NEO (NEO)

About: NEO is a non-profit community-driven blockchain project. It utilizes blockchain technology and digital identity to digitize assets and automate the management of digital assets using smart contracts. Using a distributed network, it aims to create a "Smart Economy".

NEO was founded in 2014 and was open sourced on GitHub in June 2015. NEO believes that community development is its top priority. NEO has a huge developer community around the world, such as CoZ, NEL and NeoResearch, who continuously contribute to NEO development. Millions of community members are active on Reddit, Discord, Github and Twitter.

Advantages:

1. The technology underlying NEO supports multiple types of digital assets. Users can register, transfer and trade at will on NEO.

2. Digital certificates are supported, placing trust into the public chain. This provides full legal protection for all assets digitized through the NEO platform.

3. Facilitate P2P exchange of digital assets. Buyers and sellers of digital assets and currencies will be handled peer-to-peer without the need for third party exchanges.

4. Turing-complete smart contract, which will have high certainty and finality, support parallel operation, sharding and unlimited scalability when run in NeoVM.

5. NeoContract supports multiple programming languages such as C#, Java, and Python. Developers can rapidly develop smart contracts based on the NEO platform without learning a unique language.

6. Neo Virtual Machine (NeoVM): NEO's lightweight stack-based virtual machine provides shorter startup times with efficient execution. Deterministic calling tree-technology allows NEO to achieve unlimited theoretical scalability.

7. Consensus nodes use Byzantine Fault Tolerance Algorithm to reach consensus and ensure the finality of transactions. It also ensures that the system keeps its finality and availability as long as Byzantine fault occurs on less than 1/3 of the nodes.

8. Comprises Cross-chain Assets Swap Protocol and Cross-chain distributed transaction protocol and can achieve atomic assets swap and guarantee the operation consistency of smart contracts executed on different chains.

9. Introduced Lattice cryptography-based signing and encryption technique to avoid quantum crisis by Turing encryption and decryption problem into the Shortest Vector Problem (SVP), which cannot be solved by current quantum computers.