



AIS

Shared mining of edge idle computing power based on blockchain technology

AIS crypto Investment Fund • 2025

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Chapter 1: Market background Analysis

1.1 The development status of artificial intelligence

In recent years, the development of Artificial Intelligence (AI) can be described as rapid progress, and it has been rapidly integrated into all walks of life such as economy, society and life, igniting a prairie fire all over the world. International Data Corporation (IDC) recently released the "Global Artificial Intelligence market half-yearly report" predicted that the field of artificial intelligence will continue to advance in the future, and the artificial intelligence market will maintain double-digit growth until 2025. Moreover, language, sound, and vision technologies, as well as multimodal solutions, will see significant advances, revolutionizing "human efficiency." According to a report by Next Move Strategy Consulting, the market for artificial intelligence is promising and is expected to grow 20-fold over the next decade. Currently, the market for artificial intelligence is worth nearly \$100 billion, and the figure is expected to reach nearly \$2 trillion by 2030.

Artificial intelligence refers to tasks performed by computer systems or machines that normally require human intelligence, such as visual recognition, speech recognition, natural language processing, decision support, and more. As one of the most innovative and influential technologies in the world today, artificial intelligence is changing the way of production and life in all walks of life, bringing great potential and value to economic and social development. Over the past five years, the adoption rate of artificial intelligence technology among global enterprises has increased rapidly, from only 20% in 2017 to 50% of enterprises have actively deployed artificial intelligence solutions, which undoubtedly proves that artificial intelligence is becoming the core engine to promote industrial innovation, transformation and upgrading. The development of artificial intelligence (AI) in 2024 presents several significant trends, which not only reflect the progress at the technical level, but also herald new directions for industry application and strategic layout.

- Moving from AI Grand Models to AI General: OpenAI Corporation is developing the next generation of AI, which marks a shift from AI grand models to AI general. General AI is characterized by the ability to self-modify



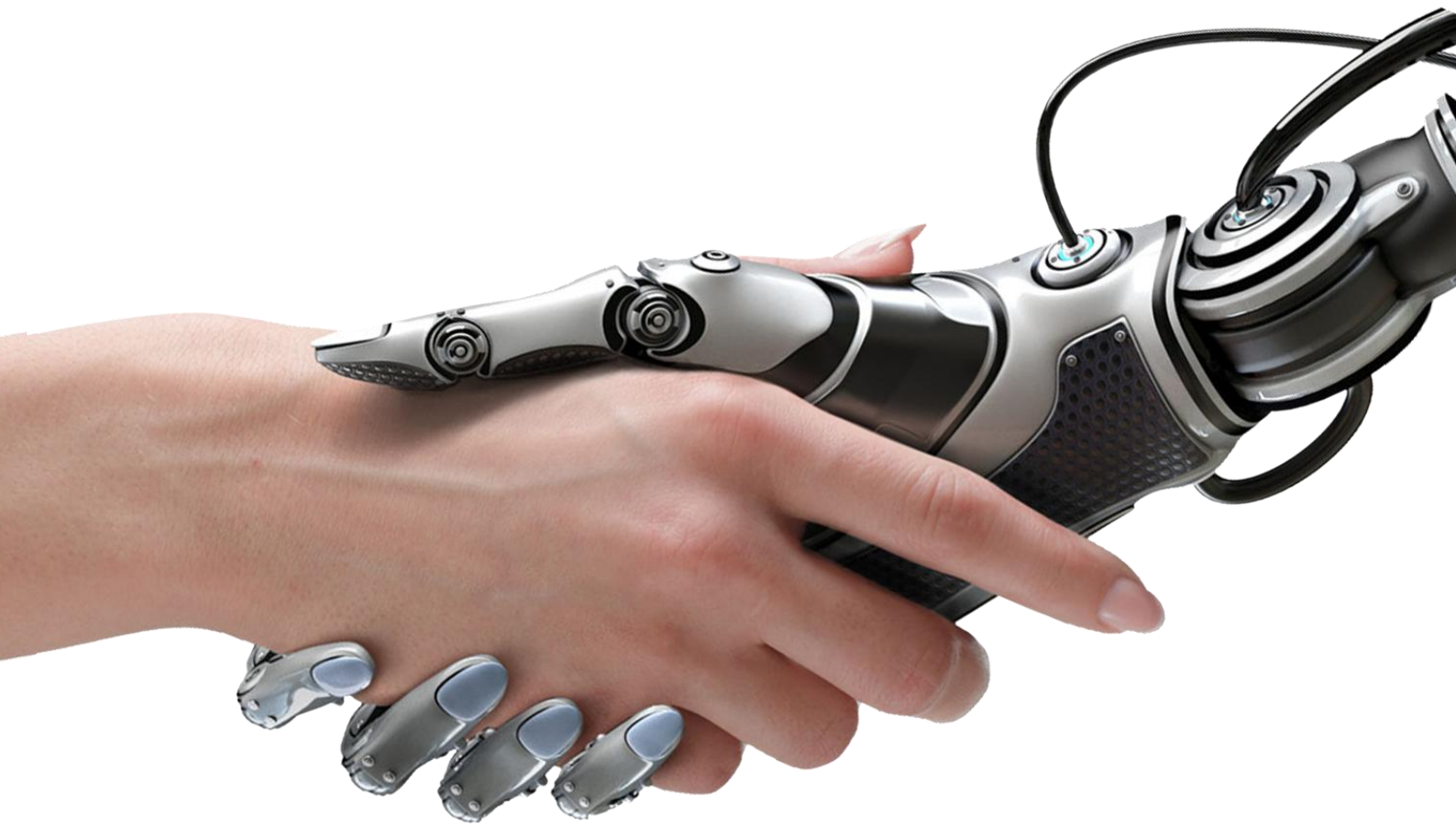
code to adapt to more complex learning tasks, an intelligence that does not rely on data from human activity. This shift could lead to AI's ability to surpass human levels in a variety of fields.

- Synthetic data breaks training data bottlenecks: Synthetic data is data synthesized using machine learning models to solve the problem of limited quality data when training AI. This trend suggests that synthetic data will become an important direction for AI development, helping to improve AI performance while reducing reliance on human data.
- Application of quantum computers in the field of artificial intelligence: Quantum computers may become an important solution for the development of artificial intelligence due to the demands of artificial intelligence technology in terms of computing power. The parallel computing capability of quantum computers gives them a potential advantage in processing artificial intelligence algorithms. This suggests that the combination of quantum computing and artificial intelligence techniques could open up new possibilities.
- Comprehensive application of AI and more general AI: AI technology is shifting from single point applications to diversified applications, from general scenarios to specific industry scenarios. With the breakthrough of large-scale AI models and the rise of generative AI, AI's ability to deal with complex problems has been improved, providing more advanced tools and means for all walks of life. Experts predict that AI will move towards being more versatile and efficient in the future.

As a strategic technology that leads the future, the world's major economies are currently taking artificial intelligence as a major strategy to enhance national competitiveness and maintain national security. Since 2013, more than 20 countries and regions, including the United States, China, the European Union, the United Kingdom, Japan, Germany, France, the Republic of Korea, India, Denmark, Finland, New Zealand, Russia, Canada, Singapore, the United Arab Emirates, Italy, Sweden, the Netherlands, Vietnam and Spain, have released AI-related strategies, plans or major plans. More and more countries have joined the queue to lay out artificial intelligence, escorting the landing of their own artificial intelligence from the aspects of policy, capital, technical personnel training, and application infrastructure construction.



The development and application of artificial intelligence technology has become one of the trends of today's society, and its unique advantages and wide application fields have brought huge business opportunities for the market development. With the continuous iterative upgrading of big data technology and the increasing maturity of artificial intelligence algorithms, we have reason to foresee that in the near future, artificial intelligence will play a more central role in the market, create greater value space for enterprises, and promote the market into a new era of intelligence.





1.2 Integration of blockchain and artificial intelligence

There are three key elements of current artificial intelligence: Data, algorithms, computing power, these are the core driving force to promote the development of artificial intelligence, to build a more open, efficient, economic data, algorithms and computing power market, but also on this basis to promote the circulation of various markets and related identity, supervision and other services, undoubtedly can greatly promote the development of artificial intelligence, to build a diverse ecosystem. In the past, the centralized way to build the corresponding infrastructure has brought excessive centralization, which is not conducive to sharing, and will form the corresponding information island. At the same time, such infrastructure built by an institution or enterprise can not achieve the consensus of the whole society, bringing information opacity and mutual communication problems. And blockchain technology, can achieve public consensus sharing, while protecting the participants of the technology, therefore, based on blockchain technology to build a set of artificial intelligence infrastructure, should be an important direction in the future.

1) Blockchain can facilitate data sharing

Data is the core driving force for the development of AI, as well as the fuel of AI. Only when data is shared by everyone can more abundant data be provided, only when data flows more efficiently can greater value be created, only when data is owned by real providers can data ownership be protected and everyone can be encouraged to provide, while ensuring the reliability and authenticity of data. Only when data power is exchanged more conveniently, In order to improve efficiency. And all these need a fair and incentive mechanism to achieve. Blockchain itself has a record, unmodifiable and economic incentive mechanism to provide a good solution.

2) Blockchain and identity and security

In the current network, the communication between people is the main body, and the communication and exchange between people and machines and machines will become the most common way in the future. In the world of Internet



of everything, what is lacking is trust and security. Blockchain can help build a decentralized and more efficient and secure identity identification system, and build the security authentication of Internet of everything devices. Improve the reliability and traceability of data sources. AI development, there will also be similar to ALPHAGO, artificial intelligence, these AI entities have stripped of biological attributes, these AI entities can also be connected to the network society, how to identify, blockchain can also help build identity system, in the blockchain world, identity can be hidden, but can not deny.

Blockchain will improve the security mechanism of artificial intelligence: blockchain helps artificial intelligence to achieve contract management, and improve the friendliness of artificial intelligence. For example, users of devices are allowed to register on the blockchain, access users at different levels through smart contracts, and provide personalized functions for users at different levels. The blockchain ensures that the device can achieve hierarchical access through user registration, which can not only prevent the device from being abused, but also prevent the user from being harmed. Co-ownership and co-use of devices can be better achieved through the blockchain, which will let users jointly set the state of the device and make decisions based on smart contracts.

3) Blockchain and AI regulation

As mentioned above, blockchain can well solve the identity, and the results of the call can not be tampered with, the results of AI also need to be output and supervision, while the call to the AI system access, traces can be easily traced on the blockchain, such features can help build a healthier AI system. For the monitoring of AI identity and AI, blockchain can play a fundamental role, and it is more effective and credible to build a credit system based on blockchain. Therefore, AI combined with the management of blockchain will inject more healthy factors into the development of AI.

4) Value exchange between blockchain and AI

Blockchain itself has the characteristics of openness, fairness and transparency, and transactions in blockchain are more transparent. Therefore, building a more transparent transaction market based on blockchain will be fairer. At the same time, due to the characteristics of universal participation, a broader platform will be built, which is conducive to the peer-to-peer exchange of value. AI, data exchange and value embodiment are easier to achieve in the blockchain world, eliminating the



information asymmetry and barriers of transactions, which is now the case with Bitcoin. This will undoubtedly promote the accelerated flow of AI and data, and promote more people to participate in the provision of AI and data.

A large number of smart contracts are used in the transaction of blockchain. The essence of smart contracts is a kind of automatic execution machine, which is a kind of transaction mechanization and automation. This mechanism is very suitable for the transaction of AI-related products, such as providing data to algorithms or models. It accelerates and optimizes the transaction process, which is more conducive to the exchange of AI value. At the same time, the incentive mechanism of the blockchain itself is easy to achieve the measurement of value through tokens.

5) Computing power sharing and assistance

At present, the Bitcoin network or the Ethereum network is undoubtedly a huge pool of computing power. Machine learning, especially deep learning algorithms, require a lot of computing overhead, while deep learning and neural network algorithms themselves require multi-node computing collaboration. Blockchain itself is a distributed computing resource, and the decentralization and incentive mechanism of blockchain, Can better manage and share computing resources, not only the use of data center computing resources, but also the idle decentralized computing resources can be coordinated and shared to build a larger, convenient transaction of computing resources pool.

With the development of 5G and IOT, discrete computing resources such as edge computing and fog computing need a broader and more trusted management network, and blockchain provides a shared, transparent and tradable computing environment that can organize these resources. Therefore, the use of blockchain to build a decentralized resource pool, while achieving credible and value-based management, can better play a variety of computing resources, whether cloud computing resources or discrete computing resources.

6) Blockchain provides a safe and reliable development environment for AI

Data security is one of the obstacles to the further development of artificial intelligence, if developers do not improve the security of the data they manage, then once the data is exposed, artificial intelligence will lose credibility, and ultimately can only be reduced to a glorified technology. Blockchain technology can go a long way to solving this problem.



The smart contract and intelligent transaction mechanism of blockchain can well play the functions of privacy protection, data opening and data fusion, and make the data transaction information subject in an encrypted state. At the same time, due to the immutability of blockchain records, it can also facilitate people to query and supervise the records of artificial intelligence devices, and enhance people's trust and acceptance of artificial intelligence. In the era of data supremacy, people can extract a lot of valuable information from the data. Blockchain and technology can both keep data safe and help extract valuable information. Therefore, blockchain can play a crucial role in improving the information leakage problem that exists in artificial intelligence.

First of all, the untamper and traceability of blockchain technology makes the records of every step of data collection, transaction, circulation, and calculation analysis can be retained on the blockchain. Anyone using any means in the blockchain network can not tamper with the data, modify the data and fake the data, so that the credibility and quality of the data get a certain degree of credit endorsement. Helps artificial intelligence to carry out high-quality modeling, so that users can get a better user experience. Secondly, technologies such as homomorphic encryption, zero-knowledge proof, and differential privacy in blockchain enable data sharing to be privacy-secure.





1.3 Web3 and AI mutually enable each other

Every technological change is a new round of wealth reorganization. With the integration and development of Web3, blockchain, digital currency, digital economy and artificial intelligence, the new thinking brought by it has created higher business value, thus solving many problems in the process of enterprise transformation and entrepreneurship. Therefore, innovators are applying blockchain technology in practice to improve the pain points in their own operations. A large number of companies have begun to surround Web3, blockchain, artificial intelligence and digital economy have been laid out, and a new wealth boom is coming.

In general, Web3 is decentralized, distributed and autonomous in nature, while also supporting blockchain technologies such as cryptocurrencies. At present, Web3 is becoming an important trend and direction. At the same time, artificial intelligence is also becoming an important part of Web3, injecting new life into it. Artificial intelligence (AI) and Web3 can work together to create a more open, transparent and decentralized world. AI can be used in many application scenarios for Web3. For example, AI can be used in smart contracts to provide them with more reliable automated decision-making capabilities. In addition, AI can be used in decentralized applications (DApps) to provide a better user experience and higher quality services. Let's take a look at the new directions that Web3 may take in the era of AI.

1) Automated decision making for smart contracts

Smart contracts are an important part of Web3, and they are automatically executed through contract code. These codes can perform operations such as asset transfers, software upgrades, and so on. With the help of AI, the automated decision-making capabilities of these smart contracts will be further enhanced, bringing even more powerful benefits to the entire Web3 ecosystem. AI can learn from historical data to make intelligent decisions, thus eliminating human error. Moreover, in the Web3 ecosystem, the execution of smart contracts may involve cooperation and decision making between multiple parties. In this case, the assistance of AI will be even more indispensable. AI can provide support and advice for decisions between different parties based on relevant data, further improving the efficiency and accuracy of smart contracts.



2) The intelligence of decentralized applications

Decentralized applications (DApps) aim to democratize networks and data by eliminating centralized threats, enabling a more just allocation of resources. In the Web3 ecosystem, the intelligentization of Dapps will bring many important improvements.

On the one hand, through AI technology, DApps will have better adaptability and intelligence. For example, AI can provide more accurate search and filtering functions in Dapps, reducing users' search costs and providing users with a better user experience. At the same time, AI can also recommend more appropriate content, services and products for users by learning their behaviors and habits. On the other hand, the intelligence of Dapps can also help users better manage their digital assets. Through the analysis and prediction of AI, users can more accurately understand the trends and risks of various digital assets and make more informed investment decisions. On top of this, users can also automatically execute their strategies through related smart contracts, thereby improving their profitability.

3) Autonomous intelligentization

Autonomy is a very important feature in the Web3 ecosystem. In order to achieve autonomy, smart contracts and decentralized technologies are needed so that individual participants can spontaneously form communities and govern themselves. At the same time, AI will play an important role in the realization of autonomy. By learning how communities behave and make decisions, AI can provide references and recommendations for autonomous management. For example, in the DAO(Decentralized Self-organization), AI can provide more precise voting and governance recommendations, thus ensuring that the interests of all parties are balanced. In addition, AI can leverage multiple data sources, including user behavior, social networks, and event history, to build more accurate and comprehensive models of autonomy. These models can help autonomous organizations make better decisions, while also providing better predictions and solutions for future decisions.

With the rise of Web3, AI technology will breathe new life into it, leading to a more efficient and intelligent ecosystem. AI can be used in smart contracts and DApps to provide them with more reliable and intelligent automated



decision-making capabilities. At the same time, AI can also be used for the implementation of autonomy, injecting more adaptive and autonomous features into the Web3 ecosystem. These improvements will help drive the development of Web3 and further promote the popularization of blockchain technology and digital assets.



1.4 Birth of the AIS project

With the explosion of the artificial intelligence market, the global demand for computing power has risen rapidly. Computing power is the core driving force of AI, the basis for AI to realize intelligence, automation and optimization, and the new productivity in the era of digital economy. It has become the core force to promote the development of digital economy and a solid foundation to support the



development of digital economy, and plays an important role in promoting scientific and technological progress, promoting the digital transformation of the industry and supporting economic and social development.

According to the "Computing 2030" released by Huawei, mankind will enter the YB data era in 2030, and the global data will increase by 1YB every year. General computing power will increase 10 times to 3.3ZFLOPS and AI computing power will increase 500 times to over 100 Zflops, which is equivalent to the combined power of one million Chinese supercomputer Sunway Taihulight.

Diversified intelligent scenarios require diversified computing power, and the rapid rise of emerging fields such as artificial intelligence, scientific research and Web3 have put higher requirements on computing power.

As AI models become more complex, the demand for computing power grows exponentially, while the supply of computing power is limited by factors such as hardware cost, energy consumption and data security, resulting in scarce, expensive, centralized and inefficient utilization of computing resources.

- ChatGPT is limited by a lack of computing power. ChatGPT, a chatbot from OpenAI, a nonprofit dedicated to developing artificial intelligence, is touted as one of the most advanced natural language generation systems. However, Sam Altman, the CEO of OpenAI, revealed in a closed-door meeting. Due to a lack of computing power, OpenAI was unable to expand ChatGPT's conversation window, which affected the amount of information ChatGPT could process when answering user questions, remembering past questions and performing complex programming tasks.
- There is a huge amount of idle computing power around the world, in devices such as personal computers, phones, tablets, etc., that sits idle most of the time and is not being fully utilized. If this idle computing power can be effectively integrated and utilized, it can provide a strong and flexible support for the development of AI. However, it is not easy to realize the value of idle computing power, and some technical and commercial problems need to be overcome, such as: how to ensure the stability, security, credibility and schedulability of idle computing power.

Facing the difficulties and problems encountered by the market, the arrival of Web3.0 has laid the foundation for the rise of decentralized computing power. As a



new generation of Internet paradigm based on blockchain technology and crypto economy, Web3.0 can effectively realize a decentralized, secure and private network environment, allowing users to authenticate their identities, exchange value, participate in governance and contribute content with cryptocurrency. This also means that the new generation of Internet will usher in a comprehensive change in infrastructure, and the decentralized computing power network will become one of the important forces of Web3.0 change.

Decentralized computing network allows anyone to share their idle computing resources to the network, get corresponding rewards and rights (computing mining), and realize the democratization, sharing and value of computing power. At the same time, the decentralized computing power network distributes computing tasks to multiple nodes for execution, realizing the parallelization and optimization of computing. The decentralized computing network not only allows computing resources to be distributed and utilized more efficiently, so that everyone can share the benefits and rights of computing power, but also provides more efficient, cheaper, more reliable and more private computing services, promoting the realization of a new era of more free, fairer and smarter computing power mining!

Market challenges and opportunities coexist, and high-quality solutions are bound to be widely concerned -- the birth of AIS is becoming the focus of the industry. As a global computing power sharing and collaborative mining AI computing power network, the source of Web3 super intelligence, AIS is committed to breaking the global computing power demand and supply barriers, bringing together marginal idle computing power, leading the innovative integration of decentralized AI computing power and mining, promoting the intelligent process of human society, and ultimately building a more intelligent, credible and sustainable new world.





Chapter 2: an overview of the AIS project

2.1 Introduction of AIS project

AIS is a shared mining ecosystem of edge idle computing power based on blockchain technology created by AIS Crypto Investment Fund in collaboration with the world's top AI technical team, mining pool/mine and capital. It is committed to providing AI big data training computing power services for the global AI market and inspiring idle computing power contributors of various devices around the world. Build a decentralized, secure, transparent and scalable AI computing power market, provide low-cost, high-performance and highly available computing power services and data services for AI demand parties, and provide innovative AI computing power solutions for Web3 while allowing global users/miners to obtain sustainable and fair idle computing power supply benefits.

Specifically, in recent years, AI companies have developed rapidly, and Nvidia, as a chip service provider, has rapidly grown into the world's largest company by market value. At present, it seems that the supply of Nvidia chips has been unable to meet market demand, and the computing power market is facing a huge supply shortage. However, people's handheld devices and computer equipment, 90% of the time dormant state. Based on this, AIS, through the software interface, allows mobile phones, computers and other idle equipment to provide computing power during idle hours to provide AI training service support for major AI manufacturers. Manufacturers purchase AI computing training services through the purchase of platform tokens (AIS) and pay to the mining pool. At the same time, each device provides computing service. Get the corresponding tokens (AIS) to complete the delivery of AI training. In this way, an internal value cycle of the demander, the attacker, the miner and the third party derived demander is formed.

In terms of technology, AIS continues to provide support for computing power collection/storage, computing power integration, AI model design/training through the integration of "AI+ terminal equipment +AI training", as well as core technical support such as L2, ZKML zero-knowledge machine learning, DAG+DPoS consensus mechanism, and cross-chain communication. At the same time, various servers, personal terminals and other devices are connected to form a sustainable idle computing power output network. More importantly, AIS can also serve as the



infrastructure connecting decentralized computing power and dApps, helping AI vendors to hardware up the chain, providing the market with more flexible, low-cost, reliable and efficient computing power resources and access ports, and enabling them to share computing power resources and process data together.

In terms of sharing mining of idle computing power at the edge, on the one hand, AIS encourages a wider range of users to participate in contributing idle computing power in a decentralized way through the perfect AIS incentive model. For example, through the AIS network, users can share their own computing power, such as laptops, computers, mobile phones, smart devices, etc., and get idle computing power sharing mining Token rewards. On the other hand, it brings low threshold and low-cost AI computing power access services for major AI manufacturers. AI manufacturers can obtain the idle computing power provided by users through the AIS network and pay the corresponding token fees.

At present, AIS is cooperating with large-scale third-party Internet data centers, AI manufacturers, top research institutions and colleges to provide more adequate computing power support for the market. At the same time, AIS is also actively establishing AI talent training and project incubation centers, and is committed to disseminating the latest applications and knowledge of edge idle computing power sharing mining, and transferring outstanding talents to the society.

In the future, the perfect AIS ecosystem will set up top-level applications such as decentralized artificial intelligence applications, scientific research applications, and university education, and the underlying support of data processing, computing power, algorithms, public chain infrastructure and AI data centers, while the innovative AIS incentive model can realize a complete set of value circulation economic value-added system. AIS is leading the new blue ocean of shared mining of marginal idle computing power, creating a miracle for the next generation of value Internet.





2.2 AIS crypto Investment Fund

AIS Crypto Investment Fund is an innovative foundation focused on the development and deployment of cutting-edge technologies, composed of a group of scientists, top technologists and investment banking experts from different fields, committed to promoting the innovation and application of blockchain technology, and promoting the creation of a third blockchain ecosystem besides Bitcoin and Ethereum. And expand the application boundary and technical boundary of blockchain technology, so that ordinary Internet users can feel the value of blockchain technology. At the same time, to provide customers with efficient, safe and reliable wallet, public chain, Web3, DeFi decentralized financial solutions. By integrating blockchain technology, it helps the market achieve business optimization in data security, transparency and smart contracts.

In addition, the AIS Crypto Investment Fund also has rich investment experience in the field of project investment incubation, having successfully invested in a series of projects with wide influence such as Qubit, Neura, BlockX, ChainAI and EtherDelta. At the same time, AIS Crypto Investment Fund is also continuing to deepen its work in the field of AI, with two core research and development institutions, namely, Intelligent Industry Research Institute and AI Strategy Center:

- Intelligent Industry Research Institute: Relying on artificial intelligence technology with massive data and supercomputing capabilities, it deepens AI industry practice and cutting-edge research, and participates in reports and studies at all levels in many countries based on case results; To build an influential AI industry frontier think tank through openness, cooperation, co-construction and sharing.
- AI Strategy Center: With the goal of leading the intelligent transformation of enterprises by AI, it focuses on the development and change of artificial intelligence industry, as well as the intelligent transformation and upgrading of traditional industries. It is building an AI+ industry ecosystem through industrial research LABS, research reports, case studies, AI strategy camp, chief intelligence officer training and other projects with the AI strategy Center as the carrier.



At present, AIS Crypto Investment Fund has set up offices in Hong Kong, London, Silicon Valley, Riyadh, ABU Dhabi, Dubai, Kuala Lumpur, Seoul and other places. In addition, AIS has operations in Germany, Thailand, the Philippines and other countries. This will provide global business network support for the AIS project's global landing.



2.3 Top team co-construction

AIS Crypto Investment Fund gathers the world's top scientists for AIS, bringing together the best experts from the industry in various fields such as computer, artificial intelligence, big data, algorithm, computing, mining, communication, mathematics, finance, Web development, etc. The team members have rich experience in AI computing power, blockchain underlying, distributed database, cryptographic algorithm, cross-chain technology and other fields.

1) Technical team

Michael Lee - PhD in quantum computing and artificial intelligence from the Massachusetts Institute of Technology (MIT), has worked as a senior researcher and technical director at well-known companies such as Google, IBM and Microsoft, and is a leading figure and authoritative expert in the field of blockchain, artificial intelligence and quantum computing.

Wolf Carr - Senior programmer, PhD in Computer Science at Caltech, Senior expert in blockchain technology applications, DeFi Application expert. He has extensive experience in big data parallel computing and distributed algorithm optimization, and has in-depth research in blockchain, cryptography, and data



mining.

Roice Morrison -- Program developer, senior engineer of artificial intelligence technology application, has senior development experience in the field of AI trading network. With 15 years of experience in the Internet industry, he is proficient in multiple computer languages, good at the design of long, massive and high concurrent availability architecture, and has rich experience in R&D management.

Jeff Smith is an expert in data modeling, specializing in financial data analysis and modeling. He specializes in applying advanced data analysis techniques and modeling methods to provide accurate, in-depth data insights and predictive models to companies or partner organizations. Since 2016, he has been responsible for developing and maintaining financial data models and algorithms, including market data, transaction data, risk data, etc., to provide support for decision making. He uses statistical analysis and machine learning technology to build prediction models and risk models, identify market trends, predict risks, and optimize investment portfolios.

Chloe Bennett, a senior engineer in the application of artificial intelligence technology, has senior development experience in the field of AI trading networks. She has 15 years of experience in the Internet industry, is proficient in multiple computer languages, is good at the design of long, massive and high concurrent availability architecture, and has rich experience in R&D management.

Mason Taylor -- security engineer, used to work in top technology companies, has more than 10 years of experience in risk control. He is good at using scientific, rigorous and thorough risk control audit standards and methods, and comprehensively verifying the real information of trading station customers, transaction risk analysis, customer transaction registration audit, and digital asset control ability assessment. To prevent the occurrence of bad parts trading to the greatest extent.

2) Advisory team

Bernice Micallef - Blockchain and wallet technologist with a long career in large systems engineering development on the Binance team. He has been involved in the development of several cryptocurrency projects. Including proof-of-concept platform, blockchain Explorer, online wallet and one of the largest token mining



pools.

Dinesh Singh -- Proficient in the principle and implementation of mainstream blockchain technology such as Bitcoin, Ethereum, HyperLedger, and has a deep understanding and rich practice of blockchain consensus mechanism, smart contract, cross-chain technology, side chain technology, privacy protection, etc.

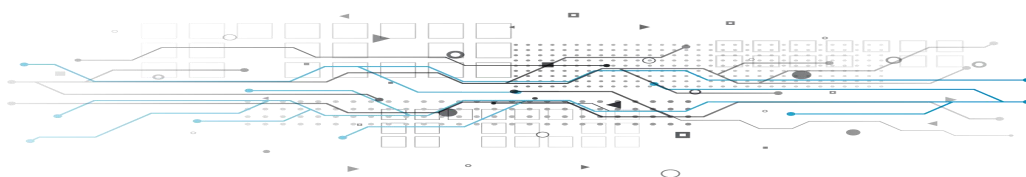
Alston Reed -- Master of Computer Science Department of Harvard University, famous blockchain software development engineer, responsible for the cross-platform transplantation of mining algorithm and mining machine software development management of Bitcoin, ETH and other virtual currencies. He has rich experience in the technical architecture of virtual digital currency wallet and virtual digital exchange.

Lawrence --.NET/C# / Azure Cloud/DevOps/ Microsoft Technical Specialist, Senior Architect. He has been engaged in software architecture, design and development for nearly 20 years. He started his career at Microsoft Engineering Asia. He has successfully led a team to implement medium and large scale software R&D delivery for North American customers.

John Charles is an American software engineer with over 5 years of experience in commercial development. Participated in and managed several of the current top 20 blockchain virtual currencies, leading brand software development, was one of the first blockchain technology architects, then left to join the team, and is currently the main platform and technology engineer.

3) Technical reserve

AIS technical team also accumulated years of relevant technical reserves: Hardware and software access technology patents, DEPIN Data honesty proof, dynamic multi-mining enabling mechanism, triple hardware data uplink mechanism, four standard token airdrop mechanism, hardware token issuance new mechanism, AI-AGENT small model, DEPIN Data zero knowledge proof, data value pool model, etc.





2.4 Capital support and strategic cooperation

1) Capital support

AIS has gained international capital recognition. It is also backed by top global Capital including TechConnect Partners, Blockchain Capital, Digital Assets Capital, Innovation Ventures and others.

- TechConnect Partners: This is a leading technology innovation investment and advisory firm focused on providing financial support and professional advice for cutting-edge technology projects, and has successfully invested in and supported several leading blockchain projects. TechConnect Partners has invested in AIS and will provide a full range of technical consulting and marketing support for the project, aiming to help the project smooth landing and promotion.
- Digital Assets Capital: This is an investment institution focusing on the digital asset field, dedicated to finding digital asset projects with innovation and potential, with extensive investment experience in the blockchain field and keen insight into technological innovation and market demand. TechConnect Partners deeply recognizes the exploration prospects of AIS in the field of computing power mining, so it invests in and promotes the landing of AIS, and jointly explores the innovation opportunities of AI computing power sharing + mining.
- Innovation Ventures: This is a venture capital firm focusing on blockchain projects, which is committed to finding those blockchain projects with unique innovative value in different fields. The investment philosophy is to focus on the mining of potential value, and has invested in and supported several innovative blockchain projects. TechConnect Partners invests in AIS mainly to reach an agreement on the future prospects of shared mining of decentralized computing power and edge idle device computing power, and to achieve win-win innovation through funding and resource support.

2) Strategic cooperation

AIS has reached extensive strategic cooperation with well-known enterprises in the fields of artificial intelligence hardware, top applications and the Internet, such as Hewlett Packard Enterprise, OpenAI, Ethereum, Polkadot, etc., to establish a solid



foundation for the landing of AIS.

- Hewlett Packard Enterprise is an American multinational information technology company focused on providing enterprise-class IT solutions and services. Hewlett Packard Enterprise offers a variety of hardware, software and services, including servers, storage, networking solutions, cloud computing, data analytics and enterprise services, among others. Hewlett Packard Enterprise's goal is to help customers achieve digital transformation, increase efficiency, enhance security, and create more business value through its technology solutions. It serves businesses of all sizes and types on a global scale, from small and medium-sized enterprises to large global organizations. Hewlett Packard Enterprise will provide AIS with comprehensive computing power intelligent analytics solutions.
- OpenAI is an artificial intelligence research company based in San Francisco, United States, consisting of OpenAI LP, a for-profit company, and OpenAI Inc, a non-profit parent company. Its core mission is to create secure Artificial General Intelligence (AGI) for the benefit of all. With large models as its core, OpenAI has created a new innovation paradigm in the field of AI and become a leader in leading general artificial intelligence. OpenAI will provide algorithmic models and intelligent interaction support for AIS.
- Ethereum is an open source public blockchain platform with smart contract capabilities that provides a decentralized Ethereum Virtual Machine through its dedicated cryptocurrency Ether (" ETH ") to process peer-to-peer contracts. Ethereum allows digital asset transfers to be made. But its functionality is much broader -- you can configure your own code and interact with other applications. At the same time, Ethereum's flexibility allows complex applications to be created. AIS will build its own AI computing power mining and ecological extension under the support of Ethereum blockchain L2, and link more encryption application scenarios to provide support for the market.
- Polkadot is the next generation blockchain protocol that connects multiple dedicated blockchains into a unified network. As part of a broad vision to "return control of Internet monopolies to individuals," Polkadot builds on the revolutionary promise of previous blockchain networks, while offering several fundamental advantages. Polkadot will provide full support for AIS 'cross-chain collaboration, customisability, and escalation iterations.



Chapter 3: AIS operation mode

3.1 Principles of system design

The foundation of value interaction is the establishment of mutual trust. The revolution of blockchain technology is that it enables a completely new way of trust, and the revolution of AI is that it changes the value interaction between humans and machines. Through the design innovation at the technical level, AIS enables the trust relationship between people in the process of value interaction to be transformed into trust between people and technology, and even the sharing mining link of idle computing power at the edge is automatically executed by the program. The realization of AI computing power sharing mining will enable AI manufacturers to realize model training activities at a lower cost.

1) Economic design principles

Reducing the cost is an important design idea of blockchain technology. Based on this, in AIS, participants can interact without knowing the basic information of each other, realizing "trust without trust" and changing the trust model centered on the third party in the traditional model. There are many innovations in this design model, two of which deserve attention:

First, interactive trust is determined by machines and algorithms. AIS constructs an interactive system that relies on machine and algorithm trust to solve the mutual trust problem in the process of anonymous interaction. All participants will establish their identities through cryptography principles in an environment that does not require the establishment of trust relationships, and rely on consensus mechanisms to realize mutual trust. Second, the interaction process can be automatically implemented by the program. AIS can automatically execute the contract reached by both parties through programmable smart contracts, eliminate human interference factors, and prevent any party's denial from the system.

Based on the decentralized characteristics of AIS, the existing economic system of computing power mining can be separated from the current system constraints or third-party institution endorsement, and the two sides can directly realize value interaction. This decentralized feature can effectively reduce the communication



cost and improve the interaction efficiency.

2) Design principles at the technical level

Generally speaking, the AIS blockchain technology, smart contract, idle computing power and AI training model can be regarded as a set of multi-party participation, reliable distributed data storage and computing power service system, unique in:

- Multi-party participation in recording behavior, that is, all parties can participate in recording;
- Multi-party participation and joint maintenance of data storage, that is, all parties participate in the storage and maintenance of data;
- Data and contracts are stored through a chain, and can only be read and written, and cannot be tampered with.

3) Apply the solution

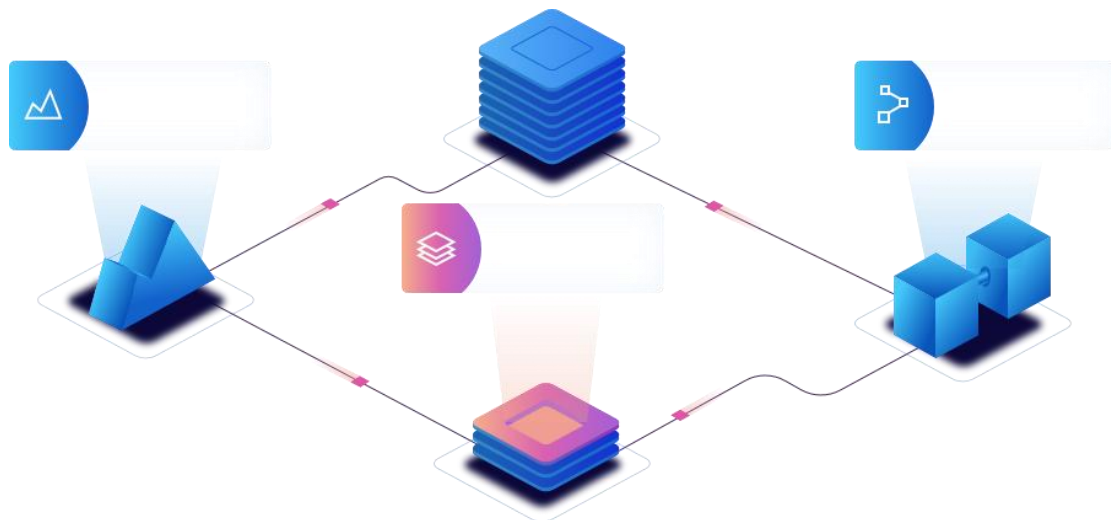
AIS will aim to provide sound solutions to the market in the following aspects:

- Establish a global distributed computing power network: AIS integrates global computing resources by establishing a global distributed computing power network, so that anyone can contribute their own computing resources to the network, and AI manufacturers can obtain computing power resources from the network.
- Improve the utilization rate of computing power resources: The distributed computing power network of AIS can effectively use idle computing resources and greatly improve the utilization rate of computing power resources. At the same time, through intelligent scheduling, computing resources can be dynamically allocated according to the needs of computing tasks, and the utilization efficiency of computing resources can be further improved.
- Decentralized service provision: AIS is based on blockchain technology to achieve decentralized service provision. This not only reduces the cost, but also solves the problem of data security and privacy protection. Moreover, since the computing resources in the network are distributed, even if a



certain part of the resources fails, it will not affect the operation of the entire network.

In the future, in application practice, the AIS system can realize information sharing, consensus and sharing among all participants, and developers and third-party projects can provide AI-based computing power basic technical architecture support. Through the sharing of idle computing power mining at the edge, AIS will realize a more effective distribution and utilization of computing power resources, promote global digital development, provide support for AI's mass data processing and intelligent application development, and provide a powerful infrastructure for Web3.0 to promote the intelligent process of human society and build a more intelligent, credible and sustainable new world.



3.2 Shared mining network

In order to better realize the shared mining of edge idle computing power, AIS has created the idle computing power mining protocol to form the whole process collaboration including mining, network, ledger and market.

1) Mining

Any user can participate in AIS edge idle power sharing mining as a client, share miner and node miner. Share miners provide mining power to the network.



Share miners participate in mining by providing their computing power and responding to Put requests. To become a sharing miner, users must pledge collateral proportional to their computing power. A power miner responds to a user's Put request by counting power at a specific time.

If it turns out to be invalid or lost, the computer miner will forfeit some of their collateral. Power miners are also eligible to mine new blocks, and if a new block is mined, the miner receives a reward for digging the new block and a transaction fee that is included in the block. Node miners provide data node verification services for the network. Node miners participate in AIS by providing the data required for a user's Get request. Unlike share miners, they do not need to pledge, submit data on their computing power, or provide proof of their computing power. Power miners can also participate in the network as node miners. Node miners can earn directly from customers or from the verification node market. Each miner will produce coins 24 hours a day.

2) Network

AIS divides all users who have a full AIS node running into an abstract entity: the network. The network acts as an intermediary for running management protocols. In simple terms, for each new block of the AIS blockchain, the full node manages the available storage, verifies the collateral, and audits the storage to prove that possible failures have been fixed.

3) ledgers

The AIS protocol is suitable for ledger-based shared mining of marginal idle computing power. For the sake of generality, let's call it "ledger". At any given time, all users have access to the ledger. The ledger is additive and consists of a sequential series of transactions. The AIS protocol can be implemented on any ledger running verification interactive proofs.

4) Market

Computing power sharing and node consensus comprise two AIS markets: mining computing power market and node consensus market. These two markets are two decentralized ecologies. Users/miners set the price of the orders they request or provide services for by submitting orders to their respective markets. The platform provides a way for users/miners to view matching bids and execute



orders. By running a management protocol, the network guarantees that the user/miner gets paid if the service request is successfully fulfilled.

5) Multiple systems

AIS offers a shared mining program of edge idle computing power composed of AIS tokens, with a wide range of computing power for AI vendors to choose from. Using cutting-edge technology, AIS provides multi-algorithm and multi-currency mining services.

- Cloud dashboard: View miners' mining income, monthly fees and productivity via AIS cloud Kanban;
- Mining service system: For each blockchain algorithm we offer, we provide some of the most efficient mining systems available;
- Lifetime hash rate: We offer 150 days and exclusive lifetime plans with a wide range of edge idle computing power shared mining capabilities.





3.3 Application Features/Market support

On the basis of innovative edge idle power sharing mining and AI real-time analysis of the best computing power mining pool, AIS enables ordinary users/miners to get more fun and benefits of mining, and builds a brand new edge idle power sharing mining ecosystem supported by public connected network services and digital currency with long-term benefits. In addition, AIS will also have the following application functions/market support:

1) Cloud computing power acceleration market support

AIS will create its own proprietary distributed acceleration service, and on the basis of the AIS edge idle computing power sharing mining protocol, to provide users with CDN acceleration service functions based on AIS, its biggest advantage is to improve density, reduce power consumption, unit TB cost is much lower than similar products. At the same time, AIS has an open cloud resource market.

In the case of an AI application developer, a developer needs computing resources, in the form of computing power from a cloud provider, to "accelerate" his application. In contrast, however, they do not benefit from an organized global marketplace, but instead have a rich choice of vendors and competitive prices. And every link is dominated by middlemen, causing prices to soar, which is the quandary that is now accelerating the market. So the whole infrastructure has to be changed.

AIS will create the first global market for computing acceleration services. In the decentralized infrastructure and market networks of the future, big data and high-performance computing applications, high-value data sets and computing resources will profit from sharing mining of edge idle computing power with high transparency, high resilience and high security.

2) Asset storage support

The storage user entrusts the private key and digital assets to the AIS wallet management, and authorizes the AIS wallet to safely manage and save the assets through "platform endorsement". This mode is convenient for accessing and accessing. The cryptocurrencies in the escrow wallet can be withdrawn anytime and anywhere, and the mutual transfer and transaction between escrow accounts do not require fees and miners' fees. There is no need to worry about forgetting the



private key and mnemonic words, and the risk of asset loss due to personal mistakes is greatly reduced. AIS wallet is regulated by the emerging Internet financial market at home and abroad, and belongs to a compliant and legal wallet platform with a sound platform ecology.

3) Mine/pool support

AIS will build modern mining sites in more than 100 countries in the Americas, Europe, Oceania, Asia and other countries, and deploy nearly 2 million distributed cloud computing power supply networks for miners, becoming a large-scale global computing power sharing network. Based on its strong technical operation and maintenance capabilities, power cost advantages and mining incentive model, AIS will become the main business platform supporting the mining union.

4) Support for computing power trading platform

AIS is based on the self-operated mining power pool and edge idle power sharing mining agreement, and will launch a computing power trading client to help stakeholders reduce costs and ensure the edge idle power sharing mining income. Miners can use mainstream cryptocurrencies or AIS to purchase computing power contracts in the computing power trading platform, and relevant service fees and commissions (including but not limited to trading, custody, franchise, etc.) are settled by AIS.

In the future, the AIS computing trading system will also support computing contract trading, financial derivatives trading and mining machine mall, and users can use AIS to buy and hold related products. The platform encourages users to use AIS to purchase independently developed AIS series mining machines and host them to the platform, which can obtain corresponding discounts and rich compound interest.



3.4 Supporting service system

1) Wallet service

In order to facilitate users to realize the management and circulation of mining currencies, AIS wallet adopts SPV mode, that is, access the wallet through the Web. The wallet adopts SSL protocol and supports Symantec CA certificate. At the same time, the wallet can support cold wallet and hot wallet.

- Cold wallet: suitable for large coins wallet, wallet of the public and private key pair offline generation, users can generate any favorite key pair, after the key is selected, you can provide a public key starting with G to accept large coins, their own trustee-safekeeping private key information starting with S.
- Hot wallet: Hot wallet is suitable for small and fast transaction scenarios. The hot wallet key is managed. When the user registers the wallet account, the private key generated by the user's payment password is encrypted locally on the user's computer through 3DES, and the encryption result is hosted in the wallet cloud through SSL protocol. That is, the hot wallet key information transmitted on the network and stored in the cloud is the user's encrypted data, and no one can get the original content of the private key except the wallet user. When the user needs to sign the transaction, the managed private key will be obtained from the wallet cloud server, and the user will enter the payment password to decrypt the content on the user's local computer. After the decryption is successful, the local program of the wallet will sign the transaction information with the private key and submit it to the AIS network for transaction.

The wallet contains two types of assets: native assets and registered assets, which are similar in nature to the RMB and various cards in real life wallets. While native assets can be used without any trust, assets registered with the gateway must trust the corresponding asset in order to exchange value. In addition, the wallet carries out a dual wallet design, realizes the decentralized storage compatible with multiple mainstream assets under one software, adopts the same elliptic curve encryption as many mainstream cryptocurrencies to calculate their respective public keys, and gets two different addresses after base58check encoding. The same private key is suitable for multiple mainstream assets, so that they can be managed safely and quickly.



2) ID identification

The blockchain allows humans to solve the problem of trust through technological means for the first time in history, which is the core value of the blockchain. The consensus trust system established by blockchain takes trust to its highest level, a passive mode of trust. Through this connection of consensus to form a complete community, we can understand it as a trust-free consensus agreement, a free agreement. ID identification is the identification mark of the mining community sharing idle computing power at the edge of AIS, and it is the only identity proof with passable capacity in the value trust network of AIS project. It is like a key used by users to unlock various functions and applications. For the most part, it takes having an ID to truly experience the powerful AIS free network.

In the future, the AIS project ID will become the virtual identity of the Internet and serve as a measure of personal worth. Depending on the value of the ID, it is possible to achieve a passcode sign-up free login on various websites, and a higher-value ID can enjoy more privileges and services.

It can be said that the AIS project ID will become the anonymous virtual ID of the future, widely used throughout the Internet. As an identity in the AIS value trust network, ID is a unique transaction address, which maintains the relationship link according to the special transaction between the addresses. An ever-expanding network of fission promoters forms, bringing AIS project users closer together. How many ID source points are successfully activated in AIS, how many value trust network veins will be born. Each value trust network vein can have unlimited layers of link relationships. That is, all fission relationships start at these ID source points, and each ID source point is at the very top of each value trust network vein.

3) The trading system

AIS will build an efficient and circulating mining currency trading system to realize the full process of sharing mining services with idle computing power at the edge. Instead of storing users' mining assets and personal data on servers, it serves only as an infrastructure to match buyers and sellers who want to buy and sell coins. AIS is more viable than centralized trading in terms of transaction process, fees and core advantages.

- The model is simple, mainly matching transactions, and hosting the user's mining assets, to eliminate the possibility of transaction surveillance;



- Smart contracts are used to realize a decentralized and trustless trading mechanism, which solves the internal operational risks, business moral risks, asset misappropriation and other risks that seriously affect the security of users' assets caused by human factors in centralized trading.
- The biggest difference between AIS and other systems is that all of these realize peer-to-peer transactions through smart contracts, placing asset custody, matching transactions and asset clearing on the blockchain.
- The user's custody assets can be transferred freely without anyone's approval, and there is no need to worry about hacking, coin loss and other problems, and there is sufficient security guarantee.

4) Lightning payment network

The Lightning network consists of a blockchain-based off-chain transmission network that works on a peer-to-peer (P2P) level, and its availability relies on the creation of a two-way payment channel through which users can conduct seamless cryptocurrency transactions. In order to create a payment channel, both parties need to set up a multi-signature wallet and store some funds in it, which can only be touched if both parties provide their private keys. The AIS package supports the Lightning network to make transactions faster and easier. Lightning Network provides a scalable micropayment channel for AIS. It greatly improves the transaction processing capacity of AIS off-chain.

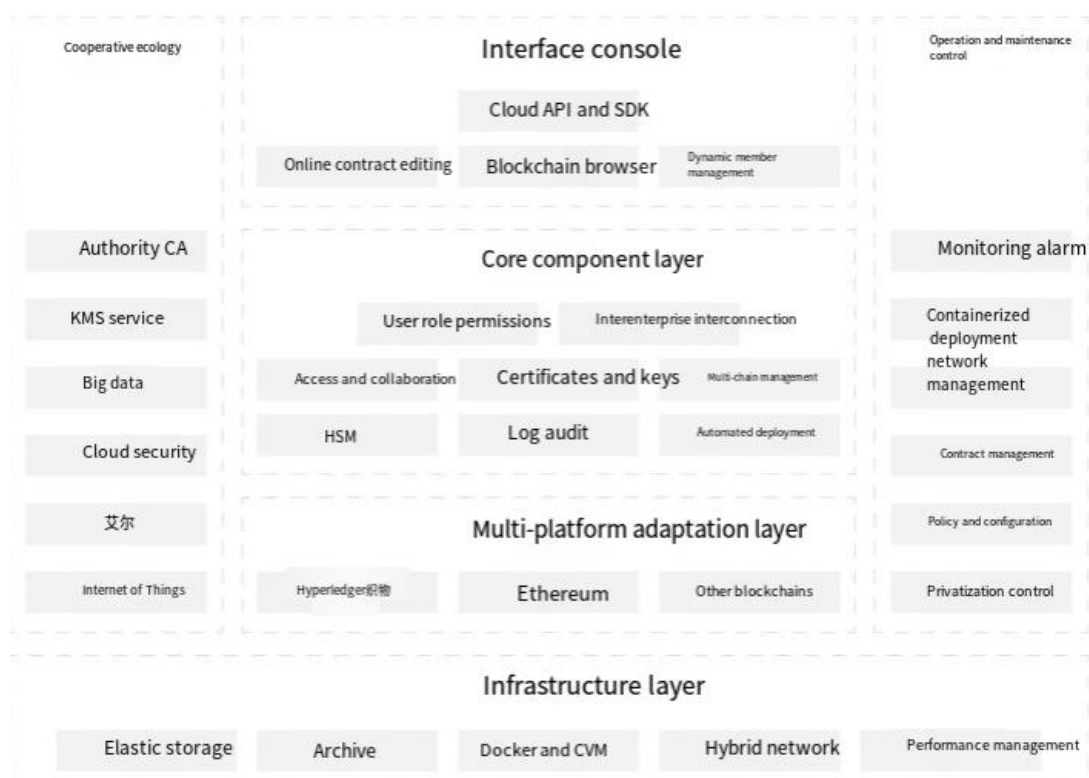
- If both sides of an AIS transaction have a payment channel in advance on the blockchain, multiple, fast, high-frequency, bidirectional micropayments can be made.
- If there is no direct peer-to-peer payment channel between the two parties, the Lightning network can reliably transfer funds between the two parties through a payment path consisting of multiple payment channels.



Chapter 4: Technical system

4.1 Bottom Structure

The AIS blockchain system architecture includes an infrastructure layer, a multi-platform adaptation layer, a core component layer and an interface control layer.



Based on the integration of blockchain and AI technology, the technical features of the underlying architecture of AIS include:

- Support for authoritative CA agencies to issue digital certificates;
- hardware-accelerated encryption/decryption;
- Support for state secret SM1, SM2, SM3, SM4 algorithms;
- Containerized resource management, support multi-chain;
- Devops operation and maintenance monitoring;



- Storage system data redundancy backup, safe and reliable;
- Standardized data migration;
- Incremental recovery technology to accelerate user data recovery;
- Redundant physical link design, multi-link highly reliable path, no single point of failure.

4.2 ZKML zero-knowledge machine learning

Zero-knowledge proof was proposed by S.Goldwasser, S.Micali, and C. Ruckoff in the early 1980s, and refers to the idea that the prover can convince the verifier that a statement is true without revealing any useful information. Zero-knowledge proof system is an effective means to realize the privacy protection security protocol. First, we give the definition of interactive proof system:

Interactive proof system: a pair of interactive machines $\langle P, V \rangle$ (where P and V are prover and verifier respectively) is an interactive proof system of language L when it satisfies:

- Machine V is polynomial-time;
- Completeness: $\forall x \in L$, then there exists an honest prover P such that V , after interacting with P , outputs " $x \in L$ ";

Soundness: $\forall x \notin L$, then for any prover P , the probability of V interacting with P output " $x \in L$ " is small.

A zero-knowledge proof system can be considered as an interactive proof system that meets the zero-knowledge requirement, and it must satisfy the following four properties:

- The verifier cannot obtain any information from the protocol;
- the prover cannot deceive the verifier;



- the verifier cannot deceive the prover;
- the verifier cannot simultaneously masquerade as a prover in other zero-knowledge proof systems.

Zero-Knowledge Machine Learning (ZKML) is an emerging zero-knowledge proof-based machine learning technique that aims to implement machine learning tasks while protecting data privacy. Its potential lies in addressing the privacy breaches that are prevalent in current machine learning and providing more control and autonomy to the data owner. By using encryption and privacy-protecting techniques, ZKML allows data owners to use their data for the training of machine learning models without sharing the raw data with third parties. This ensures data privacy and reduces the risk of data breaches. At the same time, ZKML allows the data owner to selectively share the results of the model, thus balancing the need for data privacy and machine learning tasks. In conclusion, ZKML provides a viable privacy-protecting solution for machine learning.

ZKML is similar to a secret method in computation. It involves two main parts:

- Using machine learning (ML) to perform tasks;
- prove that the task was completed correctly without revealing all the details.

In simple terms, here's how it works:

- Run the task: The user uses the ML model to process some data and get the result, just like a chef bakes a cake according to a recipe but doesn't tell anyone the ingredients.
- Proof task: After the task is completed, they can present a proof. For example, "I used a particular input in this particular model and got this result." They are actually proving that they followed the steps on the recipe correctly.
- Keeping secrets: The beauty of ZKML is that when they certify that the task is done correctly, they can keep some details, such as keeping the data entered, how the model works or the results secret. In short, ZKML allows the prover to say "trust me, I got it right" while still keeping their methods and data private.

Thus, AIS utility ZKML zero-knowledge machine learning and brings the



following advantages:

- Data privacy protection: With ZKML zero-knowledge machine learning, AIS can do machine learning without disclosing data, thus protecting data privacy.
- Data sharing: With ZKML zero-knowledge machine learning, AIS data owners can share data to third parties for machine learning without worrying about the risk of data breach.
- Efficiency: With ZKML zero-knowledge machine learning, AIS can significantly reduce the time it takes to transfer and process data, thereby improving the efficiency of machine learning.
- Security: AIS uses encryption technology to protect data privacy, thus guaranteeing the security of machine learning.
- Trustworthiness: With ZKML zero-knowledge machine learning, AIS can increase the trustworthiness of machine learning as raw data is not accessible to third parties, thereby avoiding the risk of data tampering or falsification.

4.3 DAG+DPoS mechanism

In order to meet the requirements of actual business scenarios in terms of transaction speed confirmation, handling charges and scalable lines, AIS adopts the mechanism of DAG+DPoS. AIS makes use of the advantages of DAG to build a blockchain with shared computing power of idle devices at the edge.

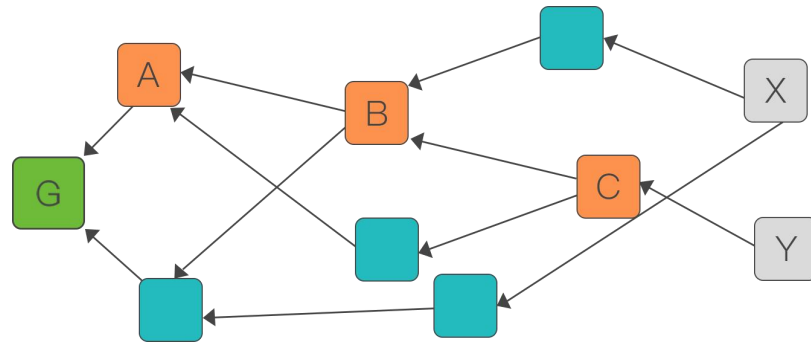
Using DAG structure, AIS moves from single thread to multi-thread concurrent blockchain, which is suitable for the scenario of small amount and high frequency of Internet of Things and AI devices, and has scalability. Based on the DAG of IOTA, AIS adds the mechanism of DPoS, which is to verify and record transactions through the way of voter voting, so that there is a large node, through which the smart contract function of EVM is realized. In order to prevent attacks, AIS introduces the design of handling fee, that is, DPoS and DAG dual node verification, dual node handling fee, on the basis of realizing security, increases the function of



smart contract.

1) DAG structure

DAG (Directional Acyclic Graph), generally translated as directed acyclic graph, or directional acyclic graph. Dag is a common data structure in the computer field. Because of its unique topological structure, it is often used in dynamic planning, finding the shortest path in navigation, data compression and other scenarios.



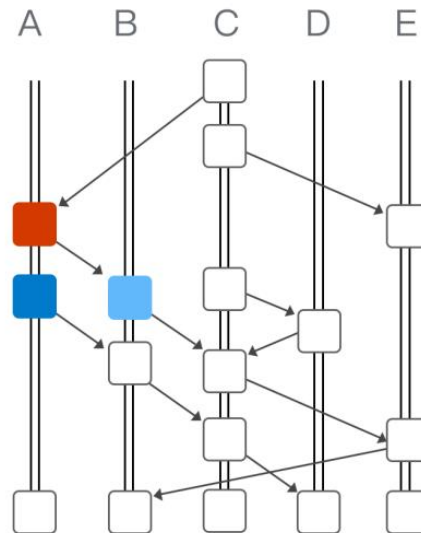
Compared with the chain structure, DAG has the advantages of security, efficiency and so on:

- Security: Compared with the chain structure, malicious modification in the DAG is much more difficult, because the DAG has a lot of out and in degrees, if you want to modify a node, then the corresponding in and out must be modified. The DAG wallet does not need to wait for how many transactions it has before it initiates a transaction. It only needs to undergo local verification, network broadcast, and other local verification, which is equivalent to decentralized transaction confirmation. Each node is doing the work similar to a jigsaw puzzle, piecing together its own transactions confirmed by others.
- High efficiency: The local processing and parallel settlement implemented by DAG can greatly improve the transaction speed. Whether it is Bitcoin or Ethereum, its transfer speed has been criticized, which has become the biggest obstacle to the implementation of blockchain applications. Unlike blockchain technology, the biggest feature of DAG technology is that there is no block, and the system does not need to issue a block regularly, which obviously speeds up the transaction speed and also realizes the capacity of a large number of concurrent transactions at the same time. In addition, the more people involved in transactions in DAG, the faster the transaction confirmation speed, which is a unique advantage for the subsequent rapid



development of DAG is very favorable.

In addition, AIS also applies the HashNet data structure based on the enhanced DAG. HashNet is a directed acyclic graph (DAG) that is composed of an infinite number of vertices and directed edges connecting vertices. As shown in the figure.



The graph records what data all nodes of the network send to other nodes at what time and in what order, and each node has a copy of such a HashNet in memory. In the image above, there are five computer nodes A, B, C, D, and E, each of which has a column that holds a vertex(also called an event). The most recent event is placed at the top of the graph, and the HashNet grows upward over time.

2) DPoS consensus

Entrusted Proof of Stake (DPoS) is the fastest, most efficient, most decentralized, and most flexible consensus model of all consensus protocols available today. DPoS uses the power of stakeholders to approve votes to resolve consensus issues in a fair and democratic manner. All network parameters, from fee estimates to block intervals and transaction sizes, can be adjusted through selected representatives. The deterministic selection of block producers allows transactions to be confirmed in an average of just 1 second.

- Verifier quorum: During the creation phase, a number of trusted nodes will



run as the initial verifier set. After blocking starts, anyone can compete as a candidate to join with the election as verifier. The pledge status determines that the first 21 nodes with the most pledges become the next verifier set, and such elections will be repeated every 24 hours.

- AIS, the token used to pledge AIS: In order to maintain the same compatibility as Ethereum and to be upgradeable to a consensus protocol to be developed in the future, AIS has chosen to rely on an innovative model for pledge management. Has a dedicated pledge module. It will accept pledges from token holders and calculate the set of nodes with the highest pledge. At midnight each UTC, AIS will send out a verifiable 'Validator AIS Update' cross-chain message notifying AIS to update its set of validators. As more blocks are generated, the existing AIS Validator periodically checks for a "Validator AIS Update" message relayed to the AIS. If they do, they will update the validator set after the epoch period (i.e., the predefined blocking time). For example, if the AIS produces a block every 5 seconds and the epoch period is 240 blocks, the current validator set will check and update the validator set for the next epoch in 1200 seconds (20 minutes).
- Security and determinism: Given that more than $\frac{1}{2} \times N+1$ verifiers are honest, POS-based networks can generally operate safely and correctly. However, there are still cases where a certain number of Byzantine verifiers can still manage to attack the network, for example through a "[clone attack]". To be safe, we encourage DPoS to wait until it receives more than a half $\times N+1$ block sealed by different verifiers. This way, DPoS can be trusted at the security level and can tolerate fewer than $\frac{1}{3} \times N$ Byzantine verifiers. For 21 verifiers, if the block time is 5 seconds, then $<s:1> \times N+1$ different verifiers seal requires $(<s:1> \times 21+1) \times 5 = 75$ second time period. Any critical applications of DPoS may have to wait for $<s:1> \times N+1$ to secure a relatively safe final certainty. However, in addition to such an arrangement, AIS introduces Slashing logic to punish the Byzantine verifier for double signing or inavailability, which will be covered later in the "Pledge and Governance" section. This Slashing logic will expose the malicious verifier for a very short period of time and make the "clone attack" very difficult to perform or extremely unhelpful. With this enhancement, $\frac{1}{2} \times N+1$ or even fewer blocks are sufficient as confirmations for most transactions.
- Rewards: All AIS validators in the current verifier set will be rewarded with fees in the transaction AIS. Since AIS is not an inflation token, it does not



generate mining rewards like the Bitcoin and Ethereum networks do, while gas fees are the main reward for validators. Since AIS is also a utility token with other use cases, both the principal and the verifier will still enjoy the other benefits of holding AIS tokens. The verifier's reward is a fee collected from transactions in each block.

The verifier can decide how much to give back to the principal who pledged AIS to them in order to attract more pledges. Each verifier will turn out blocks with the same probability (if they stick to 100% activity), so that in the long run, all stable verifiers are likely to receive similarly-sized rewards. At the same time, each verifier may have a different bet, so this presents a counterintuitive situation where more users trust and delegate to one verifier, and they are likely to receive less reward. Thus, as long as the validator remains trustworthy, rational principals will tend to delegate to people with less equity (insecure validators may present curable risks). In the end, there will be less variation in the bets of all verifiers. A portion of the gas fee will also be awarded to Repeaters for cross-chain communication.

4.4 IBC cross-chain communication

IBC (Inter-Blockchain Communication) protocol is an open standard for cross-chain communication. Its role is to provide a way for secure and reliable communication and interoperation between different blockchain networks. Through the IBC protocol, individual blockchains can interact across chains, share data and value, and enable larger-scale, more secure applications.

The emergence of the IBC protocol solves an important problem in the blockchain field. Currently, interoperability between different blockchains is often difficult, with individual blockchain networks operating independently and few ways to effectively interact across chains. This results in fragmentation of the blockchain ecosystem, where data and value cannot be smoothly shared among various blockchains, hindering the widespread application and development of blockchain technology.

The IBC protocol solves this problem by introducing a common set of standards for cross-chain communication. First, the IBC protocol provides a unified



communication mechanism for different blockchain networks, enabling individual blockchains to send and receive data, events, and transactions to each other. Secondly, the IBC protocol has a high degree of security and robustness, and the communication between various blockchains is reliable and tamper-proof. The most important thing is that the IBC protocol also realizes the transfer of cross-chain assets and the interoperability of cross-chain applications, providing more possibilities for the application scenarios of blockchain technology.

In summary, IBC divides cross-chain into Application layer/Application layer and communication layer/Channel. Its simplicity and flexibility can be called the TCP/IP protocol of blockchain.

- The application layer is a cross-chain interoperable interface for end users: it includes multiple independent application protocols such as token transfer, inter-chain account and inter-chain query. These application protocols are composable. With the increase of application protocols, the cross-chain capability can be improved exponentially.
- The communication layer defines the data sent across the chain to receive, including transmission, verification and sequencing, and the content of the transmitted data is invisible. Among them, the light client in the state machine of the source chain is the key to the communication layer and has become the essence of IBC.

For example, chain A has A light client representing chain B in its own state machine, and chain B also has a light client of chain A. The light client tracks the consensus data of the other blockchain by verifying the block header and Merkle proof, thus verifying the legitimacy of cross-chain interaction. There is a Relayer between the two sides of the cross-chain, which is responsible for monitoring the events generated by the blockchains on both sides, and once the IBC Event is received, it is converted into the actual IBC message, which is passed on to the opposite chain. To put it simply, the IBC protocol first establishes a secure channel between the two blockchains, and then transmits Data Packets/Data Packets. The light client verifies the consensus information of the other blockchain to ensure the consistency and security of transfer. Therefore, as long as the communication layer is established, the cross-chain of the entire IBC is secure.

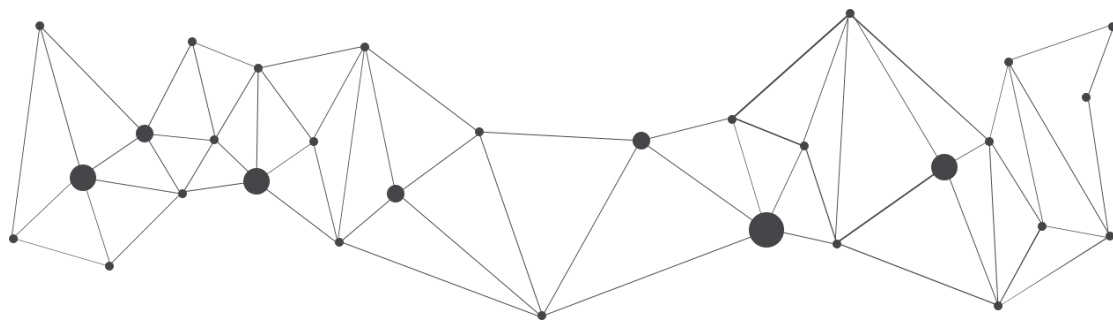
The key of the cross-chain technology solution lies in its interoperability and security. The layered architecture of IBC cross-chain communication enables AIS to



support feature-rich, trust-free cross-chain interoperability. Based on IBC cross-chain communication, AIS solves the problem of interoperability between blockchain networks. Through IBC cross-chain communication, different blockchain networks can carry out secure and reliable cross-chain communication, realizing the sharing of data and value. It also means that users can more easily transfer assets and transact between different blockchain networks without having to rely on a centralized trading platform.

Based on IBC cross-chain communication, AIS solves the problem of cross-chain asset transfer. Through IBC cross-chain communication, users can transfer assets on one blockchain to another blockchain and complete transactions in different blockchain networks. This makes the circulation of assets between blockchain networks more convenient and secure, and provides more possibilities for the application scenarios of blockchain technology.

Based on IBC cross-chain communication, AIS solves the interoperability problem of cross-chain applications. Through IBC cross-chain communication, smart contracts on different blockchain networks can call and interact with each other to achieve more complex cross-chain applications. This means that developers can use the characteristics and resources of different blockchain networks to build more powerful distributed applications and further promote the innovation and development of blockchain technology.



4.5 Oracal Prophecy Machine

An Oracal (Oracle) is essentially a technology that brings real-world data into



the blockchain, a tool for obtaining and verifying external data on the blockchain. Oracle is the middleware that connects the Smart Contract with the outside world of the blockchain, and it is an important infrastructure of the blockchain. Its role is to provide data information for the smart contract on the blockchain.

AIS introduces Oracle Oracle technology to act as a bridge between blockchain and the real world, introducing real-time data from users' idle devices (mobile phones, computers, etc.) into the distributed system, so that smart contracts can access and respond to events in the real world. Oracle works in three basic steps:

- Power data acquisition: Oracle acquires data from real-world data sources, such as apis, sensors, etc. This data can be provided through mobile phones, computers, smart glasses, smart homes, smart refrigerators, smart TVs, smart sweepers, and more. Oracle ensures the accuracy and reliability of the data.
- Power data verification: Oracle verifies the collected data to ensure the authenticity and integrity of the data. This can be done by comparing multiple data sources or using data signatures.
- Power data transfer: Oracle sends verified data to the smart contract so that the contract can use the data to make logical decisions and perform actions. Oracle ensures the secure transmission of data, preventing it from being tampered with or falsified.

AIS, based on Oracal's Oracle technology, can build a decentralized machine learning ecosystem similar to Polkadot mainnet + subnet. How it works: The subnet feeds activity information to the AIS API (Oracal), which then feeds useful information to the main network, which then distributes Rewards.

- Miners: can be understood as providers of various AI computing power and models around the world, who host AI models and feed them to the AIS network; Different types of models make up different subnets.
- Validators: evaluators within the AIS network. Evaluate the quality and effectiveness of AI computing power, rank AI models based on performance for specific tasks, and help consumers find the best solutions.
- User: the end user of the AI model provided by AIS. They can be individuals



or developers seeking AI models for their applications.

- Nominator: Entrusting tokens to a specific validator to show support, or to a different validator.
- Open AI supply and demand chains: someone offers different models, someone evaluates different models, and someone uses the results provided by the best model.

AIS will encapsulate various smart contracts and off-chain services in sub-systems through Oracle to form a protocol layer, providing standardized support for DePIN's computing power acquisition, application and redevelopment, and decentralized application (dAPP) development.

4.6 DePIN API protocol

AIS developed the DePIN API protocol with DID as the core, aiming to realize the access of DePIN hardware such as mobile phones, laptops, computers and smart devices through the collaboration of AI data +DePIN hardware.

1) DID digital identity

The core of DePIN API protocol lies in identity identification. AIS realizes identity identification and confirmation of hardware and applications accessing DePIN API protocol through DID.

Compared with the traditional IDentity system based on PKI, the digital identity system based on blockchain DID has the characteristics of ensuring the authenticity and trustworthiness of data, protecting user privacy and security, and strong portability. Its advantages are as follows:

- Decentralized: Based on blockchain, identity data can be avoided from being controlled by a single centralized authority.

Identity autonomy and control: Based on DPKI (Distributed Public Key Infrastructure), each user's identity is not controlled by a trusted third party,



but by its owner, and individuals can autonomously manage their own identity.

- Trusted data exchange: identity-related data is anchored to the blockchain, and the authentication process does not depend on the application providing the identity.

AIS creates and manages digital identities based on DID, providing a higher level of security, privacy and convenience for the public chain experience. The core principle is to use the unique and stable properties of fingerprints to generate mathematical representations associated with them, thereby shaping digital identities. Dids can be stored in a variety of ways, embedded in devices, or distributed through blockchain technology. This innovative technology can be widely used in payment, login, authorization, signature and other scenarios.

2) Introduce the D-HAAS model

The DePIN API protocol brings together more hardware devices by introducing D-HAAS mode. In the future, with the power of D-HAAS and DID mode, DePIN API protocol can not only be flexibly applied in the fields of C-side data authorization, B-side industry supervision and G-side government affairs, but also avoid the embarrassing scene of traditional blockchain accounts losing private keys and then assets going to zero. In addition, it can also build a one-click login service and a unique identity system for on-chain applications.

4.7 Quantum resistant cryptography

With the rapid development of quantum computing, traditional cryptographic methods may be at risk of being cracked. To prevent this potential threat, AIS has developed quantum-resistant encryption algorithms.

- Development focus: Quantum key Distribution (QKD) and lattice-based encryption algorithms.
- Lattice hard problems: Build on top of mathematically known puzzles to



provide security for the quantum age.

- Key update mechanism: The key is regularly updated in response to potential quantum attacks.
- Broad compatibility: Ensures compatibility with existing encryption standards and smooth transition to quantum security.

1) Quantum Key Distribution (QKD)

QKD, based on quantum mechanics, is capable of providing a level of security that is theoretically impermeable to advances in computing power and technology, including developments in quantum computing. Its core principles, such as superposition, entanglement and the no-clone theorem, have paved the way for the development of new security protocols such as BB84 and E91.

2) Key encapsulation mechanism

The Key Encapsulation mechanism (KEM) is a mechanism that covers three algorithms, including an algorithm for generating key pairs, an encapsulation algorithm that uses the public key to compute the session key and ciphertext, and a decapsulation algorithm that uses the ciphertext and private key to generate the session key. AIS works on the lattice principle and takes advantage of the computational difficulty of the "Learning with Errors" (LWE) problem to enhance the security of key exchange.

The process starts with generating a pair of keys, where the private key is kept secret and the public key is shared publicly. The key generation process involves manipulation of lattices and is closely related to the LWE problem. When the sender needs to establish a secure connection, they will create or encapsulate a key using the public key, which is subsequently decapsulated using the private key to recover the session key, ensuring that both parties can securely encrypt and decrypt the information. AIS is recognized for its high efficiency, which not only minimizes resource and bandwidth footprint, but also makes it more suitable for a wide range of applications through performance-optimized key sizes.

2) lattice-based digital signature

AIS introduces the lattice-based digital signature method, which focuses on



ensuring the authenticity, integrity verification and non-repudiation of digital communication. This approach utilizes LWE and its variants and involves the development of a pair of keys: the private key is used to sign the document, while the public key is used to verify the signature. Due to the inherently complex and untraceable nature of the lattice problem, this increases the security of the signing process and increases the flexibility of signature verification. In addition, AIS is implemented with evenly distributed samples, avoiding complex and inefficient sampling from Gaussian distributions. Its modular structure also facilitates the application of polynomial multiplication, which can be performed in a consistent manner regardless of the security level, thus ensuring seamless switching between different security levels.

3) Hash-based encryption algorithms

AIS 'hash-based encryption algorithm combines technological innovation and other cryptographic techniques to improve security and efficiency. The algorithm generates a pair of keys, in which the private key acts as a random seed to derive the other components of the signature scheme through a secure hash function, ensuring the difficulty of reverse engineering. When signing information, the private key is used to generate a unique signature of the information, including creating a one-time signature and then linking back to the public key through a multi-layer tree structure and an intermediate key, indicating that the signer owns the key while protecting the privacy of the key. To verify the signature, the receiver uses the public key to confirm that the message was signed by the corresponding private key.





Chapter 5: the design of AIS token economic model

5.1 Token economics

To achieve shared mining of edge idle computing power, a core medium is required, therefore, AIS issued AIS tokens.

- By providing idle computing power, such as mobile phones, computers and other idle devices, users/miners will provide the computing power during idle hours, and get a fair idle computing power supply income, which is obtained in the form of AIS tokens.
- AI manufacturers purchase AIS tokens, and then exchange for the idle device's computing power service through the reward of tokens. The service providers receive the corresponding tokens according to the proportion of computing power supply.

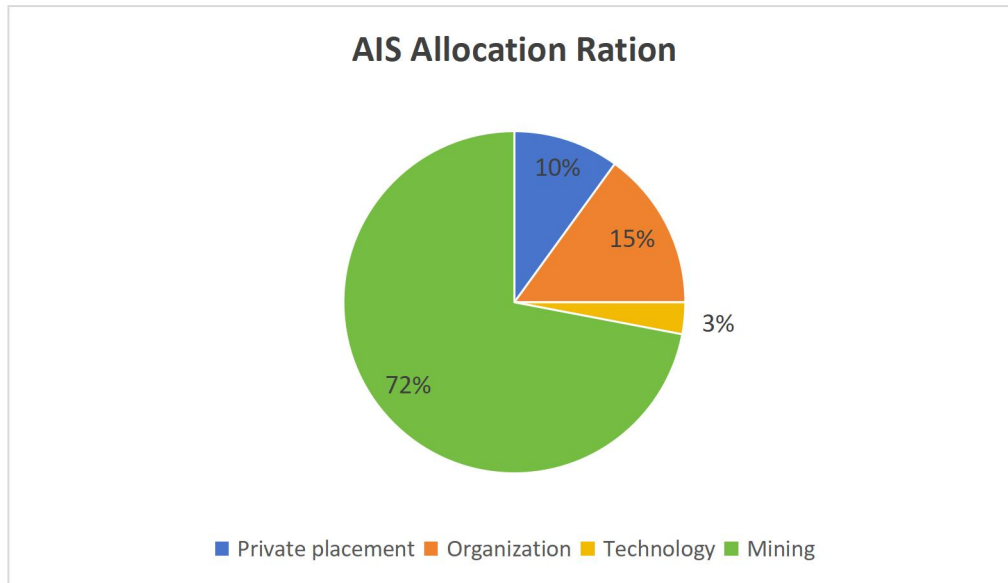
The AIS token issuance scheme is as follows:

Token name: AIS

Total issuance: 100 billion

Mining mechanism: POS pledge +POW

Token distribution: 100 billion, private 10%, technical 3%, institutional 15%, mining 72%



AIS has better liquidity and value growth potential. AIS is the universal certificate of the AIS network, which has rich application scenarios and ways of realization, and also has huge investment value. AIS supports the early development of AIS network, and coin holders can enjoy the dividend and future value-added income of the computing market.

5.2 Token governance model

Proof of stake brings decentralization and community participation. The core logic can be summarised as follows. You might see similar ideas from other networks, notably Cosmos and EOS.

- Token holders, including validators, can put their token "bonded" into the model. Token holders can entrust their token to any validator or validator candidate in the expectation that it can become the real validator, and then they can choose a different validator or candidate to reentrust their token.
- All candidate validators will be ranked according to the number of tokens tied to them, with the top one becoming the true validator.



- Verifiers can share (part of) their blocking rewards with their principals.
- Verifiers may be subjected to "Slashing," which is a punishment for their bad behavior, such as double signing and/or instability.
- The verifier and principal have an "untying period" so that the system ensures that the token remains bound when the bad behavior is discovered, during which time the person in charge will be forfeited.

1) Reward

Verifier updates and reward distributions both happen around 00:00 UTC each day. This is to save on the cost of frequent updates and block reward distributions. This cost can be high, as blocking rewards are collected on-chain and distributed to AIS verifiers and principals. Deliberate delays are introduced here to ensure fair distribution:

- Blocking rewards are not sent immediately to the verifier, but are distributed and accrued in the contract;
- AIS, upon receipt of the verifier set update, will trigger several cross-chain transfers to transfer the reward to the corresponding verifier's escrow address. The escrow address is owned by the system, so the reward cannot be used until the commitment is allocated to the principal.
- To make synchronization easier and for slashing allocation time, the n-day reward will only be allocated on N+2 days. After the trustor receives the reward, the rest will be transferred to the verifier's own reward address.

2) Kill

Chopping is part of on-chain governance to ensure that there is punishment for malicious or negative behavior. Anyone can submit an AIS slash. Transaction submissions require slash evidence and cost fees, but also come with greater rewards when successful. So far, there are two cases that can be cut.

3) Double mark

When a verifier signs multiple blocks with the same height and parent block, this is a very serious mistake, and likely a deliberate offense. The reference protocol



implementation should already have the logic to prevent this from happening, so only malicious code can trigger this. When double signing occurs, the Validator should be removed from the Validator Set immediately. Anyone can make a slash request with evidence of AIS signature, which should contain 2 block headers and parent blocks of the same height, sealed by the offending validator. Upon receipt of the evidence, if verifying that it is valid:

- Instance AIS verifier set update Cross-chain update removes the verifier from the verifier set;
- A predefined number of AIS will be deducted from the verifier's self-delegation; Neither the verifier nor its principal will receive an award.
- A portion of the slashed AIS is assigned to the submitter's address, which is a reward greater than the cost of submitting slash request transactions
- The forfeited AIS will be assigned to other verifiers' escrow addresses and distributed to all principals in the same way as the blocking reward.

4) Unavailable

The activity of AIS relies on everyone in the proof-of-stake verifier set being able to block in a timely manner when it's their turn. The verifier may miss their turn for any reason, especially problems in their hardware, software, configuration, or network. Such operational instability can hurt performance and introduce more uncertainty into the system.

There can be an internal smart contract responsible for recording the blocking metrics missed by each verifier. Once the metric is above a predefined threshold, the verifier's blocking reward will not be forwarded for distribution, but shared with other, better verifiers. In this way, poorly performing verifiers should gradually be voted out of the verifier pool, as their principals will receive fewer or no rewards.

If the indicator is still higher than another higher level threshold, the validator is dropped from the rotation, which is propagated back to the AIS, and then a predefined number of AIS validators will be cut from the self-delegated AIS. Neither the verifier nor the principal will receive their reward.

5) Governance parameters



There are many system parameters that control the behavior of AIS, such as Slash amount, cross-chain transfer fees. All these parameters will be jointly determined by the AIS Validator Set according to their money passing proposal voting process.

5.3 Holding equity

The economic model of AIS is based on AIS tokens, and encourages multiple participants such as computing power providers, computing power demanders, developers and hardware manufacturers to collaborate and compete in the network to form an open, adaptive, intelligent and sustainable global computing power sharing and collaborative AI computing power mining network. AIS has the following functions:

- Transaction fees: Pay AIS tokens as a processing fee for trading or executing smart contracts.
- Resource purchases: AIS tokens can be used to purchase computing resources, such as storage space and computing time.
- Incentive payments: Nodes that contribute resources to the network or participate in the consensus process are rewarded with AIS tokens.
- Media exchange: Used to pay for computing services and data services, as well as to purchase or redeem AI applications and rewards.
- Incentives: used to reward the contributions of participants such as computing providers, AI developers, and data providers, and to punish dishonest or malicious behavior.
- Governance interests: used to participate in the community building and governance of the network, such as voting, proposals, delegation, etc.

In the future, AIS tokens will be used in the following situations in the development of computing applications and services:



- AI manufacturers can obtain computing power through Web3 computing power sharing, such as mobile phones, computers, smart devices, etc., and pay the corresponding AIS token fees.
- Obtain data through the user's DEPIN devices such as watches, wristbands, rings, smart glasses, smart home, smart refrigerator, smart TV, smart sweeper, etc., and pay in AIS tokens.
- Developer testing: Developers will spend some tokens in testing for the training of the model. Depending on how many tokens are paid, the training time required to train the model can be reduced by anywhere from 50% to 90%.
- AI Training service purchase: When a third party uses an AI training service to obtain a more elaborate model, it may be required to pay a training fee to retrain the model. AIS tokens are the payment currency.





5.4 Examples of the circulation of AIS tokens

1) User scenario circulation

- **Trading:** Quantitative trading has been assisted by machines since a very early time. Analysts design some indicators through various quantitative models, observe the data distribution, and use the machine as an arithmetic machine. Until the rise of machine learning in recent years, data can be analyzed, fitted and predicted rapidly and in large quantities, so as to more accurately predict the future market trend of financial products. However, the calculation of these models requires a lot of artificial intelligence computing power. With the traditional approach, each trading desk would need to set up its own set of data centers. Sharing computing power saves on expensive maintenance. Let financial-trading firms focus more on forecasting itself. AIS tokens can provide a payment medium for quantitative transactions.
- **AI Learner Programs:** Universities are starting to gradually offer AI courses, and this trend will become more popular in the next few years, with students typically choosing to run small tasks on the computer and time-consuming tasks in the university computer room. However, these fragmented tasks can be completely solved by the blockchain computing cloud. Low-cost AI computing services are ideal for students to complete various arithmetic exercises and quickly modify their models. AIS tokens can provide a payment medium for the artificial Intelligence learner program.
- **Physical circulation:** AIS tokens will also be circulated in a wider range of applications, such as smart cars, AI robots, intelligent manufacturing, smart energy, unlimited home entertainment, connected drones, social networks, AI-assisted, etc. Within the application ecosystem, AIS tokens will be circulated as the only value token.

2) Cross-chain ecological circulation

After cross-chain interworking between AIS and mainstream public chains such as Ethereum, BSC, EOS, etc., AIS tokens can be applied with higher value in mainstream platforms and multi-chain scenarios, and exchange and circulation between AIS tokens and mainstream fiat currencies can be realized. At the same time, AIS tokens as a link can fully open up the ecological interconnection with the



mainstream exchanges, and support the circulation and payment of AIS tokens in all aspects of the exchange ecology, such as receipt and payment, transfer, fiat currency trading, coin charging, coin withdrawal, coin voting, STO gateway, coin allocation, lending, public welfare, games, mall and other circulation.

In the future, in the landing model of AIS, AIS tokens can be used for:

- Resource Provider incentives: AIS tokens are rewarded based on the amount and quality of computing resources provided. For example, provide computing power such as laptops and graphics cards to AI manufacturers, and get AIS token fees paid by AI manufacturers; Provide it to the demander of computing power through DePIN equipment and get AIS token reward.
- Encourage the majority of users to participate in the AIS network to conduct asset transactions, obtain transaction fees and notarization fees, jointly maintain the AIS network security, and reward transaction nodes and notarization nodes to support mining;
- As a measure of equity, support all kinds of consensus in the early stage to realize the consensus system of AIS tokens;
- Support the AIS ecosystem to realize advanced smart contracts, avoid the destruction of network performance by "logic bomb" contract execution, and provide anti-fraud mechanism;
- Play the basic currency function of AIS ecosystem, and provide the corresponding Token characteristics and asset liquidity basis of DApp sub-currencies;
- As a custodial object to achieve AIS DApp product management and improve the visibility and exposure of DApp products.

AIS can adapt to diversified business needs and meet the data sharing across the business chain of enterprises, which means that AIS has enough general and standard data recording methods, can represent a variety of structured and unstructured information, and can meet the cross-chain requirements required with the expansion of business scope. This provides a value basis for the versatility of AIS tokens. AIS tokens can be more easily circulated in various industries and scenarios around the world.



5.5 Market Incentives

In the early stage, we will give AIS tokens through air drops/rewards, etc., to attract more fans' attention to AIS. In the ecosystem of AIS, users who hold AIS tokens can enjoy a series of rights and interests such as token appreciation, fee deduction, asset appreciation, income rebate, supervision, voting, coin appreciation, and various rewards. AIS rewards AIS tokens to users who contribute to the liquidity of the system through various incentives. The platform gives back to the community users through the incentive mechanism, and enjoys various rights and interests of the community by holding AIS tokens.

At the beginning of the AIS token launch on the exchange, through kol, media news, community leaders and other channels to promote registration and delivery activities, partner recruitment activities, transaction fee reduction activities, and actively build the operation and construction of the community. Through the community management of leaders, a full range of community promotion activities, lottery activities, Q&As and gift activities, so that the global AIS token evangelists and new people can see the determination of AIS to forge ahead.





Chapter 6: Project landing and future development

6.1 Market Cooperation

In order to drive the development of AIS market, we will achieve all-round promotion through channels such as community, media and exchanges.

1) Community

As a community-driven project, AIS has its own values of decentralization. At present, its partners are all over the world, especially in the community field, which is extremely influential. We will publicize it through community channels. With Singapore as the center, it is being carried out simultaneously in 120 communities in many countries, including the United States, Australia, Japan, France and the Republic of Seychelles.

Community co-building partners include: Radar Community, IPFS Community, Moore Community, Sunzhi Capital, Coin Owner Community, YY Community, JR Community, Caitou Community, Caribbean Community, Treadsnow Community, Mango Community, 128 Alliance, Utopia Community, 631 Community, Bright Spot Community, Rainbow Community, Beyond Community, Peace Community, Brave Community, Glory Community, etc.

2) The Media

With the launch of the AIS main network and the AIS token exchange, we will also promote in the global media. For example, Deutsche Welt Finance, Lianhe Zaobao, Daily News, BBC, Wall Street Journal, Tiger Finance, Google News, Meta, CNN, Bloomberg, Voice of America, Le Monde, etc.

3) Star Partners

In order to protect the security of the AIS network, we have recruited a group of all-star partners from the fields of mathematics, computer, AI, computational power mining, DePIN, Web3, etc., to act as validators of the AIS network.



4) Application cooperation

AIS will enter into strategic partnerships with top apps such as: PancakeSwap, PONTEM, APTOS, BINANCE, CoinMarketCap, crypto.com, coinbase, CoinGecko, nomics.

5) Launch the exchange

AIS will work with top global exchanges to bring AIS tokens to the market, bringing together more like-minded and entrepreneurs while providing liquidity to the market and appreciation of investor holdings. With the access of AIS tokens to top exchanges such as Binance, coinbase, Huobi and Ouyi, the value of AIS tokens will continue to climb.

In the future, AIS is determined to develop more high-quality applications with the support of the community, media, exchanges and investment partners, join hands with global users to create brilliance, and continue to improve the world's first edge idle computing power sharing mining network owned by global users and the value consensus of AIS tokens.

6.2 Advantage of resource integration

Thanks to the advantages of continuous development and innovative technology, extensive commercial applications, and refined governance, AIS is competitive in the following aspects:

- Technical team: AIS has very mature and strong technical support, and has accumulated rich industry and technical experience in many fields such as blockchain, artificial intelligence, quantum mechanics, machine learning, DePIN, Web3 protocol, community autonomy, etc., and has made industry-leading breakthroughs in the development and mining application of blockchain underlying technology. The AIS team perfectly brings together senior people from multiple industries, many years of practical operation experience, and profound insights into the development of the industry.
- Industry resources: AIS signs strategic cooperation agreements with top



projects in target industries to provide strong support for AIS to cut into target scenarios, so as to truly promote the actual landing of AIS applications. Financial Partners include: Goldman Sachs, IDG Capital, Accel Partners, Fidelity Investment Group, IBM, etc.

- Liquidity support: AIS has rich resources and numerous partners in the industry, and has cooperated with a number of international mining farms, active communities, investment funds and professional investment institutions to provide sufficient liquidity for the platform. AIS has a professional computing team to connect with the depth of the global head market, provide total fragmented liquidity solutions, support computing trading, and adapt to the API interface set of fast programmed trading.
- Business governance: Different from ordinary projects, AIS has a clear and explicit strategic plan for the target industry, and continues to enable free, fair and high-value ecological prosperity with the model of autonomous community. AIS is more focused and professional with the distributed decentralization, immutable and cryptographic security of AI and blockchain technology and the characteristics of peer-to-peer value transmission, to penetrate the target industry and quickly acquire market share.
- Fund management: Under the leadership of the Investor Protection Fund, AIS fund management strictly abides by the principles of fairness, justice and openness, and takes project development as the primary purpose. The Investor Protection Fund is dedicated to keeping and ensuring the safety and sustainability of the funds. All use of the funds will be disclosed to all investors on a regular basis to ensure that the use of the funds is open.
- Space for development: AIS targets the trillion-level mining market for shared computing power. The development team will effectively manage matters such as general procedures, code management, financial management, compensation management and privileged operating scope by drawing up a sound governance structure to ensure sustainable development.

With the support of the core competitiveness, the commercialization logic of AIS is clear, and each technical link and organization has a strong target and logic gene, and on this basis, many modular and reformed technical solutions or mechanisms are proposed.



6.3 Promotion strategy

1) User acquisition

We will employ multiple approaches to attract and increase AIS users to build a large and diverse user base. Our user acquisition strategy includes, but is not limited to, the following:

- **Compelling rewards programs:** Introduce attractive rewards programs to incentivize new users to sign up and actively participate in AIS. These incentives may include discounts on transaction fees and other special rewards.
- **Referral programs:** Set up referral programs to encourage existing users to refer new users to join. Both recommenders and referees will benefit from this program, increasing the number of users and increasing user loyalty.
- **Market partners:** Actively seek to collaborate with other AI, DePIN projects and AI vendors to grow our user base. Partnerships will provide users with unique advantages and privileges, while also increasing exposure for AIS tokens.
- **Community building:** Actively building communities, including social media communities, online forums and offline events. This will help expand the user base and increase interaction and engagement among users.

2) Brand building

Brand building is key to the successful promotion of AIS and AIS tokens. We will use the following strategies to build and promote the AIS brand:

- **Market positioning:** We are clearly positioning AIS as the world's first shared mining network for edge idle computing power. Our goal is to be the leader in the industry.
- **Brand reputation:** Actively focus on user satisfaction and ensure excellent service and support to build a positive brand reputation.



- Social media and publicity: Establish a stronger connection with users by regularly publishing news, updates and market analysis about AIS, AIS tokens through various social media platforms such as Twitter, LinkedIn, Telegram, etc.
- Brand consistency: Ensure brand consistency across all marketing and promotional activities, including logo, website design, advertising and promotional materials.

3) Social media

AIS will make full use of social media platforms for branding. The following social media campaigns will be conducted:

- Regular updates: Updates and analysis on the AIS network, computational power mining, AI applications, DeFIN markets and protocol features will be posted on social media platforms on a regular basis.
- Interaction and response: Actively interact with users, respond to their questions, suggestions and feedback, and enhance user satisfaction.
- Promotion campaigns: Advertise and promote special events, contests, and reward programs on social media to attract new users and motivate existing ones.

Through the above strategy, AIS will establish a strong brand image in the industry, attract more users, and continue to expand our market share. AIS will strive to maintain communication and interaction with its users to meet their needs and expectations.





6.4 AIS DAO

AIS is well aware that in order to promote the coordinated development of multi-ecology, it needs to have a perfect governance model that can better realize the inner cycle of value and decentralization. Therefore, AIS innovates on the DAO model, and jointly launches the decentralized community autonomous organization -- AIS DAO with global capital, technical team, diverse community and opinion leaders.

Under the leadership of DAO, AIS DAO, the community governance organization of AIS, follows a high degree of decentralization and is carried out through the combination of on-chain and off-chain mode. After the successful setting of all procedures, it can start to operate according to the original rules. In the process of operation, it can also continue to self-maintain and upgrade according to the actual situation. Through the continuous self-improvement mechanism, it not only eliminates the trust problem, but also realizes the unprecedented level of collective coordination, thus forming the technical basis of AIS DAO.

AIS tokens will be the core driving force of AIS ecological governance and DAO development. Therefore, AIS DAO hopes to stimulate the subjective initiative of the community in a democratic, collaborative and transparent way, mobilize the high-quality resources of the community, and promote the construction of a decentralized and positive-driven DAO autonomous system.

AIS DAO, as a decentralized autonomous organization, is a technical tool written in code and run on the blockchain, and it is also a new type of governance institution that can achieve open justice, unmanned intervention and autonomous operation, and no legal entity. All holders of the governance token AIS have the right to participate in the AIS DAO. Under the basic principle of "one AIS, one vote", all community members work together to build a scientific governance system and achieve DAO governance with goals, processes and results. Different users may have different voting weights. Exchange addresses cannot participate in voting. AIS token holders can participate in the following discussions about what will benefit the project going forward:

- Community development matters and membership system



- Proposals on the economics of AIS tokens
- Important model parameters of AIS incentives
- AIS cooperation and development
- Marketing activities, exchanges and cooperation
- Other matters related to marketing strategy

In the future, AIS holders will be able to fully control the AIS DAO and decide matters such as the direction of development, market expansion plans, AIS technology roadmap, asset safety and ecological incentives.

6.5 Development Planning

1) Phase 1 planning

Experience period: obtain seed-stage users by participating in the computing power test, and attract traffic and nodes through big data.

- The computing power test network was launched and began to accumulate seed-stage users;
- Launch incentive plans, such as registration rewards, promotion rewards, cooperation rewards, etc., to continue drainage;
- Build early user communities to form community consensus and lay the foundation for the second phase.

2) Phase 2 planning

Start the main network, open the access of users and manufacturers, users provide computing power through the edge idle computing power sharing mining network, get tokens and reward, major manufacturers access the network, obtain AI computing power resources, optimize AI model training.

- Open the edge idle computing power sharing mining;



- The number of nodes reaches 100,000 to start mining;
- Access agreements for major vendors;
- AIS tokens go online on exchanges, unlocking liquidity incentives.

3) Three-stage planning

Main network online, ecological expansion, everyone can through idle equipment computing power sharing, computing power mining and cash. Expand the scope of market services, and start computing power crowdsourcing and AI training large model services.

- Start AI training large model service when the number of nodes reaches 500,000;
- AIS tokens continue to be launched on top exchanges including Binance, Pancake, Huobi, Ouyi, coinbase, etc.;
- Explore more possibilities of AI+DeFIN, and AIS has become a model for DeFIN applications;
- Realize the true decentralization of computing power resources, so that everyone can participate in and benefit from the construction of an intelligent society;
- Continue to expand AI+ mining +Web3 ecological applications to open a new future.



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