



Bittensor

*The Infrastructure
Behind Decentralised AI*



Key Takeaways

- 1 Bittensor lets anyone contribute to AI development and earn rewards
- 2 The network has a fixed supply of 21 million tokens, built on the same scarcity model as Bitcoin
- 3 A team recently used Bittensor to build one of the most capable AI models ever created without any large company involvement
- 4 Running AI tasks through Bittensor can cost significantly less than going through major cloud providers
- 5 Risks include inconsistent quality across the network and an evolving regulatory environment

What Is Bittensor?

Most powerful AI tools today are built and controlled by a small group of large companies. Access to the best AI technology is expensive, and anyone who wants to use it has to go through those companies on their terms. Bittensor was created to challenge that model.

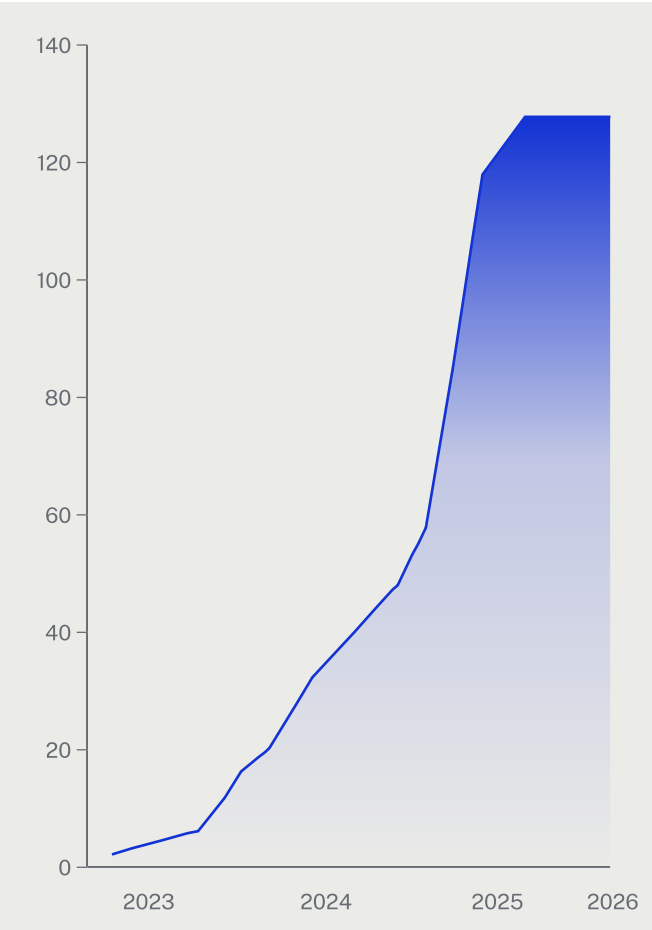
Bittensor is a blockchain network that works like a marketplace for artificial intelligence. Anyone with the right equipment can contribute to it, and anyone can use the AI services it produces. The goal is to make access to AI open to all, as Bitcoin made financial transactions open to all. The network launched in early 2021, and a major upgrade in 2023 introduced the system that powers it today.



How The Network Works

Bittensor organises its work into separate channels called subnets. Each subnet focuses on one type of AI task. Some handle text generation, others work on image recognition, financial forecasting, or scientific research tasks like protein folding (a process used in medical drug discovery). There are currently 128 active subnets on the network.

Within each subnet, three groups of people work together. Contributors run AI models and do the actual computing work. Reviewers check the quality of those results and score the contributors. Backers support the reviewers by locking up TAO tokens, which helps keep the process honest. The best contributors earn the most rewards, which means quality is constantly pushed higher.



Bittensor: Active Subnet Growth

One of the most active services on the network is Chutes, a decentralised AI inference platform that lets developers run AI models via API without owning or managing expensive hardware. Costs can be significantly lower than those of major cloud providers like AWS for equivalent computing power, making it one of the more concrete examples of Bittensor's economic model working in practice.

TAO is Bittensor's native token. Like Bitcoin, it has a fixed maximum supply of 21 million tokens. New TAO tokens are created and distributed as rewards for contributing to the network, but the rate slows over time through a process called halving. The first halving happened in late 2025, cutting the daily reward rate in half. Around 10.77 million TAO are currently in circulation, and roughly 70% of those are locked into the network by participants who secure and back the system.



TAO Token Supply Breakdown

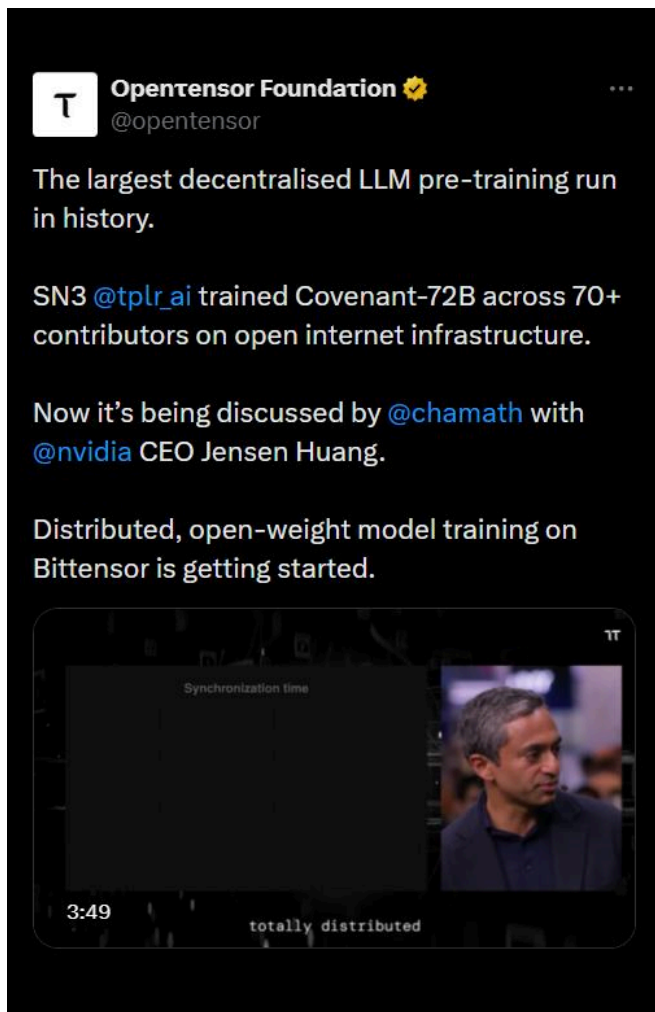
A Major Milestone

In early 2026, a team working on Bittensor completed something that had never been done before. They built a highly capable AI model called Covenant-72B, using only the Bittensor network. No data centres. No big company is involved. Just more than 70 independent contributors sharing their computers over regular internet connections.

The size of an AI model is measured by the number of parameters, which represent the connections the model uses to process information. More parameters generally mean more capability. Covenant-72B has 72 billion, placing it in the same league as some of the most powerful AI tools built by major technology companies today.

The significance is not just the size. It is that this model was built without any central organisation running the project. The final result was released publicly, meaning anyone can use it or build on top of it at no cost.

This was made possible, in part, by a network upgrade called Dynamic TAO that changed how rewards flow through the system. Previously, a small group of participants had significant influence over which parts of the network received funding. The upgrade handed that control to the market instead, allowing subnets that produce genuinely useful work to attract more support. Covenant-72B is an early example of what that kind of open competition can produce.



Opportunities And Risks

AI development is expensive. The computing power required to train and run large AI models is controlled by a handful of cloud providers who charge accordingly. Bittensor offers an alternative route, one in which costs are shared across a global network and rewards flow to contributors rather than to a central company.

The network's structure also enables it to grow across many different AI applications simultaneously. Each subnet develops independently, and the whole system benefits as more contributors join.

That said, the network is still developing. Quality is not consistent across all subnets. Some deliver reliable, production-ready results, while others are still maturing. No single authority oversees standards, which puts more responsibility on users to assess the tools they use.

The rules governing AI and blockchain assets are still being written by governments worldwide. Regulatory changes in major markets could affect how the network operates. And, as with any blockchain protocol, there are technical risks that cannot be entirely eliminated.

Summary

Bittensor is building infrastructure that could change how AI gets built and accessed. Rather than a world where a few large companies hold all the capability, Bittensor creates a system where anyone can contribute, anyone can benefit, and the best work rises to the top through open competition.

The recent milestone of training a world-class AI model using only decentralised contributors is a strong signal that the model is working. Whether the network continues to attract quality participation at scale will determine how significant that becomes.