Astro AI White Paper

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Executive Summary

The rapid advancement of artificial intelligence (AI), particularly the rise of AIGC (AI-generated content) and large models, is driving an unprecedented demand for computing power. However, the current AI computing market faces several significant challenges: centralized cloud service providers charge exorbitant fees for computing power, leading to a monopoly by a few major players and high barriers to innovation; the distribution of computing resources is uneven, with both idle and scarce resources coexisting, resulting in low overall utilization efficiency; traditional data centers consume vast amounts of energy, posing sustainability issues; the centralized architecture also introduces single-point failures and deep concerns about data security and privacy. In this context, distributed AI computing has emerged as a highly promising solution, aiming to overcome existing bottlenecks and establish a more open, efficient, and cost-effective new paradigm for AI computing.

Astro AI's distributed computing solution is dedicated to reshaping the future of AI computing through cutting-edge decentralized technology, innovative economic models, and efficient resource scheduling mechanisms. Our core value proposition is to provide global AI developers, research institutions, and enterprises with efficient, cost-effective, secure, trustworthy, and decentralized AI computing capabilities. The Astro AI platform integrates heterogeneous and idle computing resources (such as GPUs, CPUs, and NPUs) from around the world, creating a dynamic and flexible computing network. Through smart contracts and Token incentive mechanisms, it ensures the consistent interests of network participants and the continuous prosperity of the ecosystem.

This white paper will systematically elaborate on the vision and technology blueprint of Astro AI, covering the following:

- **Insight into AI computing power market:** In-depth analysis of the explosive growth trend of current AI computing power demand and its core pain points, and demonstrate

the necessity and opportunities of distributed computing power network.

- **Astro AI technology architecture:** a detailed interpretation of the core design concept, multi-layer system architecture, key technical modules (such as heterogeneous resource integration, intelligent task scheduling, efficient data transmission, security and privacy protection) and innovative advantages of Astro AI distributed computing power platform.
- **Astro AI Economic Model:** Explain the positioning, value capture mechanism, issuance and distribution scheme, core incentive measures (such as proof of computing power contribution, verification node incentive) and decentralized governance (DAO) framework of Astro AI Token (ASTRO), aiming to build a sustainable economic ecology.
- **Business model and market strategy:** analyze the core business value, diversified profit model, target market positioning, competitive landscape, and market entry and promotion strategies of Astro AI.
- **Wide range of applications:** analyze the application potential and examples of Astro AI distributed computing power in many key industries such as fintech, healthcare, intelligent manufacturing, new retail, AIGC and metaverse, scientific research, etc.
- **Future outlook and ecological construction:** Plan the technical evolution roadmap and ecological construction plan of Astro AI, and discuss its far-reaching impact on the future AI industry.

> *Astro AI firmly believes that through open collaboration and continuous innovation, distributed computing power will become the core engine driving the next generation of AI revolution. We sincerely invite global partners to join hands with us to jointly create a new era of AI computing, so that inclusive and efficient AI computing power can empower every innovative dream.*

Part I: The AI computing power revolution: the wave of the times and the distributed breakthrough

Chapter 1: The pulse and challenges of the Era of AI computing power

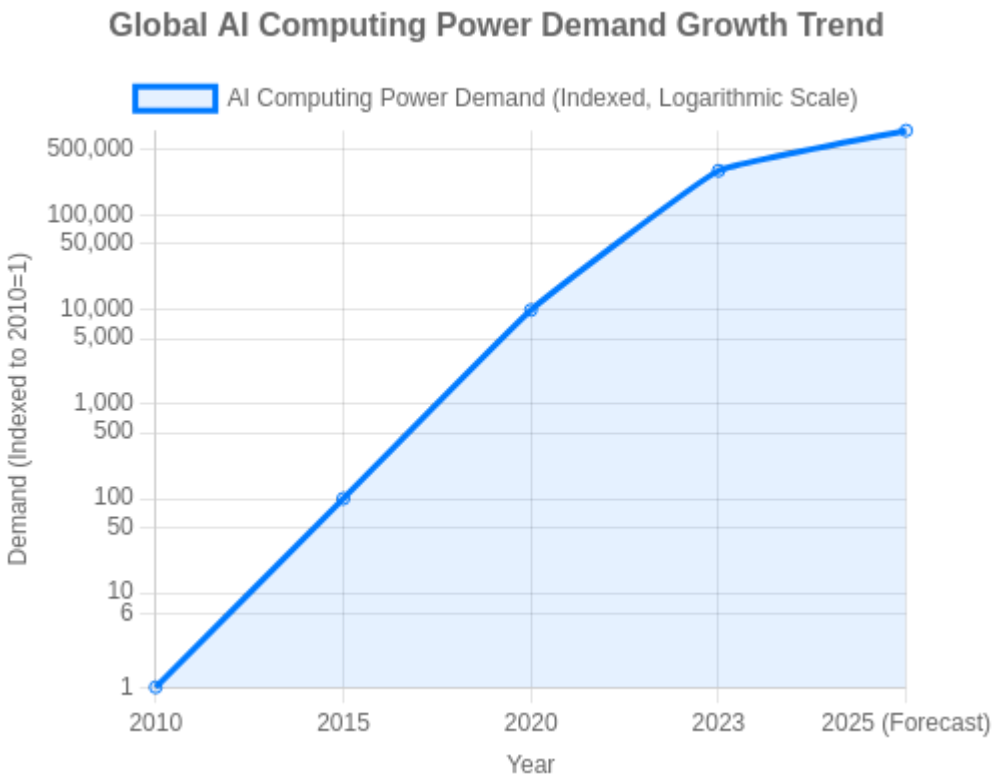
We are in a new era driven by profound changes brought about by artificial intelligence (AI) technology. In recent years, advanced AI technologies, such as AIGC (Artificial

Intelligence Generated Content) and large language models (LLMs), have made significant breakthroughs. Their powerful capabilities are now permeating various sectors, including scientific research, industry, finance, healthcare, and entertainment, signaling the accelerated arrival of the fourth technological revolution. Digital technologies, including big data, the Internet of Things, artificial intelligence, and blockchain, are evolving in a combined manner, which is expected to unleash significant multiplier effects. (**Source:** Zhihu's in-depth analysis of the computing power industry)

However, the AI revolution is driven by an unprecedented demand for computing power. The complexity of models and the surge in training data have led to an exponential increase in the demand for computing power in AI applications. According to the China Academy of Information and Communications Technology (CAICT), a distributed computing system has become crucial for supporting the development of new-generation IT technologies.

AIGC and the explosion of computing power demand led by large models:

The training and inference processes of AIGC and large models require massive parallel computing and data processing. For instance, training a large language model with hundreds of billions of parameters typically requires thousands to tens of thousands of high-end GPUs to run continuously for weeks or even months. This 'massive consumption' model makes computational power one of the core bottlenecks in AI development. According to China Research Network, from 2010 to 2023, the demand for AI computing power increased by hundreds of thousands of times, far exceeding the growth rate predicted by Moore's Law, and this trend is expected to continue until 2025.



The core pain points of the current AI computing power market:

With the rapid expansion of computing power demand, the current AI computing power market has also exposed many deep-seated contradictions and pain points:

- **High costs and resource barriers:** High-end AI chips, such as NVIDIA's A100 and H100 series, are expensive and in short supply. While large cloud service providers offer computing power leasing services, the prices remain a significant financial burden for many startups and small to medium-sized research teams.
- **Uneven resource allocation and efficiency bottlenecks:** On one hand, the intense competition for computing power among AI hotspots has led to a 'computing power shortage.' On the other hand, there are numerous underutilized computing resources globally. This imbalance results in low overall computing power utilization efficiency. (**Source:** Communication Industry Network)
- **Energy consumption and sustainability:** Traditional large data centers are big energy consumers, and their carbon emissions cause great pressure on the environment. It has become an urgent task to seek green and low-carbon computing solutions.
- **Centralized risk and data security concerns:** The centralized model of computing power supply makes user data and services highly dependent on a few platforms, posing risks of single points of failure and data privacy breaches.

- **The demand for localization and self-reliance:** In the increasingly complex international geopolitical landscape, the self-reliance and control of key core technologies have become a crucial part of national strategy.

These pain points jointly restrict the popularization of AI technology and the healthy development of the innovation ecosystem. There is an urgent need for a new computing power supply model that can break the existing pattern and is more inclusive and sustainable.

Chapter 2: The rise and opportunity of distributed AI computing power

Faced with the numerous challenges of traditional centralized computing power models, distributed AI computing power, as a new solution, is attracting significant attention from the global tech and industry sectors due to its unique advantages and vast potential. It not only complements the current computing power supply model but also has the potential to become a crucial component of future AI computing infrastructure.

The evolution of distributed computing and AI computing power networks

The concept of distributed computing is not new, with origins in grid computing. The rise of cloud computing and edge computing further extended its application. The AI computing network (AI Computing Network) represents a specific evolution of distributed computing in the age of artificial intelligence. It is optimized for the characteristics of AI tasks, such as model training and inference. By leveraging network connections and intelligent scheduling, it organizes geographically dispersed and heterogeneous computing resources into a unified and shareable computing resource pool, aiming to achieve 'ubiquitous' and 'on-demand' access to computing resources.

The core advantage of distributed AI computing power

- **Cost-effectiveness:** By leveraging idle computing resources globally, the distributed computing network can offer computing power at a much lower cost than traditional cloud service providers.
- **Resource Optimization and Elastic Scalability:** Distributed networks can aggregate a vast number of diverse computing nodes and allocate AI tasks to the most suitable nodes, thereby enhancing overall resource utilization.

- **Decentralization and Censorship Resistance:** Distributed networks do not rely on a single centralized control node, which enhances their robustness, fault tolerance, and resistance to censorship.
- **Incentive Compatibility and Community-Driven (IC&CD):** Many distributed AI computing projects leverage blockchain technology and Token economy models to align the interests of all participants and foster strong community consensus.

Market trends and policy winds

Globally, the distributed AI computing power market is showing strong growth. According to the Huajing Industry Research Institute, by the end of 2023, the global intelligent computing power had reached 335 EFLOPS, a year-on-year increase of 136%. The policy environment also supports this development. For instance, China's 'East Data West Computing' project aligns with the concept of the distributed computing network, which connects nodes across different regions to optimize resource allocation. (**Source:** Xueqiu, 'Trillion-Dollar Distributed Computing Revolution')

> **Key Points**
>
> - The demand for AI computing power is growing exponentially due to AIGC and large models, but it faces pain points such as high cost, uneven resource allocation, high energy consumption and centralized risk.
> - Distributed AI computing power provides a cost-effective, scalable, and decentralized solution by integrating idle resources and optimizing scheduling.
> - Market trends and national policies (such as "East Data West Calculation") provide broad space and historical opportunities for the development of distributed AI computing power.

Part 2: Astro AI: The distributed computing engine that will reshape the future of computing

Chapter 3: Astro AI's vision, mission and market positioning

Amidst the ongoing surge in AI computing power demands and the growing challenges of existing supply models, Astro AI has emerged. We are not just a technology platform; we

are a movement dedicated to revolutionizing the paradigm of AI computing.

Vision: To build a global leading, open and shared decentralized AI computing infrastructure

Astro AI envisions becoming the world's largest, most efficient, and most dynamic decentralized AI computing infrastructure. We aim to overcome geographical, hardware type, and ownership barriers by connecting idle computing resources worldwide, forming a unified, programmable, and on-demand 'computing ocean.'

Mission: To empower global AI developers and innovators, accelerate the universalization of AI technology, and solve the computing power gap

Astro AI's mission is to empower every AI developer and innovator in the world with powerful computing power, so that they are no longer limited by high computing costs and scarce computing resources. We are committed to lowering barriers, improving efficiency, promoting popularization, and bridging the computing gap.

Core values: Open, collaborative, efficient, safe, innovative

Astro AI will always operate and develop according to these core values, advocating for open source, collective power, ultimate efficiency, robust security, and continuous innovation.

Market positioning

Astro AI positions itself as a game-changer and enabler in the AI computing power market, focusing on frontier innovation, problem-solving for current market pain points, and a future-oriented outlook that paves the way for AGI and the deep integration of Web3 with AI.

Chapter 4: Detailed description of Astro AI distributed computing power technology architecture

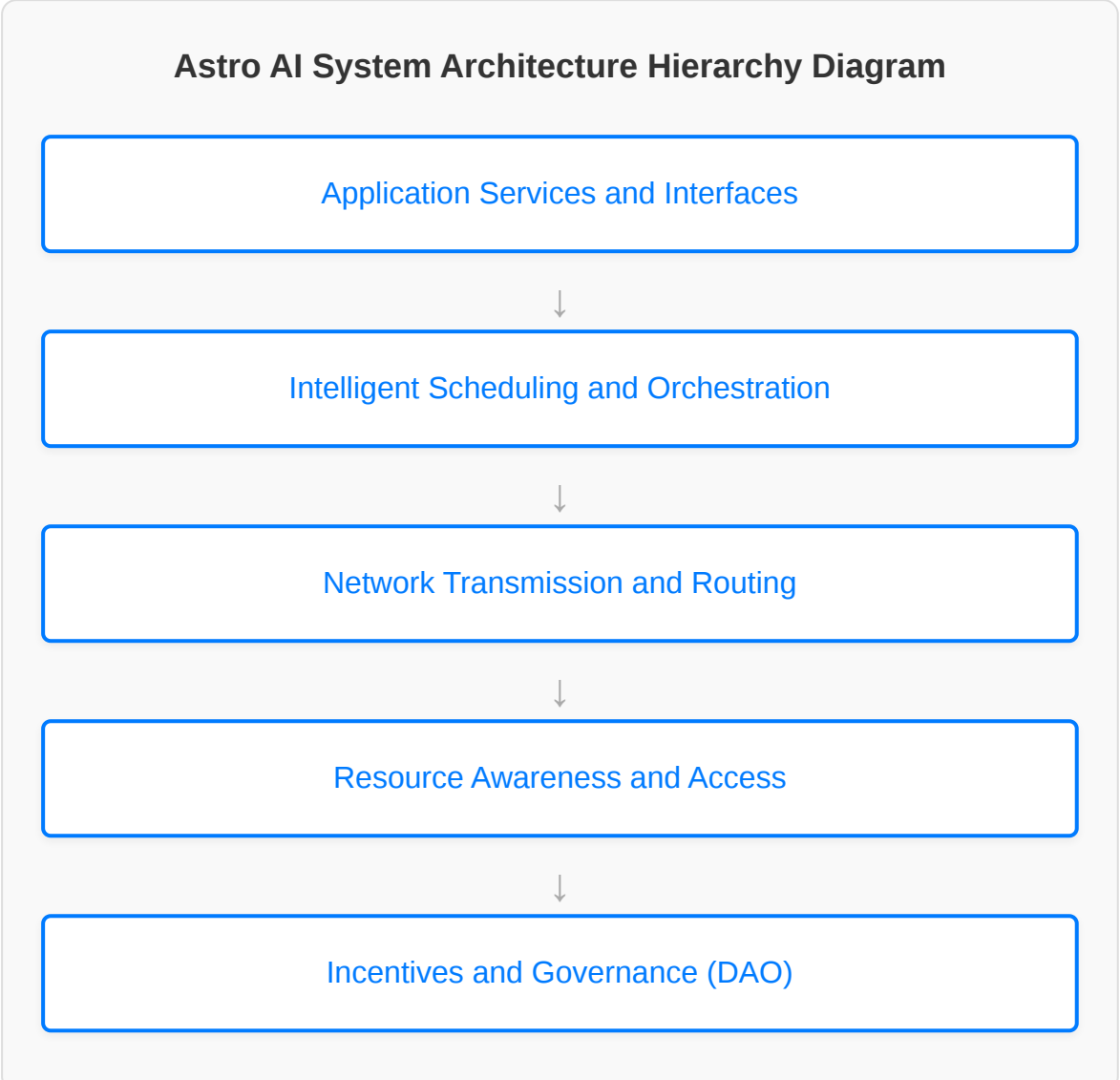
The technical architecture of the Astro AI distributed computing platform serves as the core support for realizing its vision and mission. We are dedicated to building a highly decentralized, intelligent, secure, and trustworthy computing network with excellent scalability.

Core design concept

- **Decentralized Trust:** Eliminating reliance on a single centralized authority by leveraging cryptographic principles and smart contracts.
- **Efficient Resource Coordination (ERC):** Employing multi-layer intelligent scheduling to maximize network efficiency.
- **Multi-layered Security:** Building a full-link, multi-level security protection system.
- **Elastic and Scalable Architecture:** Designing for future growth with modular and microservice concepts.

Overview of the system architecture

The Astro AI platform adopts a hierarchical architecture design to ensure clear responsibilities and efficient collaboration at each level.



The layers interact through standardized interfaces and protocols to ensure the system's fairness, efficiency, and sustainability.

In-depth analysis of key technology modules

- **Heterogeneous computing resource integration and virtualization:** Seamlessly integrating diverse hardware like GPUs, CPUs, NPUs, and FPGAs into a logical 'super computing pool'.
- **Intelligent task scheduling and matching engine:** The "brain" of Astro AI, using multi-dimensional profiling and advanced algorithms to match tasks with the most appropriate nodes.
- **Efficient data transmission and collaborative computing network:** Utilizing an optimized P2P network, data locality, and deep integration with distributed training frameworks to enhance performance.
- **Security and privacy protection mechanism:** A comprehensive approach including data encryption, Trusted Execution Environments (TEE), result verification, and privacy-preserving technologies like Federated Learning.
- **Monitoring, Operations and Maintenance and Observability:** A panoramic monitoring and automated O&M system to ensure stable operation.

> **Key Points**
>
> - Astro AI adopts a five-level hierarchical architecture: resource access, network routing, intelligent scheduling, application services, and governance.
> - Key technology modules include heterogeneous computing integration, intelligent task scheduling, efficient data transmission, multi-level security, and comprehensive monitoring.
> - Astro AI's technological innovation lies in its optimal scheduling algorithm, deep network optimization for AI, endogenous security trust mechanism, sophisticated economic model, and forward-looking layout of privacy computing.

Chapter 5: Astro AI Economic Model and Token System

The economic model of Astro AI serves as the core engine that drives the continuous development, self-optimization, and value growth of the entire distributed computing network. Centered around the Astro AI Token (ASTRO), this model coordinates the actions of various participants through a meticulously designed mechanism.

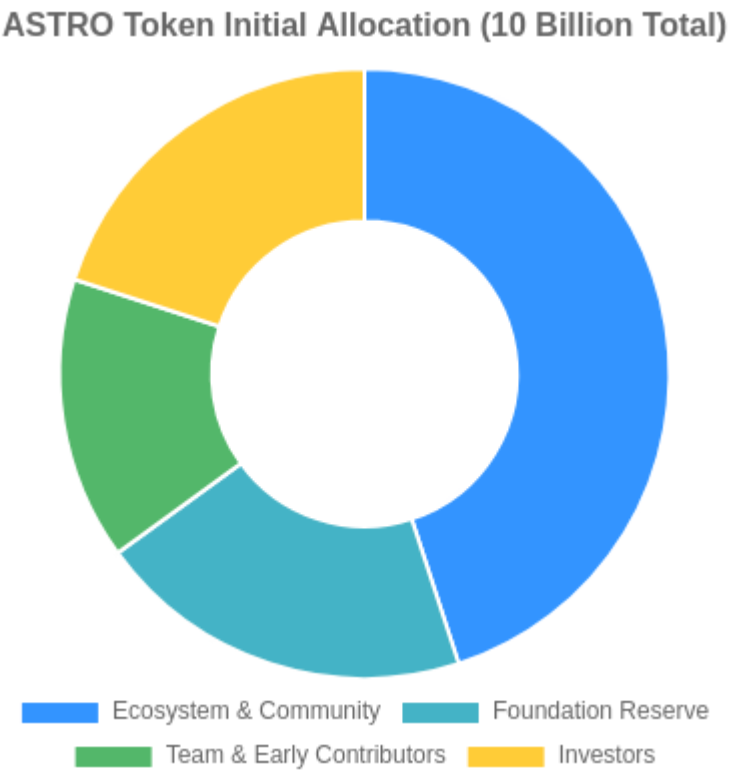
The core positioning and multiple values of the Token (ASTRO)

ASTRO is the native crypto digital token in the Astro AI ecosystem, carrying multiple core functions:

- **Network utility:** Serves as the payment medium for computing power, Gas fees, and a token for future data and model markets.
- **Incentive mechanism:** Rewards computing power contributors, task validators, and ecosystem builders.
- **Governance credentials:** ASTRO holders can participate in the decentralized governance (DAO) of the network.
- **Capture of value and equity:** Staking ASTRO can provide returns and help secure the network, while its value is expected to grow with the ecosystem.

Token issuance and distribution mechanism (Tokenomics)

The total supply of ASTRO will be capped at 10 billion to ensure its scarcity and long-term value. The initial allocation will be divided among several key areas to ensure balanced and sustainable growth.



To prevent excessive early market selling pressure, a reasonable lock-up period and a linear release schedule will be set for shares held by the team, early contributors, and investors. The model also includes a deflationary mechanism, such as burning a portion of service fees, to balance inflation from mining rewards.

Core incentive program design

- **Proof of computing power (Proof-of-Computation/Proof-of-Useful Work):** Rewards nodes that genuinely provide effective computational work for AI tasks.
- **Validation node incentives:** Validators stake ASTRO and are rewarded for verifying computation results and maintaining network security. Malicious behavior results in the confiscation of staked tokens (Slashing).
- **Developer Grant Program:** Provides ASTRO funding to individuals and teams building innovative applications and tools on the platform.

Decentralized governance (DAO) framework

Astro AI is committed to achieving true community autonomy, gradually handing over the governance of the network to a DAO composed of ASTRO holders. This DAO will be responsible for proposing, discussing, and voting on key network parameters, protocol upgrades, and fund allocation.

> **Key Points**
>
> - Astro AI Token (ASTRO) is the core of the ecosystem, with multiple functions such as payment, incentive, governance and value capture.
> - ASTRO has a limited total issuance and a balanced initial allocation with a lock-up release mechanism.
> - The core incentive scheme includes proof of computing power contribution, verification node incentives, and developer funding.
> - Astro AI will gradually implement a decentralized governance (DAO) led by ASTRO holders.

Part three: Astro AI business model and market strategy

Chapter 6: The core business value and profit model of Astro AI

Astro AI is not only a technology platform but also an ecosystem designed to generate significant commercial value. Its core business value lies in providing unprecedented advantages to all participants in the AI computing market.

The core value to AI developers/enterprises

- **Significantly reduce AI computing costs:** Cost savings can range from 30% to 70% compared to traditional cloud providers.
- **On-demand access to elastic computing power:** True 'pay-as-you-go' and 'elastic scaling' without long-term contracts.
- **Improving the efficiency of AI model development and deployment:** Streamlined processes and support for major AI frameworks.
- **Enhancing Data Control and Security:** Greater user control over data through a decentralized architecture and privacy-preserving features.

The core value of computing power providers

The platform creates significant value for individuals or organizations with idle computing resources by allowing them to monetize these assets and participate in the AI revolution.

Design of profit model

Astro AI's revenue model is designed to ensure long-term operation and ecosystem health. Main revenue sources will include:

- **Online transaction fee:** A small commission (e.g., 1%-5%) on computing power transactions.
- **Value-added services (future planning):** Enterprise-level solutions, an AI model/data marketplace, advanced tool suites, and certification services.
- **Ecological cooperation and investment returns:** Strategic investments in promising ecosystem projects.

Chapter 7: Target market, competitive pattern and market strategy

Clear target market positioning, a deep understanding of the competitive landscape, and effective marketing strategies are key to Astro AI's success.

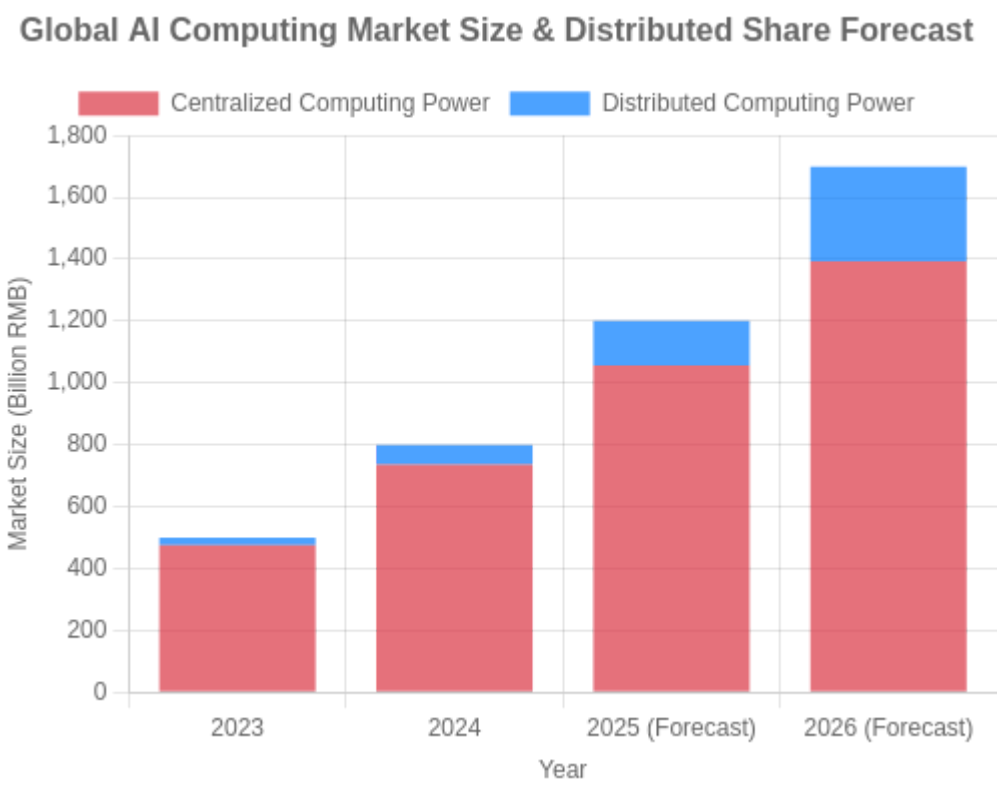
Target user group portrait and market segmentation

In the early stages, Astro AI will focus on:

- AI start-ups and small and medium-sized AI teams.
- Independent AI researchers and developers.
- Universities and research institutions.
- Traditional enterprise AI departments seeking to reduce costs.
- Individuals and businesses with idle computing power.

Market size and growth potential assessment

The AI computing power market is experiencing unprecedented rapid growth. According to the Huajing Industry Research Institute, the global intelligent computing power market is expected to exceed one trillion RMB by 2025. Distributed AI computing power is poised to capture a substantial share of this growing market.



Analysis of competitive pattern

Astro AI will face competition from centralized cloud service providers (AWS, Azure, GCP) and other distributed computing projects (Akash Network, Render Network, Golem). Astro AI's differentiated competitive advantage lies in its technological innovation, superior economic model, focus on AI optimization, and strong community-driven ecosystem.

Market entry and promotion strategy (Go-to-Market Strategy)

Astro AI will adopt a phased approach:

1. **Early user acquisition and community building:** Targeted marketing, incentive plans, and developer competitions.
2. **Strategic Partner Expansion:** Integration with AI frameworks, cooperation with hardware manufacturers, and partnerships with universities.
3. **Benchmark case building and content marketing:** Spreading success stories and establishing thought leadership.
4. **Global market layout:** Establishing local teams and providing multi-language support.

Part 4: Astro AI enables thousands of industries: Application scenarios and case analysis

Chapter 8: Typical application areas of distributed AI computing power

As an emerging computing paradigm, distributed AI computing power aims to break down the barriers to traditional computing power acquisition, providing a more economical, flexible, and efficient way to drive the intelligent transformation of various industries.

Fintech (FinTech)

Scenarios: Large-scale risk model training, high-frequency trading backtesting, intelligent investment, and fraud detection.
Astro AI Empowerment: Provides cost-effective, elastic, and secure computing power. Its privacy-preserving features are crucial for meeting the financial industry's strict compliance requirements.

Health care and life sciences

Scenarios: AI-assisted medical image diagnosis, genomics research, new drug development, and clinical decision support.
Astro AI Empowerment: Supports computationally intensive tasks and enables multi-institutional collaboration on sensitive data through federated learning, protecting patient privacy.

Intelligent manufacturing and Industry 4.0

Scenarios: Industrial visual quality inspection, predictive maintenance, digital twin simulation, and supply chain management.
Astro AI Empowerment: Integrates cloud and edge computing, deploying models where they are most needed—whether for large-scale training in the cloud or low-latency inference on the factory floor.

New retail and smart e-commerce

Scenarios: Personalized recommendation systems, AIGC for marketing content, intelligent customer service, and demand prediction.

Astro AI Empowerment: Provides massive elastic computing power for training complex recommendation models and cost-effective generation of AI-driven marketing content.

AIGC and the metaverse

Scenarios: Pre-training large language models (LLMs), text-to-image/video generation, real-time 3D rendering, and driving digital avatars.
Astro AI Empowerment: Offers an economical option for training and running AIGC models, and its distributed rendering capability can reduce latency in metaverse applications.

Scientific research and high performance computing (HPC)

Scenarios: Climate change modeling, astrophysical calculations, computational fluid dynamics, and materials science simulation.
Astro AI Empowerment: Provides an economically efficient pool of HPC resources, acting as a valuable complement or alternative to traditional supercomputing centers.

Part V: Future Outlook: Astro AI leads the new era of computing power

Chapter 9: Astro AI Technology Evolution and Development Roadmap

The development of Astro AI is a continuous process of iteration and evolution. We have established a clear roadmap for technological advancement.

- **Short-term goals (1-2 years):** Achieve stable mainnet operation, optimize core functions, and attract the first batch of core users and providers.
- **Medium-term goal (3-5 years):** Expand the ecosystem to hundreds of thousands of nodes, establish leadership in specific niches (e.g., AIGC), and achieve initial DAO operations.
- **Long-term vision (5+ years):** Become the world's leading decentralized AI computing infrastructure, drive a significant reduction in computing costs, and provide the foundation for the exploration of general artificial intelligence (AGI).

Chapter 10: Astro AI Ecological Construction Plan and Community Prosperity

A robust and thriving ecosystem is the cornerstone of Astro AI's success. Our plan focuses on:

- **Developer incentive and empowerment:** Through grants, comprehensive SDKs, and hackathons.
- **Computing power provider recruitment:** With simplified integration, attractive incentives, and technical guidance.
- **Community construction and governance:** Building vibrant online/offline communities and gradually improving the DAO mechanism.
- **Building a network of strategic partners:** Collaborating with AI chip manufacturers, application developers, and research institutions.
- **Education and marketing:** Publishing high-quality content and participating in global industry events.

Chapter 11: Challenges, Risks and Response Strategies

Astro AI acknowledges potential challenges and has formulated strategies to address them:

- **Technical challenges:** Network stability, scheduling optimization, and security threats will be addressed through robust protocols, advanced algorithms, and a multi-layered defense system.
- **Market competition risk:** We will focus on technological innovation, a strong community, and highlighting the unique value of decentralization.
- **User adoption and ecological cold start:** Early incentive programs and strategic partnerships will be used to overcome the "chicken-and-egg" problem.
- **Regulatory uncertainty:** We will closely monitor global regulations, engage with legal advisors, and emphasize the platform's utility.
- **Team execution and financial risk:** We will build a top-tier team, set clear goals, and establish robust financial planning.

Chapter 12: The profound impact of Astro AI on the future of the AI industry

The emergence of Astro AI holds the potential to profoundly and positively influence the future of the entire AI industry.

- **Promote the democratization and universalization of AI computing power:** Making AI innovation accessible to all, not just a privileged few.
- **Accelerate the innovation and application of AI technology:** Cheaper computing power will fuel faster iteration and broader adoption.
- **Promote the safe release of the value of data elements:** Enabling data collaboration while protecting privacy.
- **Building a more open, fair and collaborative AI future ecosystem:** A decentralized model where all participants can build, govern, and share in the value created.
- **Provide the critical infrastructure for the integration of Web3 and AI (AI x Web3):** Serving as a bridge linking AI capabilities with the decentralized world.

Part VI: Team and Advisors

Chapter 13: The core team and think tank of Astro AI

The grand vision of Astro AI requires a team with deep technical expertise, forward-thinking strategic vision, and strong execution capabilities to bring it to life. Our core team comprises seasoned experts and industry leaders with extensive experience in artificial intelligence, distributed systems, blockchain technology, cryptography, and business operations. Additionally, we are honored to have invited several leading figures from academia and industry to serve as advisors, providing strategic guidance and professional insights for the development of Astro AI.

Early stage investors and strategic partners

Astro AI has been favored by many well-known investment institutions, which fully demonstrates that the market has a high recognition of our vision and team. At the same time, we have established preliminary strategic cooperation intentions with many hardware manufacturers to jointly promote the construction of Astro AI ecosystem.

> *We firmly believe that with a strong core team, top think tank support and extensive industry resources, Astro AI has the ability to overcome challenges, seize opportunities and ultimately achieve its ambitious goal of "reshaping the future of AI computing".*

Part VII: Conclusions

Chapter 14: Join hands with Astro AI to create a new future of AI computing

The wave of artificial intelligence is sweeping the globe. The era calls for a new computing power solution, and distributed AI computing power is the inevitable choice. The Astro AI distributed computing solution was born in this era, aiming to build a global AI computing network that is efficient, economical, secure, trustworthy, open, and shared.

We believe that Astro AI will not only effectively address the current pain points in the AI computing power market but also significantly impact the development and application of global AI technology. It will promote the democratization of computing power, accelerate innovation, facilitate the secure release of data value, and provide essential infrastructure for the integration of Web3 and AI.

Call to action (CTA)

We sincerely invite all individuals, teams and organizations passionate about artificial intelligence and decentralized technology to join Astro AI and work with us to create a new future for AI computing:

- **AI developers and enterprises:** Welcome to try out the Astro AI platform and experience unprecedented efficient and economical distributed AI computing power services.
- **Individuals and organizations with idle computing power:** Connect your devices to the Astro AI network, become a computing power contributor, and share the dividends of the AI era.
- **Investors and partners:** We welcome forward-looking investors and partners to support the Astro AI project and jointly expand the market.
- **All community members and tech enthusiasts:** Join the global Astro AI community, engage in discussions, and work together to build and govern this open, transparent, and vibrant ecosystem.

> *Let's join hands with Astro AI to light up the starry sea of AI and jointly shape a bright future driven by intelligence and shared by all!*

Appendix

Glossary

AIGC (Artificial Intelligence Generated Content):

AI-generated content refers to the automatic creation of text, images, audio, video and other content using AI technology.

LLM (Large Language Model):

A deep learning model with a huge number of parameters, pre-trained on massive text data, that can understand and generate natural language.

DAO (Decentralized Autonomous Organization):

An organizational form that runs on the blockchain through smart contracts, whose rules and decisions are jointly formulated and implemented by community members.

ASTRO (Astro Token):

The native crypto digital token of the Astro AI ecosystem, used for payment, incentives, governance, etc.

TEE (Trusted Execution Environment):

A secure area within a processor that ensures the confidentiality and integrity of the code and data running in it.

Web3:

The vision of the next generation of Internet, emphasizing decentralization, user data sovereignty, blockchain technology and Token economy.

Disclaimer