

Understanding Crypto x AI

Setting the scene

Artificial intelligence ('AI') has easily been the hottest topic in technology and investing circles over the past 18 months, fuelled by OpenAI's release of ChatGPT in late 2022. Various forms of technology, including blockchain, continue to integrate with AI.

Projects building at the intersection of blockchain and AI are being categorised as 'Crypto x AI'. It is arguably the fastest-growing sector of this bull market¹, with dozens of projects set to go live this year.

Worth noting, to date, the price action of Crypto x AI tokens has had much more to do with the performance of publicly listed AI companies—namely Nvidia ('NVDA')—and key advancements in the AI industry (e.g. OpenAI's launch of GPT-4 in March of last year). This will likely continue until the sector matures.

Defining AI

AI refers to the ability of computer systems to perform tasks that typically require human intelligence. Despite it only recently going mainstream, AI has long impacted our lives in many subtle, yet profound, ways. For example, in the past decade, AI has been leveraged to enable virtual assistants (e.g. Apple's Siri), the personalisation of content (e.g. Instagram, YouTube, Netflix) and ride-sharing apps (e.g. Uber).

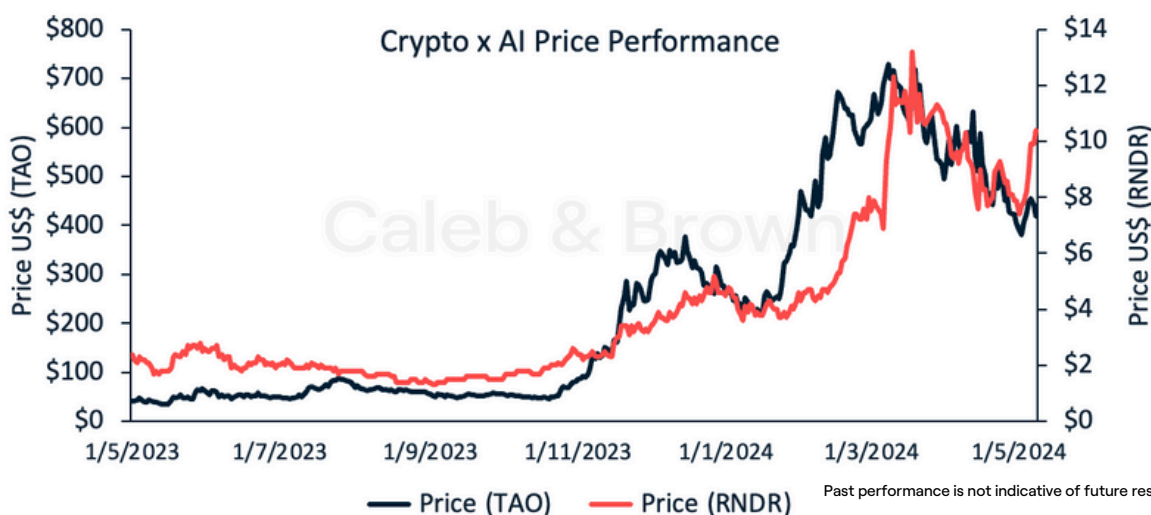
How crypto is relevant to AI

Like any technology, AI is not without its issues. Common criticisms of the technology are downstream effects of the fact that the AI landscape is dominated by a small group of data-rich corporations (e.g. Microsoft, Google, Apple, Amazon) headquartered in the U.S. This centralisation has given rise to concerns over biased AI models, fair competition and data privacy.

This is where crypto comes in. Blockchain-enabled solutions to these concerns are being developed by a wave of Crypto x AI projects. After all, the core innovation of blockchains is their ability to serve as globally accessible databases where anyone can verify ownership of data. They can also align incentives in ways that other technologies cannot.

BTC Snapshot ²	\$ ('000)
12-month high	73.4
12-month low	25.1
Price (15 May 2024)	62.1

Key Market Metrics ²	
BTC Dominance	51.4%
ETH Price	\$2,900
Total Crypto Market Cap	2.38T
Alt-Coin Market Cap	1.14T



15/05/24

1. CryptoSlate: AI Crypt Market Cap Doubles: <https://cryptoslate.com/ai-crypto-market-cap-doubles-to-25-billion-in-20-days/>

2. Coingecko Price Data: <https://www.coingecko.com/>

Past performance is not indicative of future results.²

Sector breakdown

As of this writing, the combined market cap of all AI tokens is \$20 billion, representing a mere 0.86% of the total market cap, as per [CoinGecko](#)³. Like most crypto sectors, Crypto x AI can be divided into three layers: application, middleware and infrastructure. Dozens of projects occupy each of these layers, many of which are relatively new and have yet to release a token.

- Infrastructure layer: Projects that provide permissionless access to computing resources and services such as model training and inference.
- Middleware layer: Projects that use the resources from infrastructure projects to offer products and services such as AI agents and inference verification.
- Application layer: Projects that leverage AI to offer consumer-facing use cases in areas such as trading and gaming.

AI Projects to Watch

Worth noting: The newness of Crypto x AI is such that the number of tokens currently in this sector are expected to rapidly increase in the next year. Soon to be released Crypto x AI projects are [Ritual](#), [Grass](#), [Gensyn](#), [io.net](#) and [Allora](#). (NEAR Protocol has also teased [near.ai](#), which may be a standalone project.)

Bittensor (TAO)

Bittensor is a blockchain consisting of multiple specialised networks (i.e. subnets) designed for specific use cases related to machine learning. For example, there are subnets for conversational AI, similar to ChatGPT, and others for AI-generated images. (Machine learning is a subset of AI focused on building systems that learn and improve from experience without being explicitly programmed.)

The project is still rather early in its development, with the first subnets having launched only late last year. The biggest upcoming development will be Bittensor's transition from a single-token ecosystem to a multi-token one. This development, dubbed [Dynamic TAO](#), is being steered by the OpenTensor Foundation, which proposed the upgrade earlier this year in an effort to address shortcomings of the current single-token ecosystem.

Render Network (RNDR)

Render Network ('Render') is a two-sided marketplace that leverages blockchain technology to connect users who need resource-intensive rendering power (e.g. for developing AI models) with users who have spare computational power. By doing so, Render aims to slash the time and costs associated with rendering, relative to traditional cloud-based rendering services.

In March, Render was one of two crypto projects—the other being NEAR—that [presented](#) at NVIDIA's GTC 2024, one of the largest annual conferences on all things AI and GPU computing. Also of note, Stability AI recently [announced](#) it will start running some of its models on Render.

In terms of what's ahead for Render, aside from focusing on driving adoption and performance enhancements, it may soon introduce the ability to stake RNDR. This was mentioned in a [proposal](#) by Stability AI founder Emad Mostaque in late March to create a dataset for 3D asset training.

15/05/24

3. Coingecko Price Data, Artificial Intelligence: <https://www.coingecko.com/en/categories/artificial-intelligence>