

## Decast.live

Video Infrastructure as a Service

>> by Leren Leren

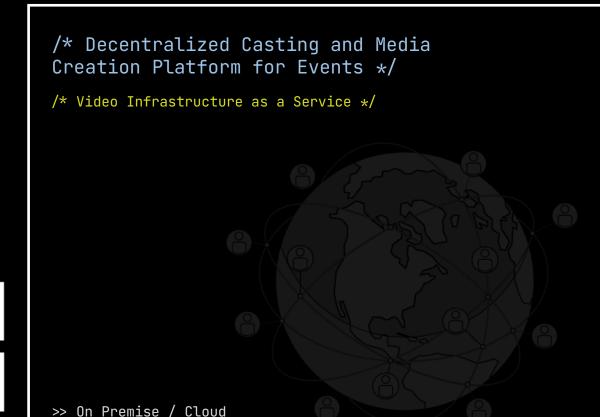
Decentralized Live Casting and Media Management







>> Private / Public
>> Open / Closed



## The Problem

- ☐ In today's digital landscape, ensuring the security and authenticity of video casting is challenged by generative AI and Deepfakes.
- ☐ Traditional platforms do not maintain data integrity and privacy, leaving sensitive communication risky and prone to leaks.
- ☐ Centralized storage systems are susceptible to tampering, unauthorized access, privacy breaches, undermining trust and reliability.





Problem? Information Management?

# Fake

# Real





## Problem Matrix

Information Issues

#### Penetration Breaches

Deepfakes can be used to bypass command authentication systems, gaining unauthorized access to secure facilities and sensitive data. This poses a severe risk to both individual privacy and national security.

(Source)

#### Video Misinformation

Deepfake videos can be used to create false narratives and influence public opinion. For example, during the 2022 conflict between Russia and Ukraine, a deepfake video of Ukrainian President Volodymyr Zelenskyy falsely urging his troops to surrender circulated online, demonstrating how deepfakes can be used to undermine trust and manipulate public perception.

(Source)

Slow

### Economic Impact

The ability of deepfakes to manipulate financial markets by spreading false information about companies or economic policies can lead to significant financial instability and loss.

(Source)

### Cybersecurity Threats

The National Security Agency (NSA) has highlighted that deepfakes pose a cybersecurity challenge by facilitating impersonation attacks, which can lead to unauthorized access to critical systems and sensitive information.

(Source)



Decast.live

Infrastructure Issues

Fast

## Our project DECAST

Ensuring secure, authentic, and efficient video infrastructure with decentralization.

With Decast, build communications that are secure plus verifiable and tamper-proof using:

- Authentication Layer:
   DID binding between Multiple Web2/Web3 IDs.
- Verification Layer:
   Chain agnostic Verification.
- Accessibility Layer:
   Data storages and Data Streams

//everything
is public,
//everything
is private.



## DID based Authentication:

Authentication layer: Binding Multiple Identities Web2/Web3 with DID system.

Because your face is not your only identity anymore

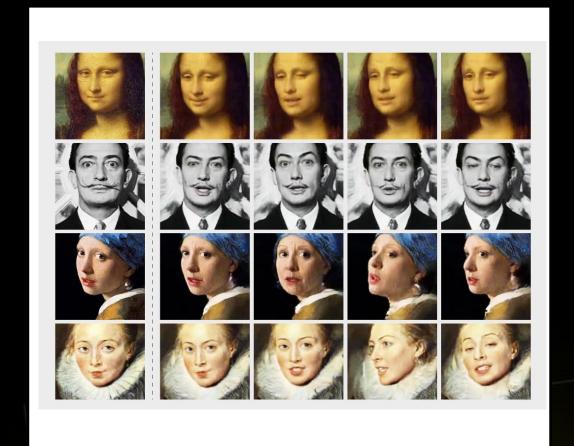




## Chain Agnostic Verification:

Verification Layer: Verification using Wallet identity or NFTs to verify ownership/accessibility of media/content.

Because it is easy to create fakes especially when sources are different





## Decentralized Accessibility:

Accessibility Layer: Secure Video
Infrastructure with media content
and live stream accessibility based
on Authentication and Verification
(1. & 2.)

Fake

Real

Because recorded content can be is being reliably tampered.





## Problem, in Numbers



zoom



Kaspersky reported

Personal data of Around

Google reported

Approximately

26%

500K

30x

149K

Increase In Number Of Malware Attacks Using Video Conferencing Zoom Accounts Was Found For Sale On Dark Web Increase In Number Of Impersonation Attack Reports On G-Meet Attacks Detected Every Month On Microsoft Teams



## Democracy?



Legislative



Judiciary



Governance



Press



"General audience is aware of the problem, they would switch to better privacy and security, if they are given



### What do we do?

Developing network-driven learning architectures—where AI and decentralized systems evolve together.

- ☐ Decentralized Identifiers (DIDs): DID binding between Multiple Web2/Web3 IDs.
- ☐ Decentralized Networks: Digital infrastructure with community nodes.
- ☐ Decentralized Apps & Accessibility: Data storages and Data Streams.



DECAST.LIVE is a decentralized live-casting platform that redefines how content is broadcasted and stored. It eliminates reliance on centralized servers, ensuring superior security, privacy, and autonomy.











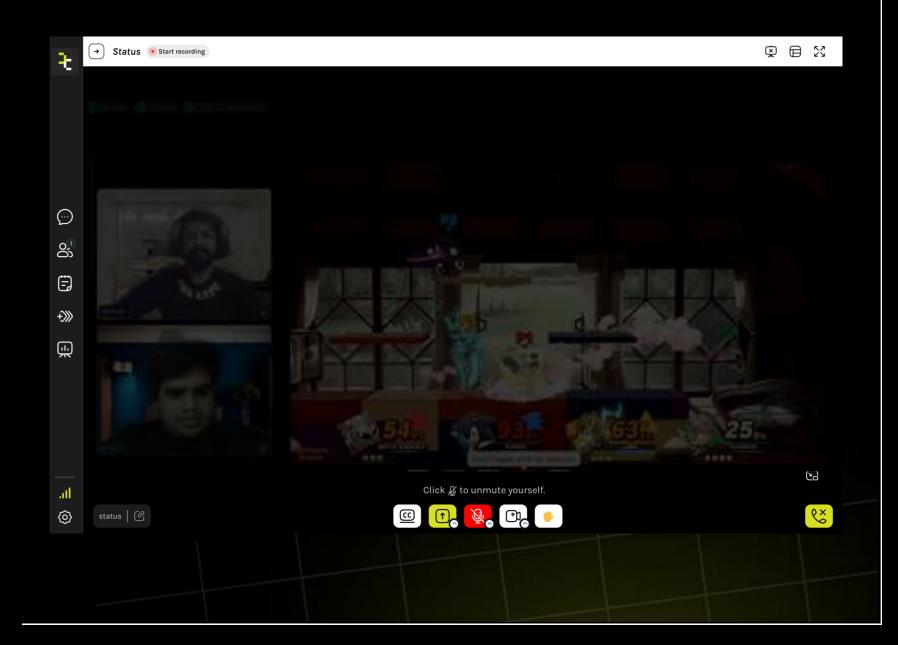


## Engaging Fan Base

To on-ramp Games on our platform with video SDKs and developer on-baording.

## Live Events to

- Embed,
- Enhance,
- Engage!



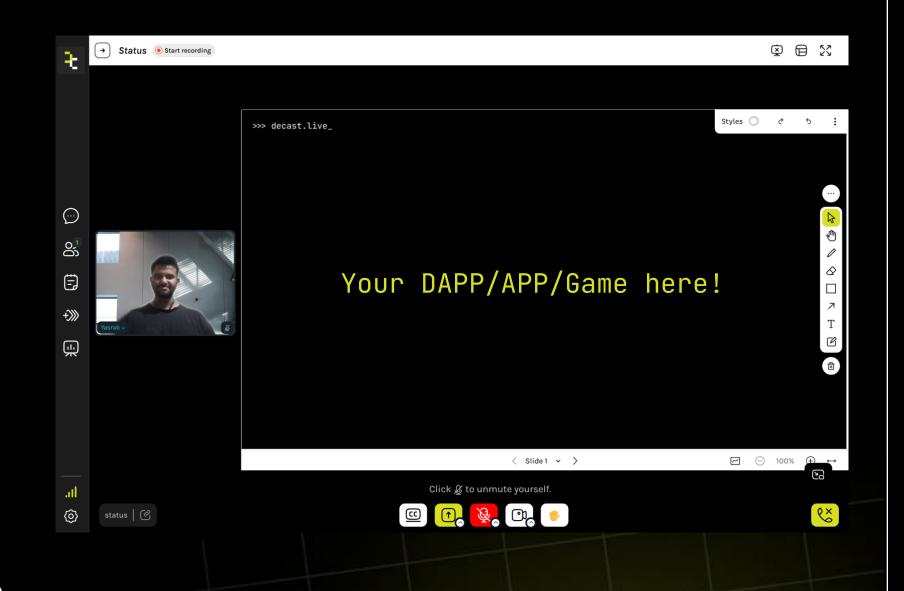


# Personalized Deployments

To on-ramp applications on decentralized private networks with video infrastructure.

Reach out to co-create!

Decast SDKs for canvas integration





## Features

NFT Gating

Access Control

Secure

Personalized

Transactions

**Event Pages** 

Audience

Event Setups

Content

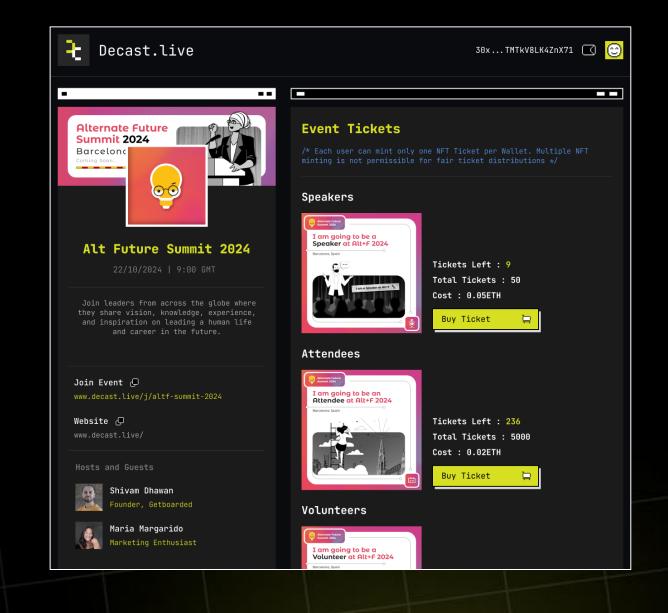
Multi Platform

Production

Streaming

Airdrops

Data Ownership





## Decentralized live casting, Competition?

Users have adapted to virtual communication tools not only for work-related meetings but also for social gatherings, online learning, and virtual events.

Inspiration for Distributed and Decentralized Casting Platform is rooted in a vision of democratic, censorship-resilient, user-centric event hosting landscape.





# Why DePIN? Why now?

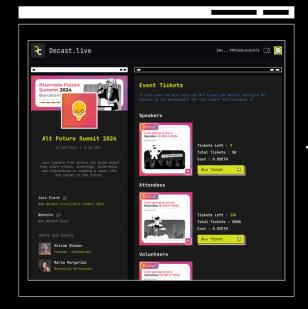
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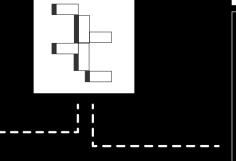
Strong
foundations for a
stronger future!



Nodes/Testnet
Community Channels







Web Extension
NFT Gated Events





## Problem? Information Management?



## Solution!

- ☐ (Identity) Security &
  authenticity of information
  protected from genAI and fakes.
- □ (Data) Next-Gen platforms that do not leave sensitive information & data prone to leaks.
- ☐ (Media) Decentralized systems are tamper-proof, reliable & trusted.



# Information Architecture

**Authentication** Service Layer

## (Identity)

**Authorization** & Security Layer

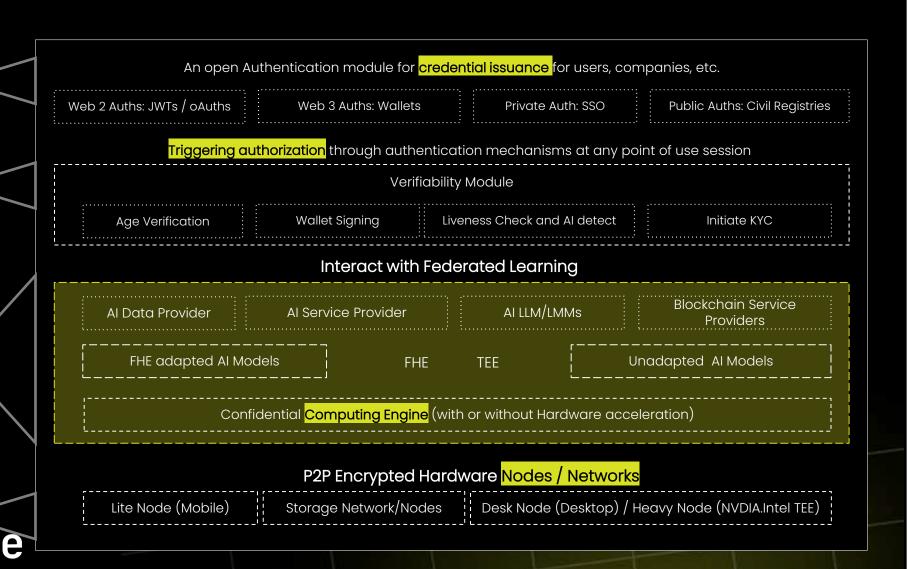
## (Information)

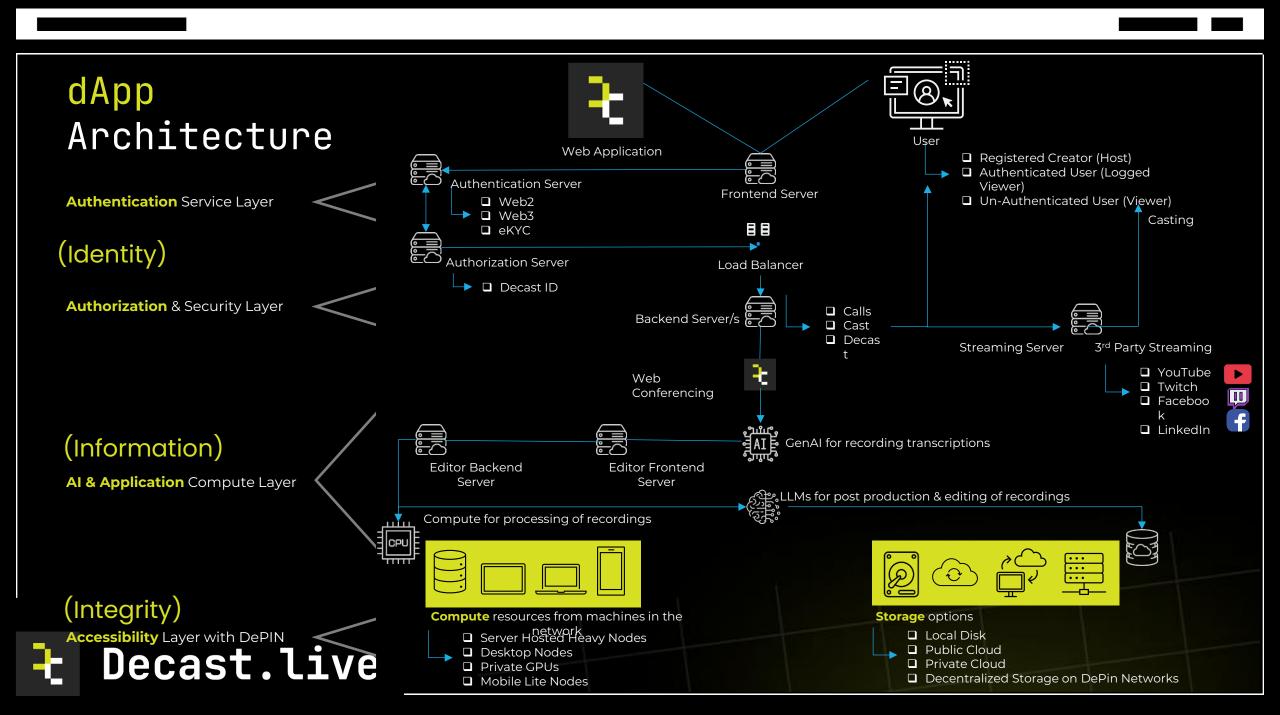
Al & Application Compute Layer

(Integrity)

Accessibility Layer with DePIN

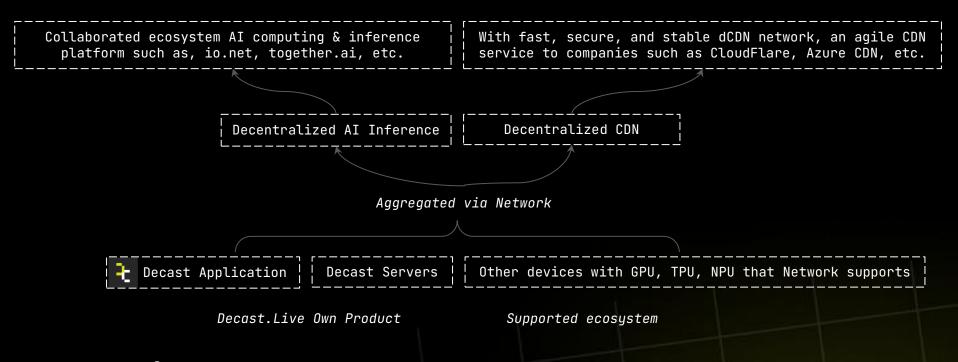
Decast. Live





# Computing Power In AI

The idle computing power, bandwidth within the ecosystem can be shared and utilized in a secured way to not only provide AI and CDN Infra services, while incentivising hardware owners.

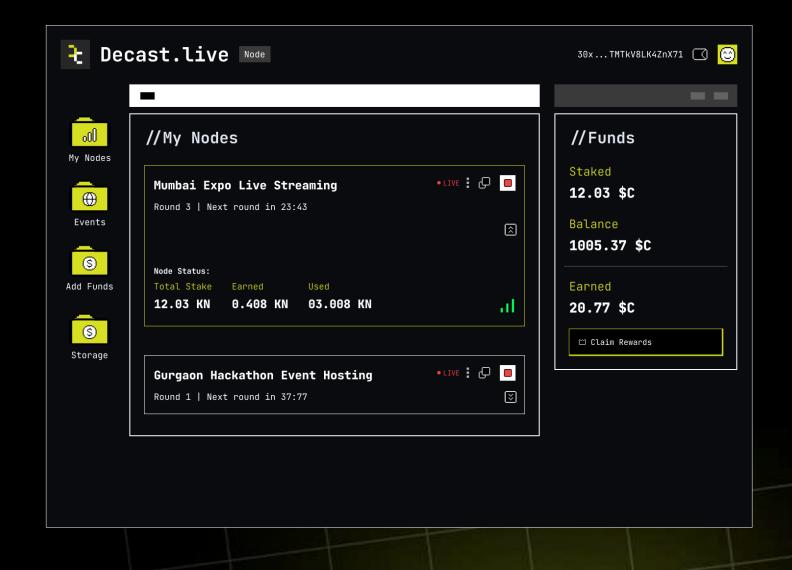




## Node

The Decast node is a vital part of the platform's decentralized network, enabling users to contribute computing resources for live casting and event hosting.

Each node enhances the system's security, scalability, and reliability by distributing data and preventing single points of failure. Node operators are rewarded for their participation, ensuring a strong, collaborative infrastructure.





## DePIN Actors

#### Node Operators

Providing decentralized infrastructure for virtual events and live casting. By contributing their computing resources, node operators support the secure transmission, storage, and distribution of content.

#### Decentralized Infrastructures

Other DePIN (Decentralized Physical Infrastructure Networks) projects will enhance Decast by providing complementary infrastructure such as decentralized storage, connectivity, and computing power

### Community and Content Creators

Their participation ensures decentralized, secure, and reliable content distribution. In return, they gain rewards and contribute to a collaborative ecosystem, making virtual events more accessible and resilient.

### Decentralized Storages

They ensure data integrity, prevent unauthorized tampering, and enhance privacy. With decentralized storage, content becomes more resilient, scalable, and protected against potential breaches or downtime.



## Decentralized Infra, Players & Advantages?

	Core Tech	AI model deployment	Verifiability	Security	P2P Encryption	Perf.	Cst.	Open Ecosystem
Decast Network	SS+TEE+FL, FHE, Security SoC	<b>×</b>	<b>×</b>	<b>~</b>		High	Low	
Sahara.AI	Merkle tree, ZK			X	х	High	Mid	
Ora	opp/ai+zkML+opML	<u>~</u>	Opt.	Opt.	х	High	Mid	
Morphic	teeFHE	<u> </u>	<b>×</b>	<u> </u>	х	Mid	Low	
Privasea	FHEML	Opt.	Х	<u> </u>	Х	low	low	
Fabric Crytography	VPU chip	Opt.	X	Opt.		Mid	Mid	X
Fhenix	FHE Roll ups + fhEVM	Х	Х	X	Х	Х	Х	X
Mind Network	FHE	Х	Х	X	Х	Х	Х	X



## Primary Audience



Event Organizers: Secure platform for hosting and streaming events, ensuring authenticity and privacy.



Corporate Executives: Secure communication platform for confidential meetings and sensitive content dissemination.



Content Creators: Reliable platform for publishing and distributing media content with confidence in its integrity.



Educators: Trusted platform for hosting educational seminars and distributing course materials securely.

... and Developers!



## Business Model

BUSINESS MODEL

## PaaS

Platform/Infra as a Service



MARKET SEGMENT



- □ Tech
- □ Web 3.0
- Gaming
- Education

Finance

CHANNELS

- Marketing
- Content
- Events
- □ Partnerships



Decentralized
Physical Infra
Networks (DePIN)



Operating System



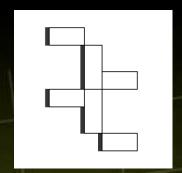
Video Conferencing



Nodes and Network Operators



Decentralized
Database Management
Systems (DDBMS)





## Our Team



Shivam Dhawan CEO / Business Analyst



Peyman Pourjafar CTO / Solutions Architect



Ahmad Arshad Product Engineer



Sushil Kumar Full Stack Developer



Anish Jha
Full Stack Developer



Rupesh Choudhary
DPO Infrastructure



Mohammed Yasrab
Product Design



Muhammed Ajmal
Pho Cyber Security
Researcher



Zain Hasan

Msc Cyber Security
Researcher



Decast.live

Working to create the world's first serverless live casting dapp.

## Roadmap



Feb 8<sup>th</sup>

Distributed Video
Infrastructure

- ☐ Distributed Architecture
- ☐ Multi Server and Scalable
  Load Balancing

Node Creation and

**Ecosystem Testing** 

- ☐ 3<sup>rd</sup> Party Compatibility
- Developer SDKs
- ☐ Run-n-Earn Campaign



TGE (Token Generation Event) Complete Decentralized

Infrastructure

- ☐ Provide Decentralized Infrastructure
- ☐ Provide Decentralized Storage Systems



Conceptualization

- & Launch
- Market Discovery
- ☐ R&D on Decentralized
  Infrastructures

Decentralized Storage

- ☐ Integrated with decentralized storage providers
- □ Version control (DVCS)

Testnet Launch

To the MOOON

- ☐ Launch Tokenomics on Testnet
- ☐ Community Campaigns
- ☐ Marketing and Outreach (100,000 Users)

2023

2024

2025

2026

2027



### Our Achievements and Awards

#### <u>EUvsVirus (EU Commission) Hackathon</u> Challenge Winner

(June 2020): Won at the largest global hackathon, developing Decast (formally known as VideoWiki) to provide secure, accessible content creation. [Read more]

#### World Summit Awards Nominee

(September 2020): Nominated for creating social impact via decentralized communication. [Read more]

#### WomenInCLoud AI Solutions Semi-finalists

(October 2020): Solving SDG Global Goals through AI. [Read more]

#### Winners <u>DigiEduHack by EIT Digital KIC</u> Timisoara edition

(November 2020): Innovating digital education solutions. <a href="#">[Read more]</a>

#### HackBack Overall Winner

(May 2020): Secured first prize and UX award for user-friendly design. [Read more]

#### DFINITY Foundation Finalist

(December 2020): One of 8 finalists selected to build scalable dapps on the Internet Computer. <a href="[Read more]">[Read more]</a>

#### Winners of Climate KIC Romania:

Winners Recognized for climate-focused solutions. <a>[Read more]</a>

#### Partnership with SWARM

(January 2022): Established partnership with SWARM, to integrate decentralize storage. <a href="[Read more]">[Read more]</a>

#### Grant Awardees from Sia

(April 2024): Integrated Sia for decentralized and tamper-proof storage solutions. [Read more]

#### Partnership with Partisia Blockchain

(July 2024): Collaborating with Partisia for enhanced privacy and decentralized services. [Read more]

#### Upcoming Partnership with SKALE

(October 2024) : In the process of partnering with SKALE to strengthen DePIN. <a href="[Read more]">[Read more]</a>



## Other Projects deployed...







#### Immersive Video Encyclopedia.

Launched during the COVID-19 pandemic to help educators quickly convert text into videos, bridging gaps in remote learning.

- ightarrow Community-maintained video knowledge platform
- ightarrow Co-editing with decentralized Version control

#### A GenAI tool to enhance learning retention.

Designed to help students retain knowledge through personalized revision content and assist educators with automated assignment grading.

- → Personalized AI assistants for learners
- → Automated knowledge synthesis

#### A team building and decision-making App.

Make your teams more productive, with team insights & work on actionable network Visuals.

- → AI-powered decision-making for remote teams
- → Workplace productivity and workflow automation

#EUvsVirus
Matchathon & Hackathon



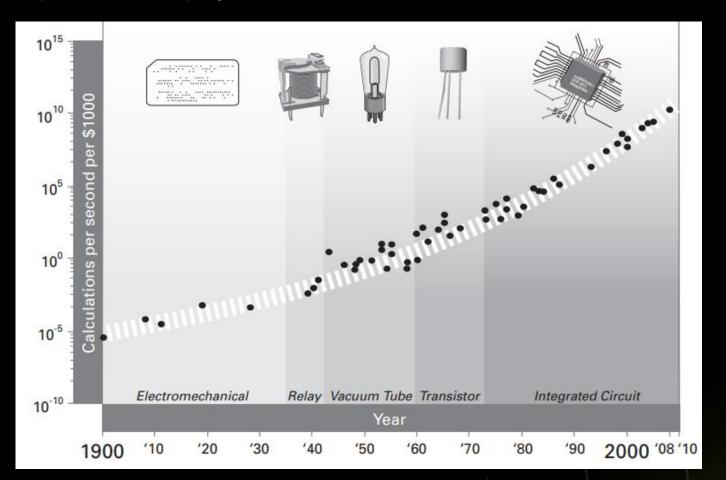








#### Exponential Growth of Computing for 110 Year





#### In 1978, a commercial flight between New York and Paris cost around \$900 and took seven hours. If the principles of Moore's Law had been applied to the airline industry the way they have to the semiconductor industry since 1978, that flight would now cost about a penny and take less than one second.



# Thank You:)

Building Learning Ecosystems with Human and Machine Integrated Networks.



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