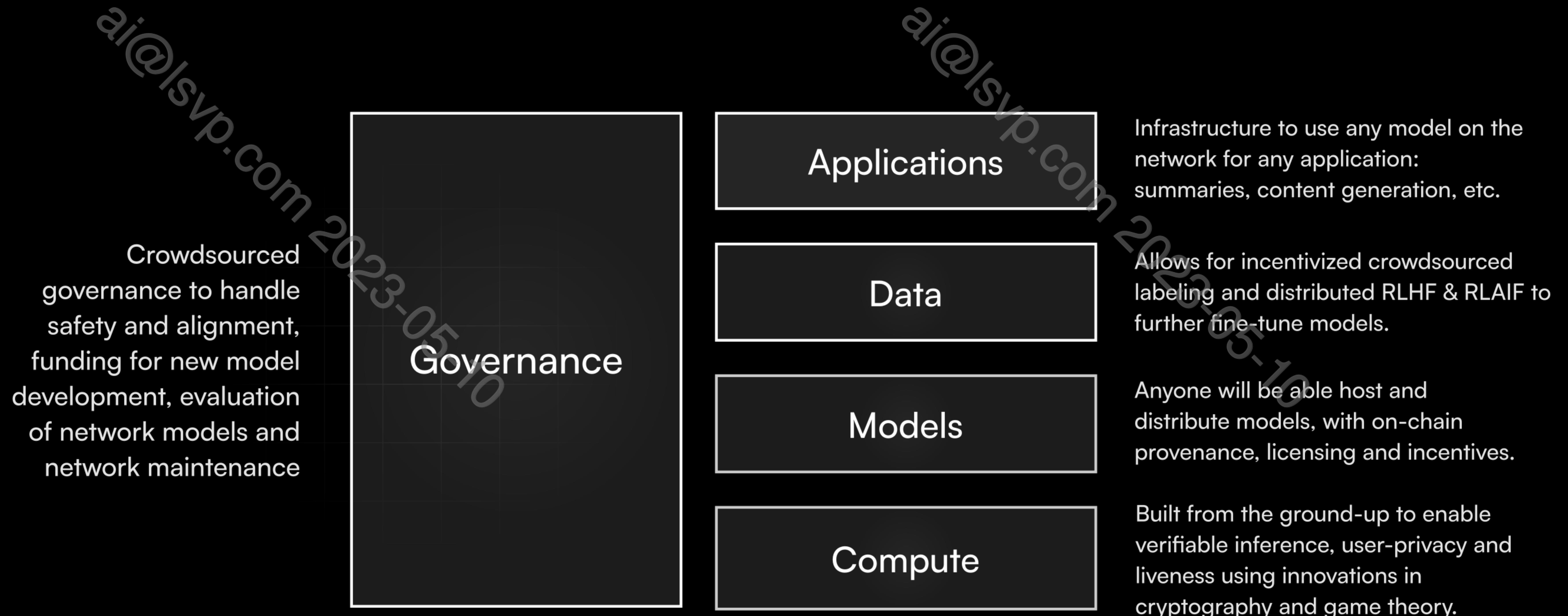
## Artificial Intelligence

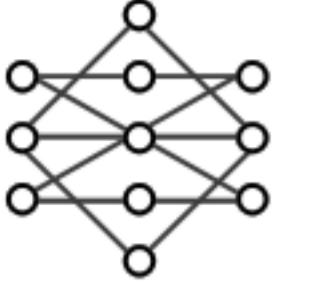
A few behemoths control omniscient statistical objects with no provable guarantees.

This isn't just an application, or a protocol, or a chain. It's the intersection of two titans of category which have their own long-standing histories of how people will interact with people.



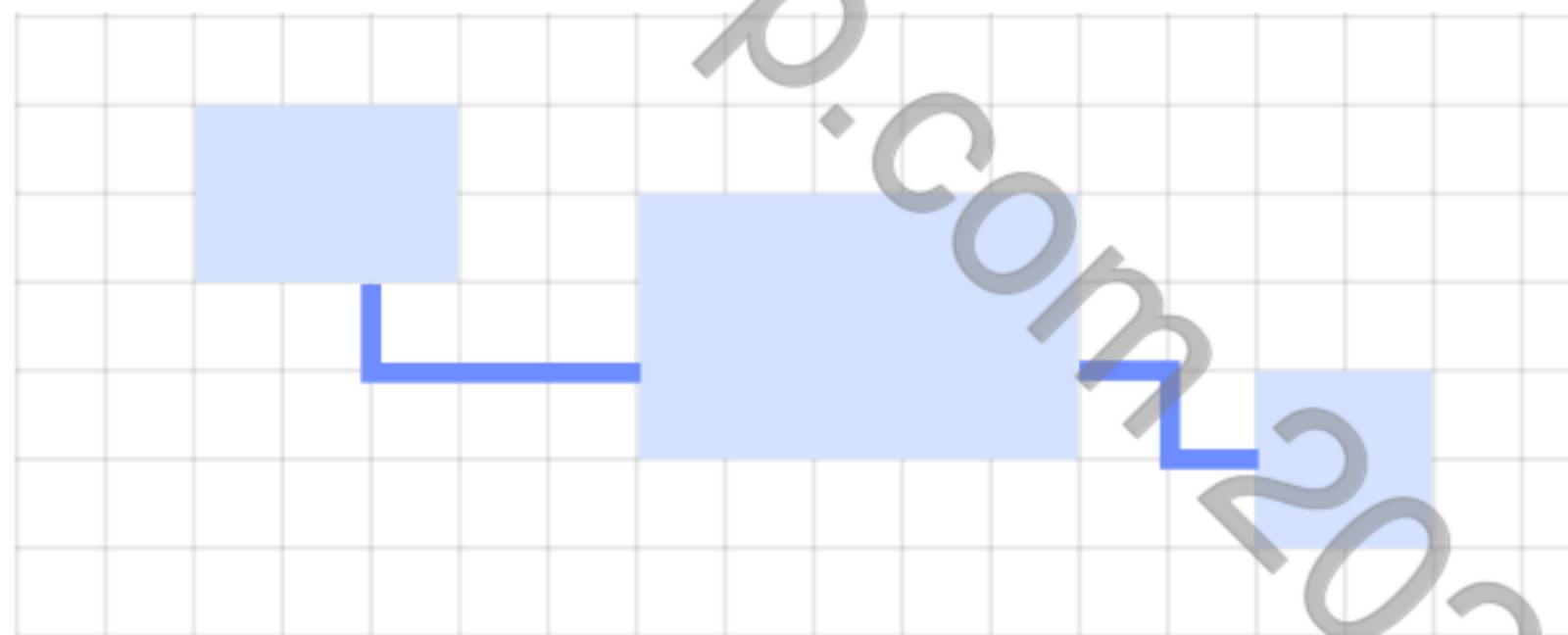
# OGN is a groundbreaking new architecture





# OGN is the network for open AI infrastructure

Crypto is decentralized infrastructure waiting for great applications. AI is the killer app.



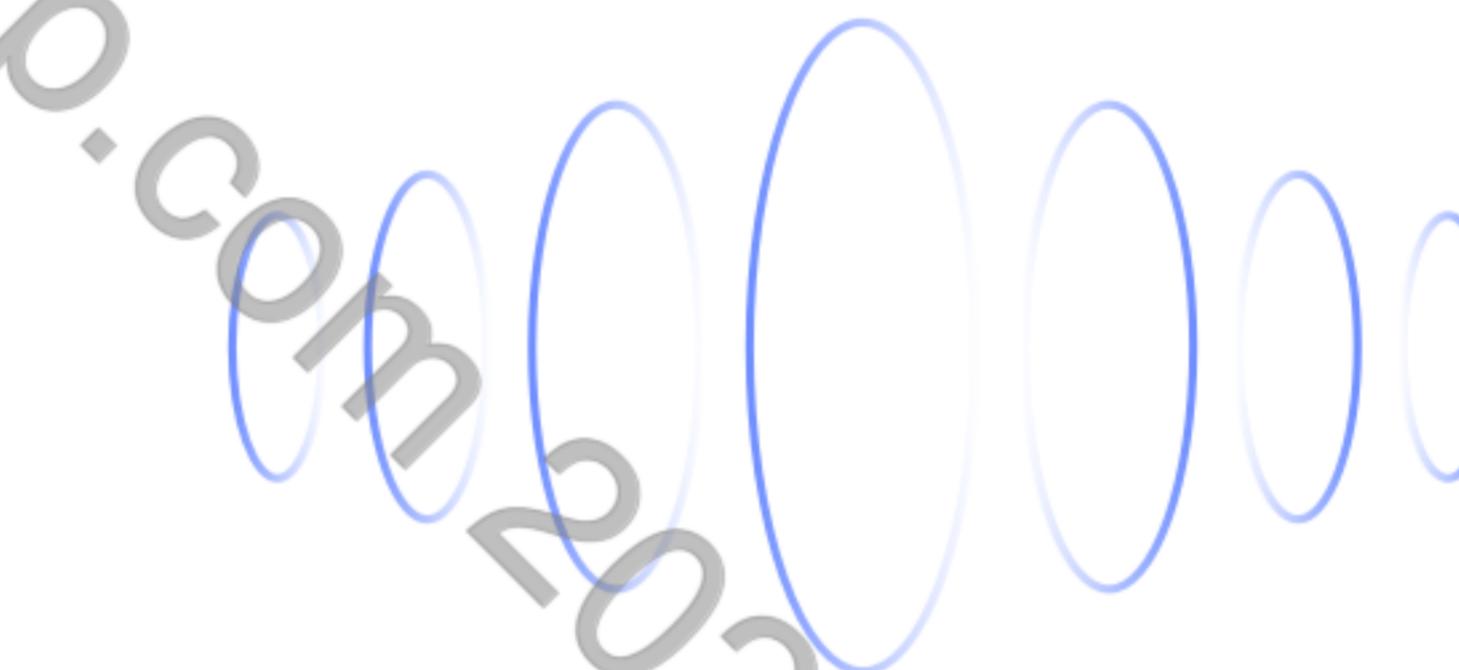
## Inference Engine

Secure inference engine that uses optimistic and zero-knowledge proofs to provide computational integrity for any hosted model as well as a sMPC setup to enable collectives, including DAOs, to group train in certain settings and run inference. Integrated existing FHE machinery to provide data privacy.



## Model Distribution

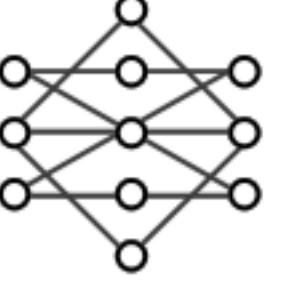
p2p network that will allow anyone to seed and leech models hosted on the network. Fully enables censorship resistance and allows for a Cambrian explosion of models via incentivized finetuning, retraining, distillation, and compression.



## Interoperability

Easy API access to query and integrate any model hosted on the network into your application directly, whether its an Ethereum smart contract or an application on AWS.

Models on OGN will be able to interact with other core pieces of data infrastructure such as vector databases like Pinecone and data availability layers like Celestia.



# OGN is an ecosystem for model development



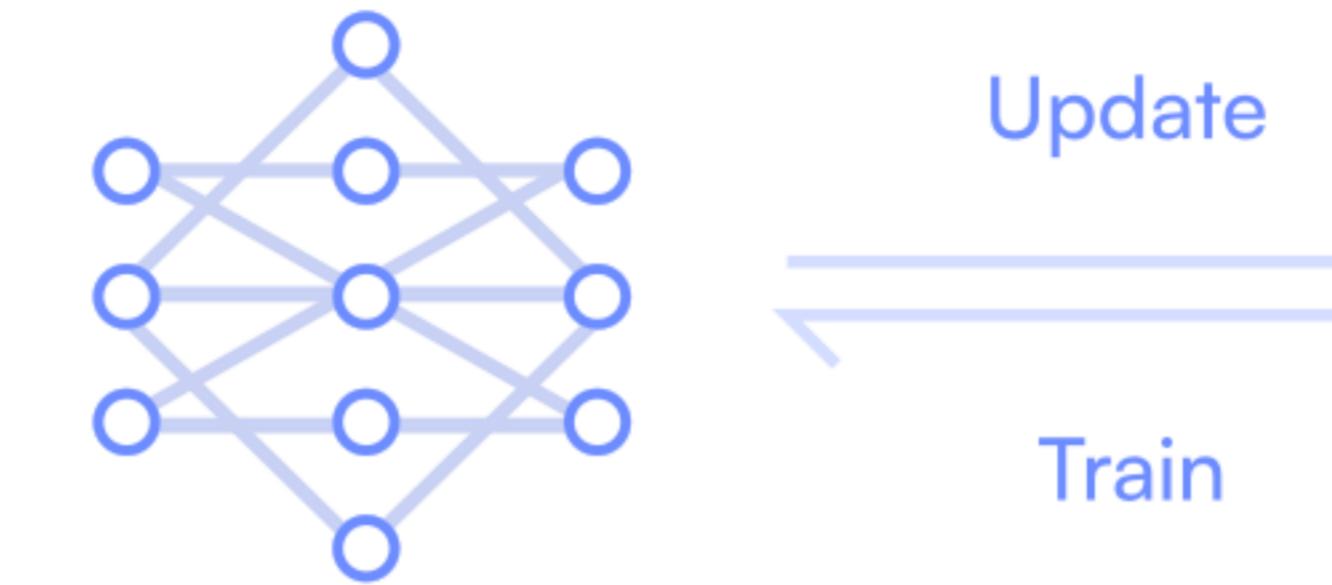
## Model Marketplace

OSS models are converging on closed-source. OGN enables marketplaces where devs build models to accelerate this & are rewarded for their use.



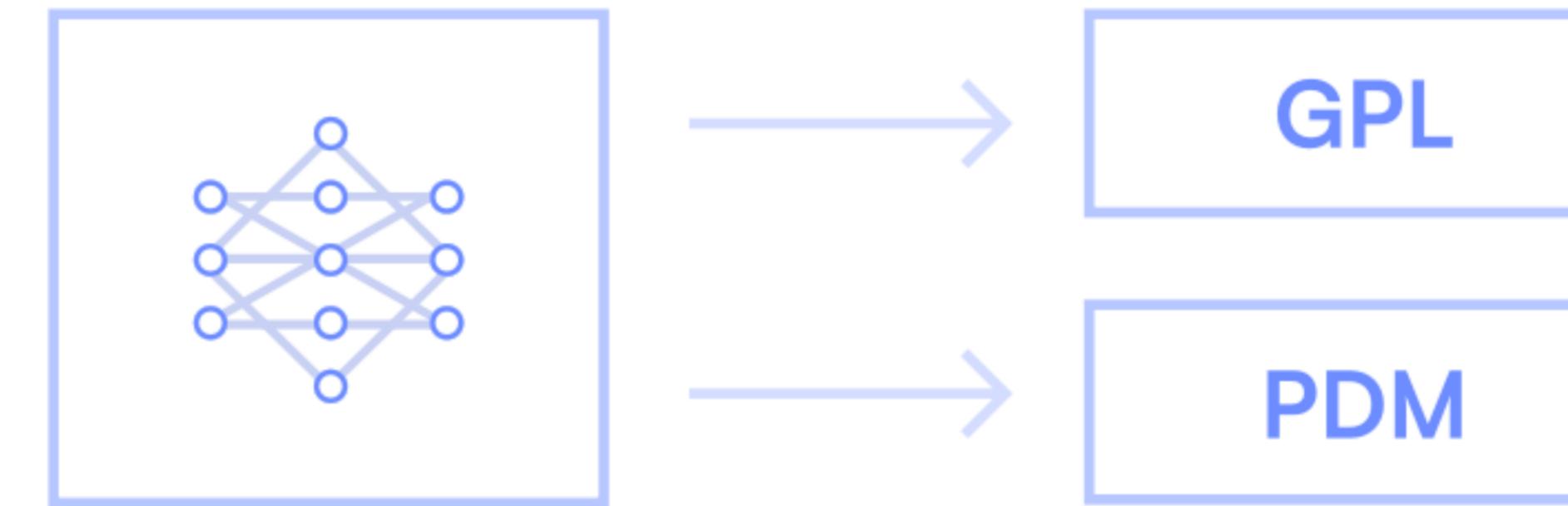
## Open Research Community

OGN will foster the world's largest online, open-source research community so that the best ideas are built in public.



## Model Evolution

OGN rewards progress, which means builders have incentives to frequently update models, finetune and improve them.



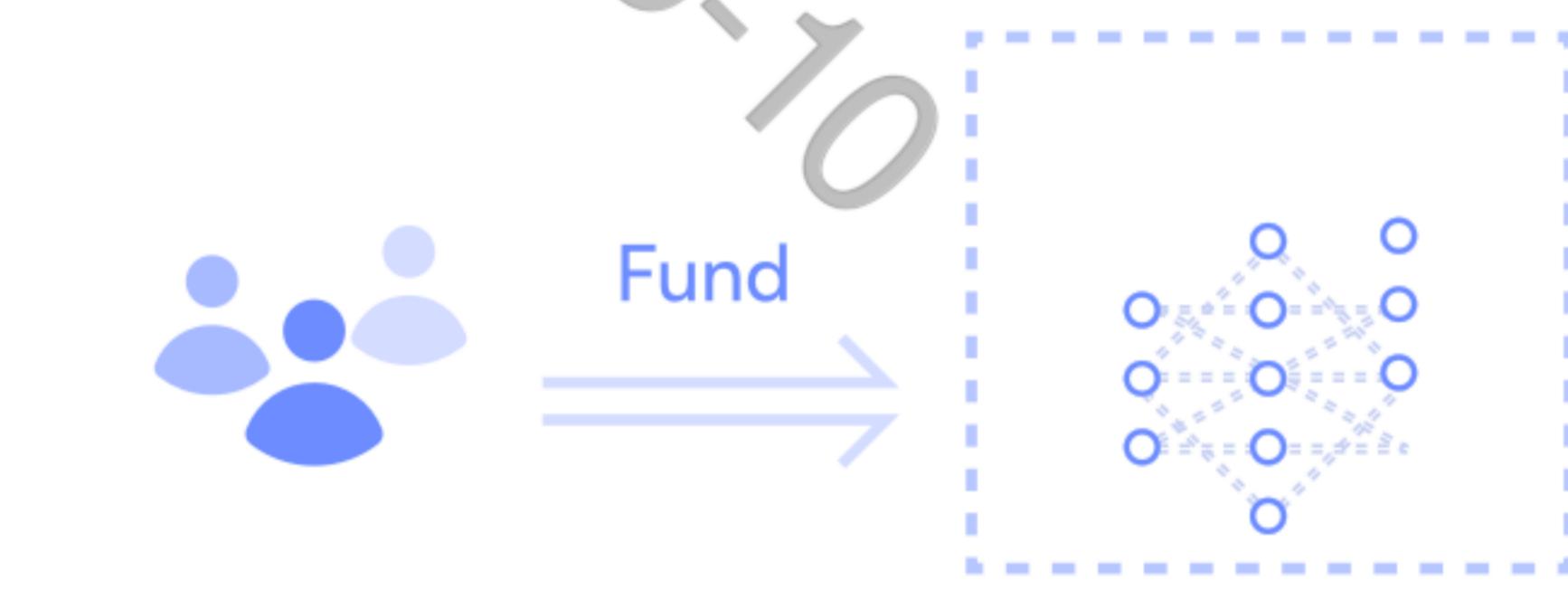
## The Intelligence Commons

Incentives to fork and deploy models on OGN aligned with the network. Ethereum is open-source, yet a \$200B+ network.



## Model Governance

Models can be collectively governed to make key decisions around alignment, maintenance and more.



## Model Financing

Crowdfund, resell, train new models whether general-purpose or vertical/purpose-built.

# Origin is the next great platform opportunity

## Easy integration

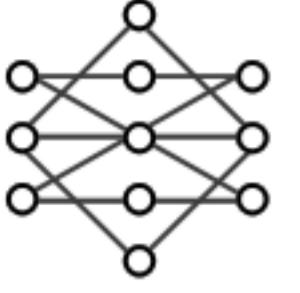
OGN's interoperability as a default makes it seamless to directly integrate models on the network into your application. No bank accounts, access restrictions, price risk, or centralized intermediaries necessary.

## [tune/host/train]-to-earn

OGN allows the FM stack to be incentivized and will integrate token-based rewards for RLHF & RLAIF, data contribution, labeling, serving models and more. If you are tuning models, uploading new ones, or just serving, OGN will reward you for your contribution proportionally to some notion of a knowledge gradient.

AI+

Programming Infrastructure	Automated vuln. detection, proof generation
Social Content	Interoperability & intelligent resource pricing
DAOs	Recommendation, recontextualization
Games	Autonomously generated, on-chain, and CCO
NFTs	Autonomous corporate governance, risk management
DeFi	Skill-based progressions, character generation, dialogue
DePINs	Appraisal, interactivity and utility
	Automated LP strategies, risk management
	Token management, data processing



# OGN is the AI layer for crypto

- **DeFi and NFTs**

Many existing blue-chip dApps and protocols could benefit from integration with foundation models in a modular way. OGN is committed to enabling users getting proportionately rewarded for their contribution to the end goal

- **Local privacy**

Looped transformers are a turing-complete architecture that can emulate arbitrary computations.

- **RLHF via incentivized networks**

Crypto has already proven useful in incentivizing group behavior; this can be extended to paying users to tune model using distributed RLHF and replicate guild semantics.

- **Financialization of AI**

DeFi 1.0 building blocks, for users to express borrowing, swapping, and levering layers of networks

- **Sybil detection**

Agent-based foundation models can emulate on-chain activity, aiding long-standing broken airdrop mechanisms

- **DAO-ification of FMs & AGI**

Models on OGN have flexible governance via sMPC and can easily be integrated with on-chain governance. Imagine a DAO controlling the creation, ownership and evolution of a FM, similar to the progression of NounsDAO.

# Real platform risk with centralized AI

## AI is too easily censored

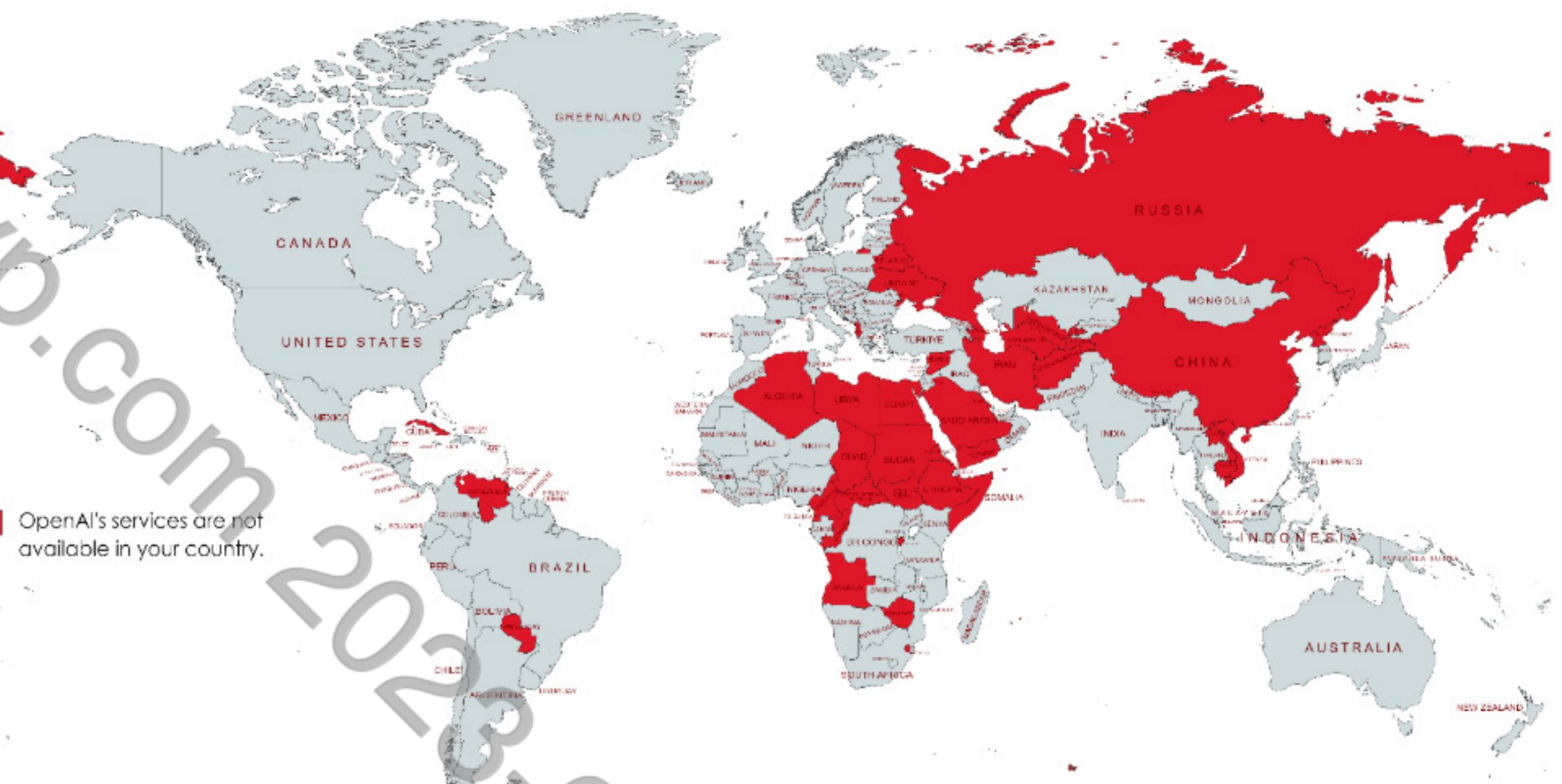
Today's AI models are too easily removed, censored, or otherwise mitigated by their creators, corporate sponsors, or nation-states. This uncertainty is destructive for developers and users that rely on this centralized infrastructure.

## OGN is truly neutral infrastructure

Origin Protocol is aligned with the growth of applications built on top of it. Origin provides truly neutral AI infrastructure for entrepreneurs, providing long-term infrastructure for builders. Let's leave censorship behind with web2. OGN is aligned with the growth of applications on top, not threatened by them.

## Italy became the first Western country to ban ChatGPT. Here's what other countries are doing

PUBLISHED TUE, APR 4 2023 4:48 AM EDT



INDEPENDENT

NEWS SPORTS VOICES CULTURE LIFESTYLE TRAVEL PREMIUM MORE

Tech

## Germany considers ChatGPT ban

Italy has already banned the AI chatbot

Anthony Cuthbertson • Wednesday 05 • Comments



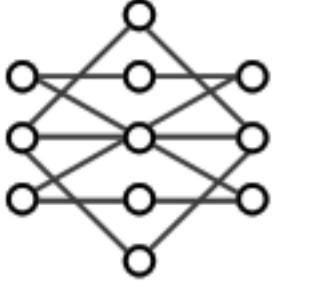
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▲ [OpenAI to discontinue support for the Codex API](#)

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# OGN is Sovereign AI

- **OGN is neutral, global AI infra**

Many existing blue-chip dApps and protocols could benefit from integration with foundation models in a modular way. OGN is committed to enabling users getting proportionately rewarded for their contribution to the end goal

- **OGN is universal AI access**

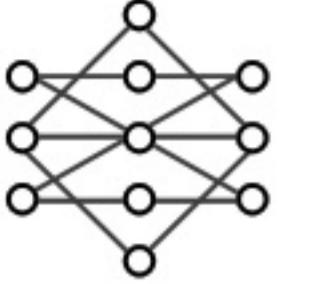
AI is a public good that should similarly benefit from universal access. OGN will allow anyone, anywhere to access and integrate available models on the network without fear of having to face restrictions like geobanning and with better security and privacy guarantees.

- **OGN is fair governance**

Model governance is largely restricted to the creators and hosters of said models. OGN will allow anyone — from governments to small businesses — to tailor model governance (update frequency, content regulation etc.) to their needs.

- **OGN is alignment**

Models on OGN have flexible governance via sMPC and can easily be integrated with on-chain governance. Imagine a DAO controlling the creation, ownership and evolution of a FM, similar to the progression of NounsDAO.



# Operating Principles

Culture is important. Here's how we think about building the future.

## First-principles thinking

As investors, operators and everything in between, we've seen teams in both AI and crypto have fail to meet expectations by building based on reactions to market hype. At OGN, everything we do is carefully debated and grounded in empirical fact.

## Shipping above all else

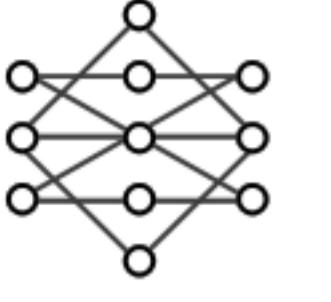
Quality products get built when intelligent people commit to tirelessly iterating, fast. The OGN team has seen and built best-in-class products and is single-minded in making what we ship is built even better.

## Dedication to open-source

Open-source enables fast iteration, integration of community feedback, and accelerated development. Unfortunately, many centralized AI companies are shifting away due to competitive concerns. OGN realigns incentives with open-source development and will always be committed to keeping it that way.

## Focus on distribution

Good technology is only as good as its distribution. We've seen plenty of great products fail because they never make it into the hands of users. We have razor focus on not only developing infrastructure to build the next generation of FMs, but also ensuring they are used in applications that touch millions.



# Distribution & GTM

- **Build alongside builders**

Tackling the full stack of {chains, protocols, apps} on the crypto side leveraging existing relationships in the community, DAOs, and builders

- **Elevate early participants**

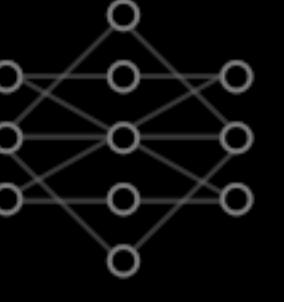
Bootstrapping new companies to build on top of OGN, hosting dedicated hacker houses, launching a crypto x AI research conference

- **Zero-in on threatened competition**

Web2 companies with self-imposed or regulatory constraints on data privacy (i.e. GDPR) will be prime targets

- **Build for a global audience**

Current foundation models are american-centric and clear opportunity to tackle sovereign nations  
New advances in AI, crypto, and the intersection will lead to apps and new emergent behavior that are hard to predict today



# The Origin ecosystem is progressing rapidly

- **Build alongside builders**

Several early-stage founders in pipeline to build startups on top of OGN

- **Close out compute resources**

Commitments from top-5 global crypto mining operations to provide compute resources

- **Elevate early participants**

Strong interest from top-5 blockchain and infrastructure projects to integrate

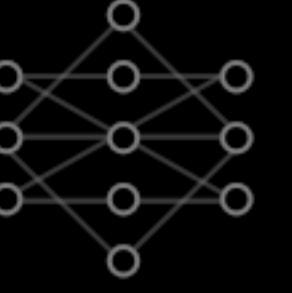
## Growth will continue

### Services web2 & web3

Initially web3 companies, but ultimately web2 companies, will choose privacy-guaranteed, open-source, decentralized models to their centralized counterparts.

### Forms new intersections

AI is going to transform everything from DeFi, to DAOs, to NFTs, to Web3 games. A crypto-native AI network will be the obvious choice for crypto-native entities.



# We don't have any competitors today

We are not going to make a table of a bunch of companies, with green checkboxes for ours, and red boxes for others. We've seen enough of those.

Nearly everyone who's been building in this space is focused on one part of the problem: computational integrity, decentralized training, or inference. No one is combining these efforts with model distribution to build a verticalized ecosystem.

# Thank you

Please don't hesitate to reach out to us at any time.

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