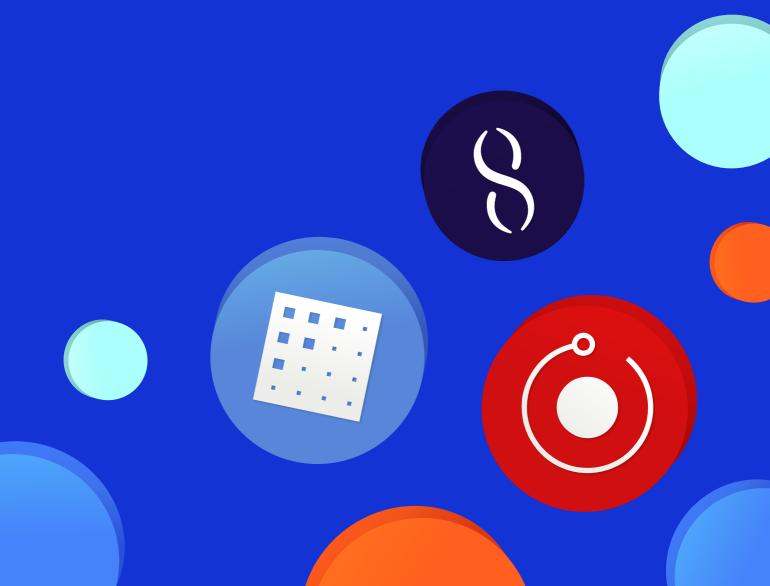


Crypto X AI: Why We Could Still Be Early



Key Takeaways

- 1 The fast-growing Crypto x AI sector has the potential to ease centralisation issues in the AI industry; increase global access to computational resources and data; and provide an interoperable layer for AI agents to operate.
- There are multiple ways to gain investment exposure to Crypto x AI, including the AI projects themselves and layer-one (L1) blockchains. The biggest unknown question pertains to value accrual.
- Challenges and risks facing Crypto x AI are mostly technological (e.g. scalability, data security).

Understanding Crypto X AI

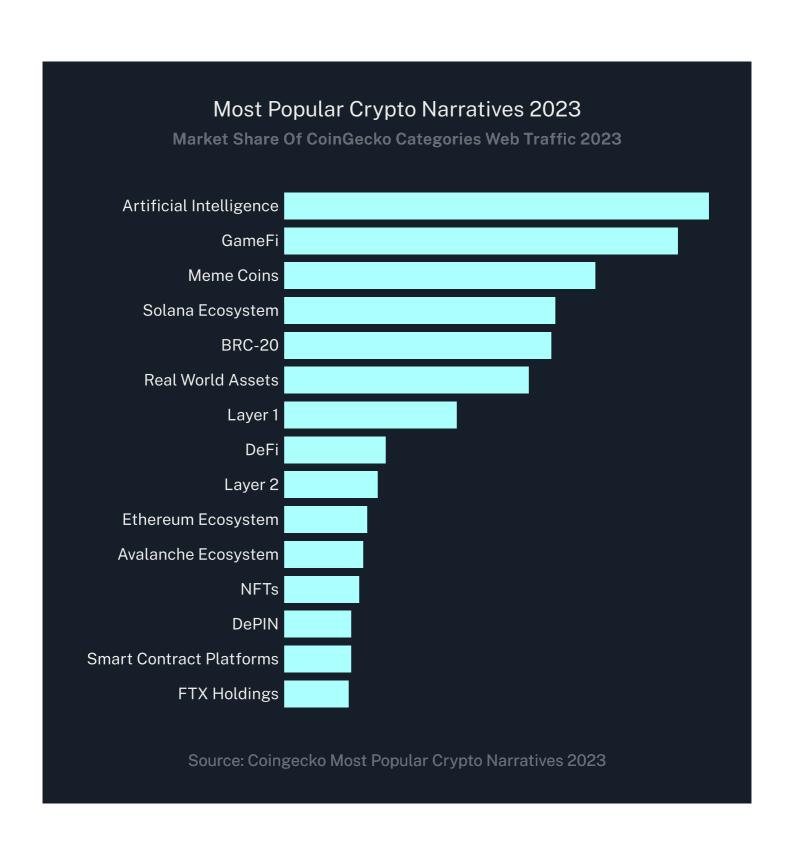
(As a refresher, AI refers to machines that learn from experience, adjust to new inputs, and perform programmed tasks. The development of AI has been ongoing for several decades, and it has been subtly impacting our lives for a long time. It wasn't until the release of ChatGPT that AI went mainstream.)

Al continues to integrate with our daily lives and other forms of technology, including blockchain. This overlap of AI and blockchain technology — dubbed 'Crypto x AI' — is one of the fastest-growing sectors in the crypto market, with proponents arguing that blockchain will accelerate AI's development as well as address some widespread centralisation concerns surrounding this powerful technology.

Think of ourselves at the end of the first 'wave' of Crypto x AI, with the overall narrative appeal remaining strong. If AI continues to develop at its current pace, Crypto x AI is every chance to ride a second 'wave' of speculation and attention that trumps the first one. This is not hard to imagine when you consider the various AI innovations coming down the pipeline (e.g. GPT-5).

Is It Too Late To Get Into Al Crypto Tokens?

Al has emerged as the most popular crypto narrative by web traffic in 2023, according to CoinGecko, with an 11.3% market share. While its popularity might suggest a mature market, there are several reasons why it might not be too late to explore Al crypto tokens.



Why It May Not Be Too Late

Market Dynamics

Recent altcoin sell-offs have positioned AI coins as some of the biggest losers, making this an opportune time to reassess this category. The overall dominance of AI in the crypto sector remains under 1%, with meme coins having more than double the market share at over 2%. This indicates significant room for growth.

Upcoming Catalysts

The upcoming Apple Worldwide Developers Conference (WWDC) in June is a potential catalyst for the AI sector. There is strong anticipation that Apple will make significant AI announcements, given that the company has yet to launch any new AI features in recent times, unlike many of the other giant tech companies like Microsoft, Google and Meta (formerly Facebook).

Early Stage of the Narrative

We are still in the early stages of the AI x Crypto narrative. As highlighted in the research report, the sector's appeal remains strong, and we may soon witness a second wave of attention. This could be driven by advancements such as real-world AI applications, new models from OpenAI (e.g., GPT-5), or major upgrades to digital assistants like Apple's Siri.



Catalysts Cont...

Additionally, the potential release of ChatGPT-5 and its capabilities could also drive more adoption of AI crypto tokens. As new AI models and technologies emerge, they can create new opportunities and applications for AI-integrated cryptocurrencies, further fueling the growth of this sector.

The initial launch of **OpenAI's ChatGPT in November 2022 triggered a huge spike in the price of several AI cryptocurrencies**.
Additionally, large-scale developments in the AI industry have had a similar affect on the crypto market (i.e. NVIDIA earnings report).

ChatGPT Hype Drives AI Token Price Gains By Up To 16x Price Change Of AI-Related Crypto Tokens, From Nov 2022 To Feb 2023 1,600% - DeepBrain Chain Singularity Net Botto 1,400% Fetch.ai Artificial Liquid Intelligence SingularityDAO 1,200% Numeraire Ocean Protocol 1,000% 800% 600% 400% 200% 0% Nov 30 Dec 14 Dec 21 Dec 28 Jan 4 Jan 11 Jan 18 Jan 25 Feb 1 Dec 7 Feb 8

Source: Coingecko Artificial Intelligence tokens category

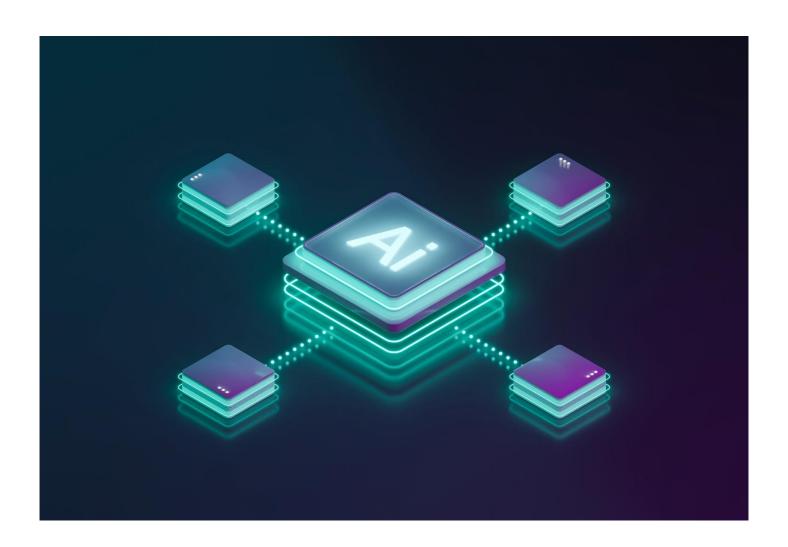
Why Does Al Need Crypto?

Beyond narrative appeal, there are valid reasons why the best elements of blockchains (e.g. data ownership, transparency, incentive alignment) can combine with the advanced capabilities of Al.

However, there is one big caveat: the jury is still out as to whether the above can be entirely achieved using non-crypto methods. See below for a more extended look into how crypto fits in.

In short, blockchains make it possible for AI to:

- gain increased global access to hardware and computation;
- build AI agents that can operate in 24/7 permissionless markets (e.g. Uniswap for trading, Render for computation); and
- facilitate the transparent exchange of quality data.



Getting Exposure To The Crypto X AI Sector

Like any sector, there are direct and indirect ways to get investment exposure to Crypto x Al.

Al Projects

The most direct way to gain exposure is through buying the tokens associated with AI projects. Broadly speaking, these projects fall into one of the following categories:

Infrastructure

Projects that provide permissionless access to computing resources and services such as model training and inference e.g:

Render (RNDR)

Akash Network (AKT)

Layer 1

The L1's best suited to AI use cases are those optimised for high throughput and low latency.

Solana (SOL)

Avalanche (AVAX)

Sui (SUI)

Near (NEAR)

Middleware

Projects that use the resources from infrastructure projects to offer products and services such as Al agents and inference verification e.g:

- SingularityNET (AGIX)
- Ocean Protocol (OCEAN)
- Fetch.ai (FET)

Storage

Data is king, and global data creation is set to soar in the next decade. Al requires significant data to train models, making storage a growing need e.g:

Filecoin (FIL)

Arweave (AR)

Infrastructure





Layer 1











Middleware







Storage





L1 Blockchains

If blockchain-enabled AI use cases gain meaningful traction, layer-one (L1) blockchains stand to benefit as they will be the settlement destination for all of the associated transactions. With dozens of L1s out there, it's unlikely that all will benefit equally from AI.

Of the dozens of general-purpose L1s, those best suited to AI use cases are those optimised for high throughput and low latency. Examples here include Solana (SOL), Avalanche (AVAX), Aptos (APT), Sui (SUI) and NEAR Protocol (NEAR), which will soon announce near.ai.

As for AI-specific L1s, the only standout is Bittensor (TAO). While competition is not yet as strong as other sectors — such as gaming, where Immutable, Ronin and Beam lead the pack — several well-resourced L1s are approaching their mainnet releases. Two names worth noting are Gensyn and Allora.



Notable Challenges & Risks

Scalability

Decentralised blockchains remain extremely slow and capacity-constrained relative to centralised databases. This is seemingly at odds with the many AI use cases that require complex computations and large datasets. While efforts are ongoing to improve the performance of decentralised blockchains, it may be a while before AI use cases can fully utilise them.

Data Security

Many AI use cases require access to sensitive data. While blockchains offer strong guarantees with respect to data integrity, this data is not always confidential. While the Crypto x AI sector will likely face these challenges in perpetuity, it is particularly relevant at these early stages.

Potential To Attract Dishonest Value Extractors

Crypto x AI will likely continue being one of this bull market's hottest trends and, as discussed, many of the potential use cases are not yet live. Unfortunately, these conditions are ideal for dishonest founders — and, in the worst case, outright scammers — who will likely latch onto this buzzword and overstate the extent to which their projects leverage AI. For investors, this risk should absolutely be a consideration when researching Crypto x AI projects.

Recap

- Despite being one of the best-performing sectors over the past year, Crypto x AI is still very much in its early stages. All sorts of blockchain-enabled AI use cases are currently being developed by dozens of projects, a large portion of which should launch tokens within the next couple of years.
- Challenges and risks facing
 Crypto x AI are mostly
 technological (e.g.
 scalability, data security).
 Additionally, if the sector's
 growth trajectory continues,
 more value extractors and
 scammers will likely arrive.
- 3 For investors, there are several ways to gain exposure to Crypto x Al. Arguably, the most important unanswered question pertains to value accrual, with it not yet being clear which category of Al projects (e.g. infrastructure, middleware, application) will capture the most value.

